BIRMINGHAM CITY COMMISSION AGENDA OCTOBER 29, 2018 MUNICIPAL BUILDING, 151 MARTIN 7:30 P.M.

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Andrew M. Harris, Mayor

II. ROLL CALL

J. Cherilynn Mynsberge, City Clerk

III. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

Announcements:

• The Museum Board will conclude the celebration of Birmingham's bicentennial by presenting a time capsule to the City at the tree lighting ceremony on November 30, almost 200 years to the day of the first land purchase in Birmingham in 1818. The time capsule will contain contributions from Birmingham's students with the theme, 'Message to the Future,' and will be placed in Shain Park, to be opened in fifty years on December 1, 2068.

IV. CONSENT AGENDA

All items listed on the consent agenda are considered to be routine and will be enacted by one motion and approved by a roll call vote. There will be no separate discussion of the items unless a commissioner or citizen so requests, in which event the item will be removed from the general order of business and considered under the last item of new business.

- A. Resolution approving the City Commission meeting minutes of October 8, 2018.
- B. Resolution approving the City Commission-Planning Board joint meeting minutes of October 15, 2018.
- C. Resolution approving the warrant list, including Automated Clearing House payments, dated October 10, 2018 in the amount of \$1,825,457.44.
- D. Resolution approving the warrant list, including Automated Clearing House payments, dated October 17, 2018 in the amount of \$765,622.19.
- E. Resolution approving the purchase and planting of 139 trees from KLM Landscape for the 2018 Fall Tree Purchase and Planting Project for a total project cost not to exceed \$44,327.00. Funds are available from the Local Streets Fund-Forestry Service Contract account #203-449.005-819.0000, the Major Streets Fund-Operating Supplies account #203-449.005-729.0000, the Major Streets Fund-Operating Supplies account #202-449.005-729.0000, the Parks Other Contractual Services account #101-751.000-811.0000, and the Parks Operating Supplies account, #101-751.000-729.0000 for these services. Further, authorizing the Mayor and City Clerk to sign the agreement on behalf of the City upon receipt of required insurances.

- F. Resolution setting a public hearing date of November 19th, 2018 to consider an amendment to the Zoning Ordinance, Article 3, Section 3.08(E) to increase the one-time payment-in-lieu of parking fee in the Triangle District.
- G. Resolution approving a request from the Birmingham Bloomfield Art Center to hold Art Birmingham in Shain Park and on the surrounding streets on May 10 12, 2019 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event.
- H. Resolution approving a request from the Birmingham Jewish Connection to display the Shain Park Menorah on December 2 10, 2018, with a special gathering to be held on December 4, 2018 at 7 pm in Shain Park, contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event.
- I. Resolution approving a service agreement with Nagy Devlin Land Design, LLC to provide Historic Landscape Design Services for the Birmingham Museum Heritage Zone, in the amount of \$2,960.00, to be charged to account 101-804.002-811.0000, and directing the Mayor and City Clerk to sign the agreement on behalf of the City.
- J. Resolution approving the Lighting Agreements with Essco of Birmingham, LLC and Merrillwood Investment, LLC, granting permission for the City to install holiday lighting over Merrill Street during the 2018 holiday season, directing the Mayor to sign the agreements on behalf of the City, and further approving the closure of Merrill Street on Sunday, November 18, 2018 or November 25, 2018 to install the lighting.
- K. Resolution authorizing an agreement between the City of Birmingham and Smarking for a period of one year to provide parking platform management and data integration for all municipal parking structures and parking meters in the Automated Parking System for a monthly subscription cost of \$3,294.54 per month and a one-time installation fee of \$7,906 using account #585-538-001-811.0000.
- L. Resolution approving the Pro Shop Space Lease Agreement with Birmingham Hockey Association and Birmingham Unified High School Hockey Team for use of the space in the Birmingham Ice Sports Arena referred to as the Pro Shop effective November 1, 2018 for the amount of \$400.00 per month until the end of the season. Further, authorizing the Mayor and Clerk to sign the agreement upon receipt of the required insurance.
- M. Resolution adopting the 2017 Oakland County Hazard Mitigation Plan for the City of Birmingham. Further, authorizing the Mayor and Clerk to sign the Resolution on behalf of the City.

V. UNFINISHED BUSINESS

A. Resolution approving the contract with DPZ Partners, LLC, as recommended by the Ad Hoc Master Plan Selection Committee, in the amount of \$298,000.00 payable from account # 101-721-000-811.000, to provide professional services to prepare an update to the City's comprehensive master plan, and to direct the Mayor to execute same.

OR

Resolution approving the contract with MKSK, in the amount of \$289,000.00 payable from account #101-721-000-811.000, to provide professional services to prepare an

update to the City's comprehensive master plan, and directing the Mayor to execute same.

VI. NEW BUSINESS

- A. Public Hearing to consider the proposed lot rearrangement of 120 Hawthorne and 125 Aspen as requested.
 - 1. Resolution approving the proposed lot rearrangement of 120 Hawthorne and 125 Aspen as requested.

OR

2. Resolution denying the lot rearrangement of 120 Hawthorne and 125 Aspen as proposed based on the following conditions that adversely affect the interest of the public and of the abutting property owners:

- B. Public Hearing to consider the necessity to establish assessment for the Birmingham Principal Shopping District for 2018-19, 2019-20, 2020-21, and 2021-2022.
 - 1. Resolution declaring the necessity to establish assessment for the Birmingham Principal Shopping District for 2018-19, 2019-20, 2020-21, and 2021-2022.
- C. Resolution awarding the Downtown Retail Review to Gibbs Planning Group, in the amount of \$50,000, to be funded from account 101-721.000-811.0000 and further approving the appropriation and amendment to the 2018-2019 General Fund Budget.

AND

Directing the Mayor to execute a contract with Gibbs Planning Group in the amount of \$50,000.

OR

Resolution rebidding the RFP seeking additional responses.

- D. Resolution removing one parking spot on Elm St. located in front of 160. Elm Street.
- E. Resolution approving the Underground Electric Easement as provided herewith authorizing the Mayor and Clerk to sign the same on behalf of the City.
- F. Resolution approving the Settlement Agreement of September 24, 2018 between the City of Birmingham and Teamsters Local 214 for a renewal of the collective bargaining agreement through June 30, 2021, and authorizing staff to execute a collective bargaining agreement consistent with its terms and conditions. Further, authorizing the transfer of the appropriate funds by the Finance Department.
- G. Resolution approving the recommendation by the Human Resources Department to implement a 2% salary table adjustment and in-range adjustments based upon performance for full-time and part-time employees in the Department Head and Administrative/Management classifications effective July 1, 2018.

AND

Approving the recommendation by the Human Resources Department implementing the 2% performance increment through June 30, 2019 with individual eligibility to be in accordance with merit increase guidelines as specified in the report.

AND

Approving ICMA plan amendments to the 401(a) plan for the Department Heads and Administrative/Management, effective January 1, 2019, increasing the City contribution to 9.5%.

AND

Approving the additional employee health care cost sharing measures, effective January 1, 2019, increasing the copay for emergency room/illness services to \$150; increasing the calendar year deductible to \$600 individual/\$1,200 family (combined in and out-of-network); increasing the annual in-network out-of-pocket maximum to \$1,100 individual/\$2,200 family; increasing the annual out-of-network out-of-pocket maximums to \$1,700 individual/\$3,400 family; and, increasing the specialty drug copay to \$75.

AND

Approving the transfer of the necessary funds by the Finance Department to the respective departmental personnel accounts.

VII. REMOVED FROM CONSENT AGENDA

VIII. COMMUNICATIONS

IX. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

X. REPORTS

- A. Commissioner Reports
- B. Commissioner Comments
- C. Advisory Boards, Committees, Commissions' Reports and Agendas
- D. Legislation
- E. City Staff
 - 1. Quarterly Investment Report
 - 2. Quarterly Budget Report

XI. ADJOURN

INFORMATION ONLY

NOTICE: Individuals requiring accommodations, such as mobility, visual, hearing, interpreter or other assistance, for effective participation in this meeting should contact the City Clerk's Office at (248) 530-1880 (voice), or (248) 644-5115 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

Las personas que requieren alojamiento, tales como servicios de interpretación, la participación efectiva en esta reunión deben ponerse en contacto con la Oficina del Secretario Municipal al (248) 530-1880 por lo menos el día antes de la reunión pública. (Title VI of the Civil Rights Act of 1964).

BIRMINGHAM CITY COMMISSION MINUTES OCTOBER 8, 2018 MUNICIPAL BUILDING, 151 MARTIN

7:30 P.M.

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Patty Bordman, Mayor Pro Tem

II. ROLL CALL

ROLL CALL: Present, Mayor Pro Tem Bordman

Commissioner Boutros Commissioner DeWeese Commissioner Hoff Commissioner Nickita Commissioner Sherman

Absent, Mayor Harris

Administration: City Manager Valentine, Assistant City Manager Gunter, City Attorney Currier, Senior Planner Baka, Fire Chief Connaughton, Fire Deputy Chief Donohue, Police Commander Grewe, Planning Director Ecker, DPS Deputy Director Filipski, Assistant City Engineer Fletcher, Finance Director Gerber, Building Official Johnson, City Clerk Mynsberge, City Engineer O'Meara, BSD Director Tighe

III. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

10-267-18 INTRODUCTION OF GUESTS

Shelley Goodman Taub, County Commissioner, 12th District

Commissioner Taub reported on the balanced County budget, noting particular line items of interest to Birmingham.

Mike McCready, State Representative, 40th District

Representative McCready provided a brief report on various legislative items.

10-268-18 ANNOUNCEMENTS

Mayor Pro Tem Bordman announced:

- Commissioner Sherman's Birthday
- Tonight marked the official grand opening of Fire Station #2. The Public is invited to tour the new station located on Chesterfield at open public tours on October 11th, 5:30-8:00 pm, and on October 20th, 10:00am-1:00pm.
- Tomorrow, October 9th, is the deadline to register to vote to be eligible to vote in the November general election. If you are not already registered to vote at your current address go to Michigan.gov/Vote to register online, or contact the City Clerk's office at 248-530-1880.

- The Birmingham Fire Department's Annual Open House is Saturday, October 13th, from 1-4 p.m. at the Adams Fire Station. Attendees can operate a fire hose, learn about fire safety, and view an EMS and vehicle extrication display, along with HAZMAT apparatus and equipment. Enter a raffle and enjoy firehouse chili at this family-friendly event. For more information, contact the Birmingham Fire Department at 248.530.1900.
- The Baldwin Public Library is hosting "A Novel Wine Tasting", a fundraiser to support the upcoming Youth Room Expansion and Renovation. The event takes place on Friday, October 19th, 6:00-9:00 pm. Purchase tickets at www.baldwinlib.org/booksandbites.

10-269-18 APPOINTMENTS TO THE BOARD OF ZONING APPEALS

The City Commission interviewed current members Erik Morganroth and John Miller.

MOTION: Motion by Commissioner Boutros:

To appoint Erik Morganroth to the Board of Zoning Appeals as a regular member to serve a three-year term to expire October 10, 2021.

VOTE: Yeas, 6

Nays, 0 Absent, 1

MOTION: Motion by Commissioner Nickita:

To appoint John Miller to the Board of Zoning Appeals as a regular member to serve a threeyear term to expire October 10, 2021.

VOTE: Yeas, 6

Nays, 0 Absent, 1

City Clerk Mynsberge administered the Oath of Office to the appointees.

IV. CONSENT AGENDA

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10-270-18 APPROVAL OF CONSENT AGENDA

The following items were removed from the Consent Agenda:

• Commissioner Hoff: Item B, Approval of the City Commission regular meeting

minutes of September 17, 2018.

Item N, FY2019 Municipal and Community Credit Funds

and FY2018 Contract Addendum
Item T, Lot 12 Parking County Survey

• Mayor Pro Tem Bordman: Item A, Approval of the City Commission special meeting

minutes of September 17, 2018.

MOTION: Motion by Commissioner Sherman, seconded by Commissioner Boutros:

To approve the Consent Agenda with Items A, B, N, and T removed.

ROLL CALL: Ayes: Mayor Pro Tem Bordman

Commissioner Boutros

Commissioner DeWeese Commissioner Hoff Commissioner Nickita Commissioner Sherman

Nays: None

Absent: Mayor Harris

- C. Resolution approving the warrant list, including Automated Clearing House payments, dated September 19, 2018 in the amount of \$29,692,487.78.
- D. Resolution approving the warrant list, including Automated Clearing House payments, dated September 26, 2018 in the amount of \$2,757,529.68.
- E. Resolution approving the warrant list, including Automated Clearing House payments, dated October 3, 2018 in the amount of \$400,349.29.
- F. Resolution accepting the resignation of Jeffery Jones from the Board of Zoning Appeals, thanking him for his service, and directing the City Clerk to begin the process of filling the vacancy.
- G. Resolution accepting the resignation of John Rusche as Alternate Member of Parks and Recreation Board, thanking him for his service, and directing the City Clerk to begin the process of filling the vacancy.
- H. Resolution accepting the resignation of Lauren Tolles from the Design Review Board, thanking her for her service, and directing the City Clerk to begin the process of filling the vacancy.
- I. Resolution accepting the resignation of Adam Charles from the Design Review Board and from the Historic District Commission, thanking him for his service, and directing the City Clerk to begin the process of filling the vacancy.
- J. Resolution setting a Public Hearing of Necessity for the Birmingham Shopping District on October 29, 2018. Further, setting a Public Hearing of Confirmation of Assessment Rolls for November 12, 2018 for the Birmingham Shopping District.
- K. Resolution setting a public hearing for October 29, 2018 to consider the proposed Lot rearrangement of 120 Hawthorne, Parcel #1935230015 and 125 Aspen, Parcel #1935230001.
- L. Resolution authorizing an expenditure of \$25,000 from the Parking Enterprise Fund #585-538.001-901.0300 in support of the BSD holiday television campaign.
- M. Resolution approving the purchase of (2) workstations, (2) secure storage cabinets and (16) lateral files in the amount of \$16,744.42 from Kentwood Office Furniture, Inc.; further authorizing this budgeted expenditure from account number 101-301-000-972.0000; further authorizing and directing the mayor and city clerk to sign the agreement on behalf of the city.
- O. Resolution authorizing the City Manager to cast a vote, on the City's behalf, for the two incumbent members of the Michigan Municipal League Liability and Property Pool Board of Directors for three year terms, beginning January 1, 2019.
- P. Resolution awarding parts 2 and 3 of Contract 9-18(S) to Doetsch Industrial Services of Warren, MI, in the amount of \$691,485.02, to be charged to account number 590-

536.001-981.0100. Further, approving the appropriation and budget amendment as outlined.

- Q. Resolution authorizing the purchase of the Tennant Sweeper in the amount of \$37,843.00. Funds are available in account #585-538.001-971.0100.
- R. Resolution approving the purchase of one (1) new 2018 GMC Sierra 2500 HD from Todd Wenzel Buick GMC through the Oakland County cooperative purchasing contract #5222 in the amount of \$36,838.00 from account #641-441.006.971.0100.
- S. Resolution authorizing an increase in the authorized amount for the 2018 Sidewalk Trip Elimination Program, Contract #6-18(SW), to Precision Concrete Cutting, Inc., in the amount of \$34,174, to be charged to the Sidewalk Fund, account number 101-444.001-981.0100.
- U. Resolution approving the appointment of election inspectors, absentee voter counting board inspectors, receiving board inspectors and other election officials as recommended by the City Clerk for the November 6, 2018 General Election pursuant to MCL 168.674(1) and granting the City Clerk authority to make emergency appointments of qualified candidates should circumstances warrant to maintain adequate staffing in the various precincts, counting boards and receiving boards.
- V. Resolution scheduling a meeting of the Election Commission on Monday, October 29, 2018 at 6:30 p.m. for the purpose of conducting the Public Accuracy Test for the November 6, 2018 General Election.

10-271-18 APPROVAL OF THE CITY COMMISSION SPECIAL MEETING MINUTES OF SEPTEMBER 17, 2018 (ITEM A)

Mayor Pro Tem Bordman noted that Joseph Fazio is with the law firm Miller Canfield, not Beier Howlett.

MOTION: Motion by Mayor Pro Tem Bordman, seconded by Commissioner Boutros: To approve the City Commission special meeting minutes of September 17, 2018, as corrected.

VOTE: Yeas, 5

Nays, 0

Absent, 2 (Mayor Harris absent; Commissioner Nickita abstained due to his

absence at the September 17, 2018 meeting.)

10-272-18 APPROVAL OF THE CITY COMMISSION REGULAR MEETING MINUTES OF SEPTEMBER 17, 2018 (ITEM B)

Commissioner Hoff noted that Teresa Bridges is the Assistant City Engineer, not the Assistant City Manager.

Mayor Pro Tem Bordman asked that her last name be added after her title on page 8. She also asked that her comment near the bottom of page 11 regarding the disparity between DPZ's community engagement budget and MKSK's budget be added.

MOTION: Motion by Commissioner Hoff, seconded by Commissioner DeWeese: To approve the City Commission regular meeting minutes of September 17, 2018, as amended.

VOTE: Yeas, 5

Nays, C

Absent, 2 (Mayor Harris absent; Commissioner Nickita abstained due to his

absence at the September 17, 2018 meeting.)

10-273-18 FISCAL YEAR 2019 MUNICIPAL AND COMMUNITY CREDIT FUNDS AND FISCAL YEAR 2018 CONTRACT ADDENDUM (ITEM N)

City Manager Valentine confirmed that the next new bus shelter to be built with these funds would be at the corner of Maple and Coolidge.

MOTION: Motion by Commissioner Hoff, seconded by Commissioner DeWeese:

To approve \$19,760 in Municipal Credits and \$7,217 in Community Credits from fiscal year 2019 and \$1,901 in Community Credits from fiscal year 2018 to Next in support of their specialized transportation program; to approve \$21,932 in Community Credits from fiscal year 2019 to purchase and install a bus shelter (location to be determined); and further to direct the Mayor to sign the Municipal Credit and Community Credit contract for fiscal year 2019 and the amendment to the fiscal year 2018 contract on behalf of the City.

VOTE: Yeas, 6

Nays, 0 Absent, 1

10-274-18 LOT 12 PARKING COUNT SURVEY (ITEM T)

Commissioner Hoff stated a need to find out why people are not parking in Lot 12 before the City sells an additional 75 parking permits for the lot.

City Manager Valentine said:

- The goal of the Advisory Parking Committee (APC) was to take the intermediary step of selling more passes for Lot 12 while also assessing the parking conditions vis-a-vis the lot
- Since only twelve of the passholders seem to be parking in Lot 12 on a regular basis, the APC is hoping that selling more passes would increase utilization of the lot.
- At the same time, the APC and staff can go back to the current passholders and investigate why they are not parking in Lot 12 more frequently.
- The 3,000-person waiting list number cited contains some redundancy, and is for all five parking structures in the City.
- There are approximately 135 spaces in Lot 12, and 150 passes have been sold thus far for the lot.

Mayor Pro Tem Bordman agreed with Commissioner Hoff, saying that a survey of the current passholders is in order. She continued:

- That perhaps the Advisory Parking Committee could monitor those passholders underutilizing their parking pass, who would then be subject to a three-month limit, at which point the pass would be transferred to another person.
- It is embarrassing that the City has prepared this lot for parking and that it sits largely unused.

City Manager Valentine opined that even if the people holding passes are contacted for feedback, the City still needs to issue additional passes in order to increase utilization of the lot. The City always has the option to rescind passes that are not being used.

Commissioner Boutros agreed with Commissioner Hoff and Mayor Pro Tem Bordman as far as investigating the issues with the lot, while saying it is also a good idea to issue more passes.

Commissioner Hoff agreed to move the resolution as long as further research is done into the lot's underutilization.

MOTION: Motion by Commissioner Hoff, seconded by Commissioner DeWeese:

To accept the recommendation of the Advisory Parking Committee to authorize an additional 75 parking permits for Lot 12 located at the southeast corner of Woodward and Maple Road, and to direct staff to contact the current pass holders for Lot 12 and determine why they are not utilizing their permits.

VOTE: Yeas, 6

Nays, 0 Absent, 1

V. UNFINISHED BUSINESS

10-275-18 CONTINUATION OF PUBLIC HEARING FOR BISTRO ORDINANCE AMENDMENTS

Mayor Pro Tem Bordman suggested postponing this item due to the size of the agenda.

MOTION: Motion by Commissioner Sherman, seconded by Commissioner Nickita: To continue the public hearing for Bistro Ordinance Amendments to December 3, 2018.

VOTE: Yeas, 6

Nays, 0 Absent, 1

10-276-18 MASTER PLAN CONSULTANT SELECTION

City Manager Valentine noted that the purpose of tonight's item was to allow the Commission to pose questions for clarification to MKSK.

Planning Director Ecker stated that MKSK is available for questions, and the DPZ team returned should there be any further questions. She clarified that two rounds of scoring were done: one based on the initial submissions, and one after the Ad Hoc Master Plan Selection Committee (MPSC) completed interviews with both MKSK and DPZ.

Chris Hemann, MKSK, introduced members of the team: Megan O'Hara, Principal with United Design Associates, Brad Strader, Principal with MKSK, and Tom Brown, Principal with Nelson Nygaard.

Commissioner DeWeese asked for clarification regarding MKSK's community engagement process. He also asked the MKSK team to differentiate their process from DPZ's community engagement process.

Mr. Hermann said he could not speak to DPZ's community engagement process, but that community involvement is essential. He continued that MKSK:

• Meets with stakeholders from development, neighborhoods, business, real estate, and retail early in the process, seeking to understand their critical issues.

- After these meetings, MKSK holds a weeklong Charrette process in which they begin to address the previous concerns and opportunities expressed by the community stakeholders during the initial meetings.
- Works further on the plan based on the initial meetings and the charette, returning to the community a final time to present recommendations and understand any further concerns the stakeholders have about how the plan has evolved.

Ms. O'Hara stated that United Design Associates (UDA) was founded 54 years ago and was one of the first firms in the world to involve citizens in making decisions in planning their communities. Public engagement and involvement is a standard part of their planning practices. Ms. O'Hara stressed:

- Listening is a central aspect of their process, and that the feedback from citizens is incorporated into the planning work.
- The people interviewing the citizens are the same ones designing the plans.
- There are many ways of soliciting community feedback, including lecture series, online invitations to provide feedback, MKSK team attendance at community soccer games, visits to schools, and public meetings, as some examples. The MKSK team would work with Birmingham to come up with the most appropriate avenues for community engagement.
- UDA is experienced in both neighborhoods and downtown, and they would be working with MKSK on both.

Mr. Hermann said:

- His team at MKSK and Ms. O'Hara's team from UDA would be working primarily on the public engagement pieces, with other members of the team focusing on other aspects of the plan such as parking and the downtown.
- Comprehensive plans are an opportunity to both educate and engage the community.
 City staff and the Commission would highlight particular concerns, and the MKSK team
 would do presentations on those issues for the community, soliciting feedback on how
 those issues could be improved. Using their professional expertise, the MKSK team
 would synthesize the community's goals and offer options for how to achieve those
 goals, highlighting both the benefits and drawbacks of each option.
- The goal is to find consensus on a number of issues which the City can then move forward, and to continue to work with the issues that remain as sticking points.

Mr. Strader emphasized:

- MKSK's present involvement in Birmingham, adding that he lives in Birmingham, Ms.
 O'Hara grew up in Birmingham, and another member of their team lives in Royal Oak,
 meaning the team brings a lot of local knowledge. It also means that the community
 engagement activities would be led by local people who are already known entities to
 the community.
- MKSK's work with Birmingham so far has included both recommendations that have been accepted and recommendations that have been influenced by the citizens' preferences and concerns. Mr. Strader conceded that sometimes the resident feedback led MKSK to make even better recommendations than the ones initially offered.
- The process so far has led to more flexibility on both the MKSK team's end and the community stakeholders' end, moving them more towards consensus.

Commissioner Sherman said that previous interactions with the MKSK team vis-a-vis Old Woodward often ended with MKSK opining something 'could not be done', only to return to the Commission soon after to have implemented the request. Commissioner Sherman continued:

- This was a frustration the Commission had with the MKSK team.
- It would be a problem if the community, during a public engagement process, is told something 'cannot be done' because that is the MKSK team's initial reaction.

Mr. Strader said the MKSK team now comes to the Commission earlier on in the process to solicit feedback and integrate it. He added that sometimes the things the Commission requested could not be done engineering-wise, but the MKSK team worked to find other solutions that met many of the original goals of the request.

Commissioner Nickita stated the City's area plans are good. The goal of the Master Planning process is to explore the areas that have not yet been planned, and how they will integrate with the extant area plans. The Commission does not want to see already extant area plans redone.

Mr. Hermann confirmed that the MKSK understands Birmingham's goals as stated by Commissioner Nickita.

Ms. O'Hara explained:

- The MKSK team recognizes Birmingham neighborhoods as very stable. This means the focus is not interventions like new parks, but becoming very clear on the specific characteristics of each neighborhood, tracking things such as whether the streets have curbs, the width of the streets, what the tree canopy looks like, the lot sizes, and the age and era of the houses. From this information, the MKSK team would recommend standards for construction, park types, tear-downs, re-builds, parking, and other relevant items for each neighborhood based on their specific characteristics.
- UDA has a copyrighted process through which they look at a City as a set of different systems. They then look at each system by itself to see what could be improved. Some of the systems looked at include street connections, park locations, commercial-use distribution, and multi-family residence distribution. UDA plans on doing this as part of its process with Birmingham.
- A pattern book documents the characteristics of a place, and then recommends guidelines for future interventions so that they would fit into that place. Pattern book houses historically referenced homes with similar floorplans and different architectural elevations. Pattern books also contain neighborhood and community patterns at a block level. It is something created for each community.

Mr. Hermann said:

- Discussing the benefits and potential drawbacks of the current area plans with stakeholders, seeing what gaps exist in the current planning, and discussing what the community would like to see further developed will all be part of the process of creating a master plan that integrates all the planning Birmingham has done to date.
- Designing appropriate transitions between the neighborhoods, especially the downtown and residential, will also be discussed with community members.
- The MKSK team will synthesize community feedback, discuss the new recommendations synthesized from that feedback with the community, and further revise those recommendations based on further feedback. In this way, MKSK generates community buy-in, as they see their ideas, concerns and goals reflected in the planning.

Mr. Hermann said that the team aims to meet with influential people early in the process who can then encourage other residents to participate as well.

Tom Brown, of Nelson Nygaard, stated he is the project manager for Birmingham's current downtown parking study. He said:

- One of the key takeaways from the RFP in terms of parking was that there is a desire to explore parking in the planned districts like the Rail District and the Triangle District.
- Figuring out the different parking conditions and expectations in the different neighborhoods is critical as well.
- One example of an approach to parking issues is that residents who value being within
 walking distance from downtown are sometimes willing to allow employees to permit
 park on the residential streets during the day, with the understanding that this helps
 keep the downtown functioning and vibrant.

Mr. Hermann said aspects of a market study would be pulled in on a macro scale since Birmingham has already performed market studies. The goal would be focusing on the transition zones between neighborhoods. If Birmingham desires a further market study at any point, however, Mr. Hermann confirmed the MKSK team would be able to provide that as well.

Commissioner Hoff wanted to ask questions of DPZ. The DPZ team introduced themselves as Andres Duany, DPZ, Robert Gibbs, Gibbs Planning Group, Sara Trexler, of McKenna, Phil McKenna, former owner of McKenna and now consultant to McKenna, and John Jackson, owner of McKenna.

Mr. Jackson reviewed McKenna's history in working with Birmingham.

Mr. Duany noted that DPZ invented the Charrette process 35 years ago. He then:

- Reviewed the Charrette process as described on pages 432-434 of the October 8, 2018 agenda packet. He noted that there is a high failure rate with Charrettes, but that DPZ has changed its process over the last five or six years and has become successful.
- Clarified that DPZ expects to make individualized reports for each neighborhood.
- Said the central focus is synthesizing the expertise of the residents and the expertise of the DPZ team. He said the residents are experts in the present and in the details of their neighborhoods. The DPZ team brings a different kind of expertise, with an eye towards general trends and evolving technology.
- Said DPZ provides reports with three different scenario types to provide perspective. The
 first is how the community would develop with no changes to its planning. The second is
 how the community would develop if all the residents' preferences were implemented.
 The third scenario how the community would develop if the DPZ recommendations are
 implemented.
- Emphasized that the residents are experts in their neighborhoods, but only in the
 present, whereas planners endeavor to create something based on trends and
 forecasting for twenty or thirty years from now. He explained that DPZ clarifies the
 options before the stakeholders, rather than making the decisions for the community.
- Said older residents are usually resistant to the new ideas presented in Charettes, while younger residents are usually more interested in change. Often, when a younger resident speaks in favor of an idea in a Charrette, older residents also tend to take a more positive view. Because of this, DPZ always invites the youngest person in the Charrette to weigh in first, because the young people will be interacting most with the community changes being proposed.

- Said DPZ is careful to get a random sample of attendees to attend Charrettes now, because often the most resistant residents are the ones most likely to attend of their own accord. Inviting attendees randomly allows for a more accurate representation of the community's view.
- Said that, during planning, DPZ correlates each concern raised by residents to the appropriate level of decision making: household, block, street, city, state, nation, or United Nations. In this way, DPZ is able to clarify for everyone involved that the decisions being focused on are city-level ones.
- Said in order not to lose the more advanced participants in a Charrette, more elementary questions are answered by providing written information that can be reviewed at the inquirer's leisure.
- Said the Commission will be an integral and active part of the process the whole time, and can provide feedback all the way along.
- Said the market study mentioned in the submittal was probably a mistake of including boilerplate language, because the submittals are not usually taken as seriously by the planners or by the community. The plan receives DPZ's utmost attention, however.
- Said DPZ goes after the problems in a community to see where the fundamental issues are, even if they are uncomfortable topics for the community to broach, because this allows for the best planning proposals.
- Said he would be running the Charrettes, and other members of his team would write up the plan.

Ms. Traxler stated the DPZ team plans on meeting with neighborhood associations, and on being available for follow-up conversations with residents. Residents are invited to participate in Charrettes in a number of ways determined early on in the process through discussions between the DPZ team, city staff, and the Commission. Addressing the budget presented in the RFP, Ms. Traxler explained the Charrette is included in plan preparation, whereas the comprehensive community engagement is included in DPZ's preliminary work.

Mayor Pro Tem Bordman noted that, within the RFP, Charrettes were included under comprehensive community engagement. Therefore, their inclusion under plan preparation makes little sense in terms of what the Commission asked for.

Commissioner Sherman pointed out that in paragraph six of the RFP, it is possible to have made the interpretation of the Charrette being part of the plan preparation phase. In addition, the Commission was provided an explanation by Mr. Lambert at the September 17, 2018 meeting as to how the time was allocated, which met the Commission's expectations. He continued:

- Certain Commissioners have decided Mr. Lambert's previous explanation was not good enough.
- The MPSC worked hard on vetting these proposals, and the Commission has now spent two hours tonight and two hours at the last meeting going over this information again. The Commission originally appointed the MPSC to avoid this kind of process.
- That some members from the MPSC are present at this meeting, and should be invited to share their perspective with the Commission.

Commissioner Hoff said the meeting minutes of the MPSC are very complete in providing the MPSC's perspective, and that no further input should be necessary to make this decision.

Commissioner Nickita opined it was reassuring that both teams had similar ways of allotting time and resources to the various aspects of the planning process

Mayor Pro Tem thanked both teams and asked for comments from the Commission.

Commissioner Boutros reviewed the process thus far, and said he now is sure DPZ is capable of carrying out the master planning process to the City's satisfaction. He made a motion to award DPZ the contract, and it failed due to a lack of a second.

Commissioner Hoff said that she was more confident in the MKSK team.

Commissioner DeWeese, Mayor Pro Tem Bordman, and Commissioner Nickita all said they would like to wait for a full Commission to make a decision.

Commissioner Sherman noted that Mayor Harris did not have the benefit of asking questions this evening. He continued that the Commission has made a habit of deferring decisions, and that the decision should be made by the Commissioners present. Both teams are capable of doing the job well. He opined the decision should not be made on a 4-3 vote.

Commissioner Hoff said this is not a deferral, even if the Commission often does defer decisions. She said the vote would be 3-3 tonight, and having the Mayor participate in the vote will be the tie-breaking vote.

Mayor Pro Tem Bordman stated that Mayor Harris could review the video recording of the meeting to catch himself up on the discussion, and that a 4-3 vote will have to be an acceptable option for the Commission on this matter.

Commissioner Boutros urged the Commission to move forward with the vote because the Commission received a recommendation from the very qualified MPSC.

Mayor Pro Tem Bordman noted two Commissioners in favor of voting now, and four in favor of waiting, so Mayor Pro Tem Bordman deferred the vote.

VI. NEW BUSINESS

10-276-18 PUBLIC HEARING FOR ORDINANCE LANGUAGE UPDATES FOR CHURCH & RELIGIOUS INSTITUTION USES

Commissioner Boutros temporarily left the commission table.

Senior Planner Baka reviewed the issue as presented in the agenda packet, explaining that church is more exclusively used with Christianity, and the goal is to be more inclusive of other religions.

Mayor Pro Tem Bordman opened the public hearing at 9:59 p.m.

Commissioner Sherman excused himself from the meeting at 10:00 p.m. due to illness.

Mayor Pro Tem Bordman closed the public hearing at 10:00 p.m.

MOTION: Motion by Commissioner DeWeese, seconded by Commissioner Nickita: To approve the following amendments to Chapter 126, Zoning, of the City Code to remove all references to Church or Churches and replace the terms with religious institution(s) and provide a definition for same:

- 1. TO AMEND ARTICLE 2, SECTION 2.03, R1A (SINGLE-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION:
- TO AMEND ARTICLE 2, SECTION 2.05, R1 (SINGLE-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 3. TO AMEND ARTICLE 2, SECTION 2.07, R2 (SINGLE-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 4. TO AMEND ARTICLE 2, SECTION 2.09, R3 (SINGLE-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION:
- 5. TO AMEND ARTICLE 2, SECTION 2.11, R4 (TWO-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 6. TO AMEND ARTICLE 2, SECTION 2.13, R5 (MULTIPLE-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION:
- 7. TO AMEND ARTICLE 2, SECTION 2.15, R6 (MULTIPLE-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION:
- 8. TO AMEND ARTICLE 2, SECTION 2.17, R7 (SINGLE-FAMILY RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 9. TO AMEND ARTICLE 2, SECTION 2.21, O1 (OFFICE) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 10. TO AMEND ARTICLE 2, SECTION 2.25, P (PARKING) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 11. TO AMEND ARTICLE 2, SECTION 2.27, B1 (NEIGHBORHOOD BUSINESS) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE PERMITTED USES, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 12. TO AMEND ARTICLE 2, SECTION 2.29, B2 (GENERAL BUSINESS) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE PERMITTED USES, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 13. TO AMEND ARTICLE 2, SECTION 2.31, B2B (GENERAL BUSINESS) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE PERMITTED USES, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 14. TO AMEND ARTICLE 2, SECTION 2.33, B2C (GENERAL BUSINESS) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE PERMITTED USES, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;

- 15. TO AMEND ARTICLE 2, SECTION 2.37, B4 (BUSINESS-RESIDENTIAL) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE PERMITTED USES, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 16. TO AMEND ARTICLE 2, SECTION 2.39, MX (MIXED USE) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 17. TO AMEND ARTICLE 2, SECTION 2.43, TZ2 (TRANSITION ZONE) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 18. TO AMEND ARTICLE 2, SECTION 2.45, TZ3 (TRANSITION ZONE) DISTRICT INTENT, PERMITTED USES, AND SPECIAL USES, TO AMEND THE USES REQUIRING A SPECIAL LAND USE PERMIT, TO REMOVE CHURCH AND REPLACE WITH RELIGIOUS INSTITUTION;
- 19. TO AMEND ARTICLE 3, SECTION 3.07 PERMITTED USES AND SPECIAL USES, TO REMOVE CHURCH IN THE LAND USE MATRIX;
- 20. TO AMEND ARTICLE 4, SECTION 4.45 (G)(5)(a)(ii) and (iii) PK-01 GENERAL PARKING STANDARDS TO AMEND THE METHODS OF PROVIDING PARKING FACILITIES, TO REPLACE CHURCH WITH RELIGIOUS INSTITUTION;
- 21. TO AMEND ARTICLE 4, TO AMEND TABLE A REQUIRED OFF-STREET PARKING SPACES, TO REPLACE CHURCH WITH RELIGIOUS INSTITUTION;
- 22. TO AMEND ARTICLE 4, SECTION 4.66 (A)(1)(STORAGE AND DISPLAY STANDARDS), TO REPLACE CHURCH WITH RELIGIOUS INSTITUTION;
- 23. TO AMEND ARTICLE 4, SECTION 4.84 TU-01 (A)(2)(TEMPORARY USE STANDARDS), TO REPLACE CHURCH OR OTHER RELIGIOUS FACILITY WITH RELIGIOUS INSTITUTION;
- 24. TO AMEND ARTICLE 4, SECTION 4.86 TU-03 (A)(1)(TEMPORARY USE STANDARDS), TO REPLACE CHURCH WITH RELIGIOUS INSTITUTION;
- 25. TO AMEND ARTICLE 7, SECTION 7.21 (A)(1) REQUIREMENTS, TO REPLACE CHURCHES WITH RELIGIOUS INSTITUTIONS;
- 26. TO AMEND ARTICLE 9, SECTION 9.02 DEFINITIONS, TO ADD A DEFINITION OF RELIGIOUS INSTITUTION;
- 27. TO AMEND APPENDIX A, LAND USE MATRIX, TO MERGE CHURCH AND CHURCH AND RELIGIOUS INSTITUTION ROWS INTO ONE ROW UNDER RELIGIOUS INSTITUTION; AND
- 28. TO AMEND APPENDIX B, INDEX, TO ELIMINATE INDEXED PAGES WHERE CHURCH NO LONGER EXISTS, ADD RELIGIOUS INSTITUTION AND CORRESPONDING PAGE NUMBERS.

VOTE: Yeas, 4

Nays, 0 Absent, 2

10-277-18 EMERGENCY RESPONSE VEHICLE PURCHASES

Fire Chief Connaughton thanked the Commission for its continued support of the Fire Department and reviewed the issue on the agenda.

Commissioner Boutros returned to the table.

Assistant Fire Chief Donohue presented a short presentation on the two vehicles.

Fire Chief Connaughton explained the ambulance will be at the Adams Fire Station and the mini-pumper will be at the Chesterfield Fire Station. Each station will have a full-size engine as well. If the call is a rescue, the mini-pumper and the ambulance will go out. If the call is a fire, the full-size engine and the ambulance will go out.

Commissioner Boutros pointed out that the mini-pumper will be less expensive to maintain than a full-size engine, and that it is a necessary addition to the changing needs of the Birmingham community.

MOTION: Motion by Commissioner Boutros, seconded by Commissioner Hoff:

To authorize the purchase of a 2019 Life Line Type1 ambulance on a Ford F-450 chassis for the cost of \$237,241.00 and a 2019 Danko mini-pumper mounted on a Ford F-550 chassis for a cost of \$338,431.00; further to authorize this budgeted expenditure from account number 663-338.000-971.0100; further authorizing and directing the mayor to sign the respective agreements on behalf of the City.

VOTE: Yeas, 5

Nays, 0 Absent, 2

10-278-18 MAPLE ROAD PAVING PROJECT – SOUTHFIELD ROAD TO WOODWARD AVENUE

Planning Director Ecker introduced Brad Strader and Haley Wolf from MKSK, and Justin Rose from Fleis & Vanderbrink (F&V).

Mr. Strader made a presentation of the findings and recommendations made by F&V and endorsed by the Multi-Modal Transportation Board (MMTB) in the agenda packet. He continued that the design of the barrier-free spaces will be updated to meet current standards and expectations. As a result some of the barrier free spaces were relocated to accommodate the design change.

Mr. Rose explained that having the barrier-free spaces across from each other allowed them to be closer to the 'X', and the MMTB emphasized the desire to have the 'X's located in a consistent way.

City Engineer O'Meara explained:

- Handicapped parking standards require a certain number per block, not necessarily per smaller unit of road.
- His understanding is that the new ADA standards do require the proposed changes to the handicapped spaces, even though they are more invasive to the land- and streetscapes.

Mr. Rose clarified that:

- The changes to the handicapped spaces may be required if using federal funding, but not necessarily on a local project.
- MDOT's standard is 20-foot spaces with an eight-foot box, or 22-foot spaces. The only way F&V was able to get to 22-foot spaces was with Birmingham's current 18-foot spaces and eight-foot boxes.

Mr. Strader said that F&V drew out both options, and the MMTB said to remove the 'X's if the yield increased, but to leave them if the yield remained the same.

Commissioner Nickita asked the team to consider whether these changes to the handicapped spaces should be done at all, or perhaps only at some spaces as they are not required.

The team confirmed for Commissioner Nickita that from Southfield to Old Woodward the proposed changes would remove seven spaces.

Commissioner DeWeese pointed out that wider sidewalks would mean businesses no longer need to use parking spaces to accommodate their decks, which could lead to an increase in available spaces. He added that the biggest issue with wheelchairs and parking is curb height. Lower curbs are easier to navigate.

Mr. Strader said that the team would get more clarity on the ADA requirements for parking and would look into potential modifications that would accommodate Commissioner DeWeese's observation about curb height.

City Engineer O'Meara confirmed Maple would have wall-to-wall, optic lines, and irrigation. The power lines were foregone because installing them was a large expense and the City can always light things on Maple by plugging in the lights.

Mayor Pro Tem Bordman said that skipping the power lines on Maple may be unwise because it is a large east-west thoroughfare.

Mr. Strader said that MDOT projects do not have bid options, so the Commission would need to decide on installing power lines or not before moving the project on to MDOT.

Mayor Pro Tem Bordman replied that the City can then internally research the option.

Mr. Strader explained that benches and other amenities were not included in this early version because this presentation was just of the proposed infrastructure changes. Amenities would be included in the later design.

Mr. Strader continued with the presentation, reviewing the tree and landscaping options as included in the agenda packet.

Commissioner Nickita opined that canopy trees are essential to the quality of the streetscape.

Commissioner DeWeese noted that different kinds of canopy trees could be used in different locations as necessary instead of switching to columnar trees.

There was consensus among the Commissioners that canopy trees are to be maintained.

Mr. Strader continued with the presentation, next addressing the mast arm signal at Maple and Southfield. He confirmed that the light on Southfield is facing south.

Mr. Rose explained the new conditions would turn the road considerably, facing where the stop bar would be, which is not dead-on like the other ones are. The goal was to eliminate the pork chop for the right turns. The City got some safety funding from MDOT to do this reconfiguration which is why the City cannot do the mast arm and the box span, as the decision needs to be made prior.

Mr. Strader said the MMTB focused more on the view into the Museum, not the view of the signal.

Mr. Rose confirmed that the team would be putting more of a bend in the road. He continued that:

- The right turn movements along with the people turning left off of Maple yielded the most crashes.
- Going from Maple to Southfield, turning right and going eastbound, the road will look slightly different because the movement will be controlled with the intersection.
- Currently there is a yield situation in which many vehicles are not yielding to the left-turning vehicles, which is creating the conflict. After the proposed change, rights onto Southfield will still be possible, just within the confines of the intersection.

Commissioner DeWeese said it was wise to include mast arms at both locations, and that the 90° angle will increase safety. Commissioner Nickita concurred.

Commissioner Nickita continued that the width of the southbound lane may need further study. He said the width of the proposed lane is so wide as to be potentially dangerous.

Mr. Rose said that lane is not yet to scale, because these were the schematics used in the proposal. He agreed with Commissioner Nickita that the lane cannot be that wide.

There was Commission consensus on adopting Commissioner DeWeese's recommendation for mast arms.

Mr. Strader continued with the presentation, reviewing the intersection at Maple and Bates.

Mr. Rose said the intersection would work fine with left-turns onto Bates, even without a left-turn lane, according to models.

Mr. Strader continued with the presentation, reviewing the intersection at Maple and Henrietta.

Commissioner Nickita opined that the City needs to adhere to its plan of celebrating terminating vistas. He continued that where Henrietta terminates to the north something needs to be done to accentuate the end of that visual corridor.

Mr. Strader continued with the presentation, reviewing the mid-block crossing between Peabody and Old Woodward.

Mr. Rose confirmed that removing the three 'X's to the east of the crosswalk would not equal another parking space. This is because with the federal fund requirement, the spaces are the same at 22-feet or 20-feet with an eight-foot 'X'.

Mr. Strader said that an eleven-foot lane is an MDOT standard, and was found to be no less safe than a 12-foot lane.

Commissioner Nickita said he liked the lane narrowing, that the taper-length is excessive, and that he would like to see less space on either side of the crosswalk.

Mr. Rose noted that a fifteen-foot lane tends to increase speeds, that the team would look into shortening the taper in order to add an additional space, and that the space on either side of the crosswalk is required by MDOT.

Mr. Strader continued with the presentation, reviewing the intersection at Maple, Park and Peabody.

Commissioner Nickita explained that this is one of the remnants of the ring road system from the 1960s that Birmingham has been replacing, and that this section of road should be fixed similarly. He suggested:

- Peabody should allow drivers to either go through or right, instead of limiting drivers' options to a right turn.
- That then the five lanes become four lanes.

Mr. Rose agreed, saying the team would update the plan with these recommended changes.

Mayor Pro Tem suggested there should be a crosswalk installed on the east side, at Peabody and Park, going north to south.

Mr. Strader reviewed the Commission's direction:

- Barrier-free parking will be reviewed to see if its frequency can be reduced.
- Electric systems as part of Maple will be reviewed.
- The next round of drawings will include amenities.
- Maple and Bates will have no left turns on either side, and there will be mid-block crossings.
- Canopy trees will be reviewed as the preferable option for landscaping.
- Maple-Southfield graphics will be cleaned up to show a better signal view.
- Terminating vistas which are part of this plan will be designed with an eye towards celebration.
- F&V will model removing the fifth lane at the Woodward, Peabody and Park intersection.

Commissioner Nickita excused himself from the meeting at 11:32 p.m. due to an early morning flight.

10-279-18 DOWNTOWN PARKING STRATEGIES AND RECOMMENDATIONS REPORT AND PRESENTATION

Assistant City Manager Gunter summarized the report as studying the effective management, use of capacity, and the City's technological environment. She emphasized:

- This is a dynamic plan and a recommendation.
- The implementation guide for immediate action steps that the Advisory Parking Committee (APC) should consider.

Assistant City Manager Gunter concluded by introducing Tom Brown, Julie Dixon, and Brad Strader.

Mr. Brown provided an overview of pages ten through thirty-one of the September 2018 Final Downtown Parking Plan Report.

Ms. Dixon suggested that Lot 12's underutilization could be because employees work from home a number of days a week. Thus, a potential option would be a pass that allows passholders to purchase a certain number of lot uses per month instead of the flat rate. This can encourage drivers to consider alternate forms of transportation. She continued:

• The Commission's instinct to study Lot 12 is a good one, as it can be a study for how exactly to design a flexible pass that will work for Birmingham drivers.

- When overselling passes, the process has to be increased incrementally beginning with an additional ten percent.
- Factors like day-use passes or night-use passes could also be considered in the process of tracking the car counts.
- A flex-pass is more similar to a 'license to hunt' than a guaranteed space. The pass would offer a good likelihood of finding a space. It would also be beneficial to the City to allow the pass to be used in a few different areas so a failure to find a space in one lot does not end a driver's opportunity to find a space.
- The most essential part of these recommendations is that someone needs to be interpreting the data and making recommendations based on that. If the data is ignored the recommendations are not sound.
- Nelson-Nygaard tends to write the report, Dixon often helps municipalities interpret the
 data and implement the report, and through part of Dixon's work they help
 municipalities design and hire for a permanent position monitoring parking trends and
 implementing changes. Several parking operators are able to do this. Municipal
 oversight has to be engaged in this process.
- There are sustainable solutions that allow municipalities to retain their parking revenue.
- Birmingham can definitely justify a dedicated parking manager for the City, given the age of the industry and the demand for parking in Birmingham.

Commissioner Hoff said she liked the idea of parking ambassadors.

Commissioner DeWeese said he appreciated the 'Quick Wins'.

Mr. Brown noted that sometimes these decisions are sensitive, so one of the best approaches is to combine something like a rate hike with one of the recommended 'Quick Wins' or something else positive so that it is clear the changes are part of a program.

Al Vaitis, Chair of APC, liked the idea of a valet at Lot 6. He explained:

- One company bought a block of permits that are not being used at Lot 12, so the APC's idea was to get more utilization.
- One of the negatives of Lot 12 is that it means people have to cross Woodward.
- SP+ has been doing a great job for the City.

MOTION: Motion by Commissioner Boutros, seconded by Commissioner DeWeese: To accept the Downtown Parking Strategies and Recommendations report, as presented by the Nelson Nygaard Consultants and further to direct the APC to evaluate and prioritize implementation of the recommended strategies in future meetings.

VOTE: Yeas, 4

Nays, 0 Absent, 3

VII. REMOVED FROM CONSENT AGENDA

The items removed were discussed earlier in the meeting.

VIII. COMMUNICATIONS

None.

IX. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

None.

X. REPORTS

10-280-18 COMMISSIONER REPORTS

The City Commission will interview for three positions on the Birmingham Shopping District Board on November 19, 2018.

The City Commission will appoint one member to the Cablecasting Board on November 19, 2018.

The City Commission will appoint one regular member to the Board of Zoning Appeals on November 19, 2018.

The City Commission will appoint one alternate member to the Parks and Recreation Board on November 19, 2018.

The City Commission will appoint two members to the Design Review Board on November 19, 2018.

The City Commission will appoint one member to the Historic District Commission on November 19, 2018.

10-281-18 CITY STAFF REPORTS

The Commission received the Parking Utilization Report, as submitted by Assistant City Manager Gunter.

The Commission received the Oakland County Board of Commissioners Ad Hoc Committee on Election Infrastructure Report, as submitted by City Clerk Mynsberge.

The Commission received the CN Maple Road Bridge Update, as submitted by Director of Public Services Wood.

XI. ADJOURN

Mayor Pro Tem Bordman adjourned the meeting at 11:58 p.m.

J. Cherilynn Mynsberge, City Clerk

BIRMINGHAM CITY COMMISSION / PLANNING BOARD JOINT MEETING MINUTES OCTOBER 15, 2018 DPS FACILITY, 851 SOUTH ETON, BIRMINGHAM MI 48009 7:30 P.M.

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Mayor Andrew M. Harris called the meeting to order at 7:30 PM.

II. ROLL CALL

ROLL CALL: Present, Mayor Harris

Mayor Pro Tem Bordman Commissioner Boutros Commissioner DeWeese Commissioner Hoff Commissioner Nickita

Scott Clein, Planning Board Chairman

Robin Boyle, Member Jason Emerine, Member Stuart Jeffares, Member Bert Koseck, Member Daniel Share, Member

Janelle Whipple-Boyce, Member J. Bryan Williams, Member

Absent, Commissioner Sherman, Naseem Ramin

ADMINISTRATION: City Manager Valentine, City Attorney Currier, Deputy Clerk Arft, Assistant

Planning Director Ecker, Building Official Johnson, Assistant Building

Official Morad

III. ITEMS FOR DISCUSSION

A. CURRENT ISSUES:

Aging in Place

City Planner Ecker reviewed the October 10, 2018 memo on the matter.

Planning Board (PB) Chair Clein said the issue of aging in place is part of a larger issue of affordable housing in Birmingham. He asked the Commission if there was interest in exploring affordable housing in general in Birmingham, in addition to the issue of aging in place, in order to allow older residents to continue to live in Birmingham.

Commissioner DeWeese suggested that the City could look at its code to encourage people to build accessible housing from the outset. He continued:

• That part of the issue is that the code does not currently require people to consider accessibility issues.

 Changes that increase building accessibility help all citizens, not just those using mobility aids. People pushing baby carriers, for instance, are greatly benefitted by ramp entrances to buildings.

Planning Director Ecker said there are many examples of how other communities are dealing with the same issues of accessibility and aging in place.

Mr. Jeffares explained these issues currently loom large for real estate agents in Birmingham. A couple of examples were residential requests for:

- Covered walkways between a house and a detached garage so as to increase the safety of the path in winter.
- Elevator additions to homes where stairs present an accessibility issue.

Mr. Jeffares also suggested that planning parks with an eye towards the preferred recreational activities of an older population, such as softball, pickleball, and shuffleboard, would be beneficial. He noted that it was very difficult for NEXT to find softball fields in Birmingham for the senior softball league.

Commissioner Hoff explained the Foundation for Senior Residents' program providing nointerest loans to Birmingham senior citizens to increase residential accessibility. She is the Commission's representative at the Foundation, and the Foundation gets very few requests from citizens even though there is capacity. She mentioned:

- One of the reasons is likely that applicants have to be low-income, and many Birmingham residents are not at that level.
- The Commission and PB must remain aware of potential unintended consequences of changing the code to allow accessibility modifications to residences.

She also asked the PB to work closely with NEXT to get feedback on needs.

Commissioner Nickita offered a couple of examples of increased residential accessibility:

- Converting first-floor garages into liveable spaces.
- Creating smaller residences in the backyard of a residence to allow for independent living for seniors while allowing them to be close to their family.

He added:

- That the issue of increasing downtown residency is related to parking, which the City is currently working on.
- Changing the zoning of some streets from single- to multi-family homes could help. This would be done through the Master Plan process. While the onus would not be on the PB to make these changes, the PB could help direct the Master Plan conversation on the issue.

Mayor Pro Tem Bordman offered support for exploring both affordable housing and aging in place.

Mr. Boyle talked about the 'house within a house' concept in which different generations of a family can both live with each other and have separate living spaces. He also:

- Agreed that there are a number of other elements to explore to increase accessibility, such as curb heights, seating, and signage.
- Commended the City on providing larger and more legible street signage.
- Noted that the market will not make these kinds of accessibility changes. Only the City can provide them.

2

October 15, 2018

Mr. Koseck said the City should be focusing on attracting younger residents as well.

Commissioner Boutros agreed with Commissioner Hoff that the potential unintended consequences of moving forward with code changes must be considered. He noted:

- People may use the code changes put in place for seniors to gain space they do not need.
- The City must consider who moves into a house modified for senior citizens once the home is relisted.
- Perhaps there could be an age criterion for more flexible rules on these issues.

Mayor Harris noted consensus among the Commissioners in favor of exploring aging in place and affordable housing. He then opened the issue to comment from the public.

Ron Lewis spoke on behalf of himself and his wife, Stephanie Olman, who was in the audience. He explained:

- That while he is currently mobile, he has a back issue and was looking to build a bedroom and accessible bathroom on the first floor of his home.
- Mr. Lewis and Ms. Olman went to the Board of Zoning Appeals (BZA) to request the 3% variance that would have been necessary to make these changes.
- The BZA declined their request for the variance.
- Such a modest change to the house would not be a deterrent to a potential future buyer.
- The zoning ordinances are currently very rigid on these issues. He said Commissioner Boutros' suggestion of an age criterion could be a good idea.

Mr. Lewis thanked the Commission and PB for listening. He thanked City Manager Valentine and Mayor Pro Tem Bordman for speaking with him prior to his comments regarding the matter.

2. Rooftop Usage in MX District City Planner Ecker reviewed the October 10, 2018 memo on the matter.

Commissioner Nickita endorsed this possibility, saying it should be considered for the rail district, the triangle district, and the downtown as well. He noted that the ordinances would need to be updated to require accessible access to rooftops. He cautioned:

- That these rooftop usages should not become an additional floor of interior space.
- Attention must be paid to the structural changes made as part of these updates. For instance, columns on the roof would visually imply another floor.

Planning Director Ecker said she could not speak to the City's original rationale for disallowing rooftop usage in 1998.

Commissioner DeWeese suggested that the code should be written with an eye towards creating these spaces as an amenity, as opposed to for occupancy. He also agreed with Commissioner Nickita that the careful implementation of these spaces could occur in Birmingham's other commercial districts as well.

Commissioner Hoff said:

- The MX District is currently the only district that disallows rooftop usage.
- Rooftop usage could be expanded to the MX District.

 The issue of enclosures for elevators or similar considerations could be looked at further, both for the MX District and for the other commercial districts.

Planning Director Ecker explained that currently an enclosed rooftop-access elevator cannot cause a building to exceed the permitted number of stories in a district.

Mayor Harris acknowledged consensus to explore rooftop usage in the MX District and to explore definitions affecting rooftop usage in all of Birmingham's commercial districts.

It was determined that All Seasons has two buildings of differing heights, and residents have rooftop access to the shorter building's roof by exiting an elevator in the taller building.

3. Process for Minor Changes to the Planning Board's Action List City Planner Ecker reviewed the October 10, 2018 memo on the matter. She provided wooden gates on dumpster enclosures as one such potential minor change.

Mayor Pro Tem Bordman said the PB has a full slate of important issues, and that the minor issues should be saved to be addressed periodically so they do not take time from the major issues.

Ms. Whipple-Boyce explained she would like to have a miscellaneous category for the PB to consider minor ordinance changes, which would then go before the Commission. She cited two examples where materials that would have been appropriate for a building were disallowed by the City's code. She stressed that none of these issues would bump a more pressing issue off the list.

Mr. Koseck noted that materials continue improving, and the PB is currently unable to recommend updates to the code to keep up with those improvements.

PB Chair Clein explained that the PB would not make exceptions to ordinances. Rather, as projects are proposed and turned down based on code, the PB notes issues that could be revised. They are asking for a process to revisit those issues with the Commission a bit more frequently. PB Chair Clein suggested a quarterly review might work.

Planning Director Ecker explained minor issues used to go to the Commission from the PB through an informal Miscellaneous category. Since the PB's list is now formalized and ordered by priority, however, it would be more difficult to have a miscellaneous category.

Commissioner DeWeese said that if the issues can be resolved quickly, they should be. Otherwise, issues should be noted and brought to the next joint Commission-PB meeting to be discussed.

Commissioner Nickita suggested clarifying:

- The definition of minor;
- The appropriate process for reviewing these issues and making changes; and,
- When these issues are addressed.

Mayor Harris noted consensus to expedite consideration of minor issues. He suggested City staff could bring issues to the Commission's attention at the next Commission meeting after the issues arise, in order to quickly get feedback to the PB.

City Manager Valentine confirmed that City staff would look into how to do this efficiently.

4. Use of Astro Turf in Residential Rear Yards
Building Official Johnson reviewed the October 10, 2018 memo on the matter.

Mayor Pro Tem Bordman spoke on grass' importance to the local ecological system.

Commissioner DeWeese said:

- Turf can help control run-off and helps avoid fumes from lawn mowers.
- In the particular example being discussed, the water would be recycled to water a garden, which gets to Mayor Pro Tem Bordman's concern.
- He does not have a preference for a particular color of turf as long as the public cannot see it.

Commissioner Nickita said:

- Drainage is a big issue although products are getting better.
- He would only want it in the rear yard.
- The significant burden of implementation and regulation would be placed on the City.
- Odor retention can be an issue with pets and turf.

Building Official Johnson explained this would only add a few inspections to the normal inspection routine and that he is in favor of this.

Commissioner Hoff said she was comfortable with a study of this, and would want to start with backyards.

Commissioner Boutros pointed out that turf is better than rocks or concrete, which would currently be permitted by code.

Building Official Johnson said lower-quality materials tend to have the issues with odor retention. He also confirmed that high-quality turf installed properly reduces drainage problems that lawns have.

Mayor Harris noted consensus to study the turf use in rear yards further.

5. Walls, Structures & Grade Changes in Front Yards Building Official Johnson explained the current issue.

Commissioner Nickita agreed the City needs to figure out the limits for these issues before the walls, structures and grade changes get too extreme. The parameters should adhere to the character of the neighborhoods. He also acknowledged that creative expression on front lawns can be valuable and has a place in the community.

Commissioner DeWeese said the character of the neighborhoods will be clarified during the Master Planning process, and this topic can be brought up within that conversation. The PB could do some preliminary research on trends. The question will also be what residents want their own neighborhoods to look like.

5

Building Official Johnson said that raising the grade of a yard can cause excess water in neighbors' yards. He also explained that a drainage system installed at the time of the graderaising would prevent the issue.

Commissioner Hoff said effects on adjacent properties should be considered.

Building Official Johnson noted some back-to-back lots can have six-foot tall fences along the property line.

Commissioner Nickita said he wants an ordinance requiring a concrete walk between the sidewalk and the front door, instead of only having a front door accessible by walking along the driveway. He would like this added into the discussion of front yard ornamentation, and believes it promotes Birmingham's goal of being a walkable City.

V. PUBLIC COMMENT

There was no public comment.

V. CITY COMMISSION BUSINESS

A. Resolution of the City Commission to meet in closed session, as requested pursuant to Section 8(A) of the Open Meetings Act, MCL 15.261 – 15.275.

The meeting was recessed at 9:22 p.m.

The meeting was adjourned to closed session at 9:32 pm.

The meeting returned to open session at 11:20 p.m.

VI. ADJOURN

The meeting was adjourned at 11:20 p.m.

Check Number	Early Release	Vendor #		Vendor	Amount
PAPER CHECK					
261553		MISC		MARK & STEPHANIE RUMA	10.00
261554	*	008805		21ST CENTURY MEDIA-MICHIGAN	112.00
261555	*	000855		48TH DISTRICT COURT	100.00
261556	*	008226		KATHI ABELA	305.24
261557	*	007266		AETNA BEHAVIORAL HEALTH LLC	463.45
261558		MISC		AIR MASTER HEATING & AC LLC	131.25
261559		008015		ALL PHASE LOCK AND SAFE	245.00
261560		007793		AMERICAN HOME FITNESS	121.94
261561		001206		AMERICAN MIDWEST PAINTING INC	2,690.00
261562		008667		APOLLO FIRE-APPRATUS REPAIR	400.40
261564		000500		ARTECH PRINTING INC	49.00
261565	*	006759		AT&T	188.66
261566		MISC		AUDRIK INC DBA ROTO ROOTER	1,000.00
261567	*	004027		AUTOMATED BENEFIT SVCS INC	13,688.72
261568		MISC		B7 INVESTMENTS LLC	15,000.00
261569		MISC		B7 VENTURES	500.00
261570		006316		BAHL & GAYNOR, INC	5,547.57
261571		003012		BATTERIES PLUS	158.40
261572		008899		CITY OF BIRMINGHAM #234	58,458.93
261573		006683		BIRMINGHAM LAWN MAINTENANCE	19,829.00
261575		000542		BLUE WATER INDUSTRIAL	88.75
261576	*	007716		PATRICIA BORDMAN	390.51
261577		MISC		BOSTWICK EXCAVATING	807.00
261578	*	006953		JACQUELYN BRITO	24.98
261580		003907		CADILLAC ASPHALT, LLC	5,092.43
261581		004125		CANNON EQUIPMENT	619.96
261583		007933		CARDNO, INC.	4,849.01
261584		MISC		CARLYSLE & LLOYD INC	100.00
261585	*	000444		CDW GOVERNMENT INC	137.37
261586		MISC		CEDAR WORKS INC	100.00
261587	*	008540		CERTIFIED LABORATORIES	248.93
261588		000603		CHEMCO PRODUCTS INC	362.00
261589		MISC		CHRISTINE DALTON	500.00
261590		000605		CINTAS CORPORATION	119.29
261591	*	008044		CLUB PROPHET	590.00
261592		002234		CMP DISTRIBUTORS INC	218.85
261593		004188		COFFEE BREAK SERVICE, INC.	312.00
261593	*	004188		COFFEE BREAK SERVICE, INC.	83.75
261594	*	004026		COFINITY	1,431.00
261595	*	007625		COMCAST	551.14
261597		002167		CONTR. WELDING & FABRICATING INC	7,720.00
261598		001367	4C	CONTRACTORS CONNECTION INC	95.70

Check Number	Early Release	Vendor #	Vendor	Amount
261599		008512	COOL THREADS EMBROIDERY	239.96
261601		000177	DELWOOD SUPPLY	11.39
261602	*	006907	DENTEMAX, LLC	143.10
261604	*	000179	DTE ENERGY	63.21
261605	*	000180	DTE ENERGY	28,495.97
261606		MISC	ECOART LLC	100.00
261607		004671	ELDER FORD	1,748.60
261608	*	001124	EMPCO INCORPORATED	2,458.22
261610		001495	ETNA SUPPLY	2,400.00
261611		008495	FALCON ASPHALT REPAIR EQUIPMENT	1,561.44
261613		008898	FERNDALE FIRE RESCUE	2,048.27
261614	*	008281	AUSTIN FLETCHER	80.00
261615		MISC	GILKEY, JOHN W	25.00
261617	*	004604	GORDON FOOD	132.61
261618		007347	GREAT LAKES AWARDS, LLC	19.00
261619		MISC	GREAT LAKES CUSTOM BUILDER LLC	2,000.00
261620		MISC	GREAT LAKES HEARING PROTECTION	210.00
261621		MISC	GSA GRUPPO LLC	200.00
261622		008701	H BAR C RANCHWEAR	500.00
261623		MISC	HANSONS GROUP LLC	500.00
261624		006153	HARRY'S ARMY SURPLUS	125.00
261625		006845	HAWTHORNE	860.00
261626		001846	HIGHWAY MAINTENANCE AND	200,092.37
261629	*	003436	RACKELINE J. HOFF	193.60
261630		MISC	HOME RENEWAL SYSTEMS LLC	1,000.00
261632	*	008608	THE HUNTINGTON NATIONAL BANK	500.00
261633		000342	IBS OF SE MICHIGAN	215.90
261634	*	008888	IKEA CANTON	769.90
261635		002407	J & B MEDICAL SUPPLY	69.26
261636		007870	J.C. EHRLICH CO. INC.	40.00
261637		008891	JASEN MAGIC	500.00
261638	*	002576	JAX KAR WASH	94.00
261640	*	001798	BRUCE JOHNSON	168.52
261641		006283	K & J VENTILATION	268.00
261642	*	007827	HAILEY R KASPER	144.00
261643	*	MISC	KATIE HOLDEN	724.24
261645		004088	KGM DISTRIBUTORS INC	263.00
261646	*	007828	DEBORAH KLEIN	465.00
261647	*	000352	JILL KOLAITIS	1,846.00
261648	*	002466	MIKE LABRIOLA	26.26
261649		006817	LEXISNEXIS RISK DATA MANAGEMENT INC	115.05
261650		000287	LIGHTING SUPPLY COMPANY	28.31
261652		007797	MAILFINANCE INC.	422.64

Check Number	Early Release	Vendor #	Vendor	Amount
261653		008248	MALWAREBYTES	2,314.00
261654		MISC	MARK ZIMMERMAN	100.00
261655	*	MISC	MASSERMAN PHOTOGRAPHY	25.00
261656		MISC	MCLEAN CONSTRUCTION CO	100.00
261657		008793	MERGE MOBILE, INC.	56.00
261658		003860	MICHIGAN CHANDELIER - SF	62.88
261659		003099	MICHIGAN POLICE EQUIP.	504.00
261660		MISC	MILLCREEK PROPERTY GROUP LLC	2,500.00
261661		007163	MOBILE HEALTH RESOURCES	2,761.83
261662		001452	MONTGOMERY & SONS INC	586.00
261663	*	007462	MICHAEL MORAD	97.22
261665		000462	MOTOR CITY INDUSTRIAL	30.88
261667		000668	NATIONAL TIME & SIGNAL CORP	542.20
261668		008806	NELSON NYGAARD CONSULTING ASSOC.	3,970.00
261669		007755	NETWORK SERVICES COMPANY	845.70
261670	*	007856	NEXT	26,200.00
261671		MISC	NORTH BOUND CONSTRUCTION INC	200.00
261672		001864	NOWAK & FRAUS ENGINEERS	37,952.50
261673	*	000477	OAKLAND COUNTY	711.90
261674	*	003461	OBSERVER & ECCENTRIC	1,031.70
261675	*	004370	OCCUPATIONAL HEALTH CENTERS	108.00
261676	*	000481	OFFICE DEPOT INC	192.00
261678		MISC	Phillip Sign & Lighting Inc.	807.00
261679		MISC	PIPITONE CUSTOM BUILDERS	100.00
261680		008901	PLANTE & MORAN CRESA, LLC	7,000.00
261681		008858	PODS ENTERPRISES, LLC	69.00
261682		000897	PRINTING SYSTEMS INC	619.66
261683		MISC	PRM CUSTOM BUILDERS LLC	2,000.00
261684		001062	QUALITY COACH COLLISION LLC	1,706.20
261685		006729	QUENCH USA INC	240.00
261687		008852	REDGUARD FIRE & SECURITY	300.00
261689		MISC	ROBERT-THOMAS LANDSCAPE ENVIRONMENT	100.00
261690		000218	ROYAL OAK P.D.Q. LLC	510.30
261691		MISC	SHERER CONSTRUCTION	200.00
261692		008144	SMARTDEPLOY	1,080.00
261694		000260	SPARTAN DISTRIBUTORS INC	350.70
261695		002809	STATE OF MICHIGAN	747.00
261696	*	004355	SYMETRA LIFE INSURANCE COMPANY	34,571.39
261697		MISC	TECHHOME BUILDING CO., LLC	850.00
261698	*	003173	TIFFANY FLORIST	65.95
261699		000275	TIRE WHOLESALERS CO INC	274.00
261700		MISC	TORTORA, PATRICK	707.00
261701		005645	TRAFFIC DATA COLLECTION LLC	1,800.00

Check Number	Early Release	Vendor #	Vendor	Amount
261702		004379	TURNER SANITATION, INC	140.00
261703		MISC	TURNER, MARK A	300.00
261704		000931	VARSITY SHOP	59.87
261705		000158	VERIZON WIRELESS	727.05
261706	*	000158	VERIZON WIRELESS	151.35
261707	*	000158	VERIZON WIRELESS	151.71
261708		000298	VESCO OIL CORPORATION	100.80
261709		006491	VILLAGE AUTOMOTIVE	464.82
261710	*	004334	VILLAGE CONEY	236.10
261711		004497	WATERFORD REGIONAL FIRE DEPT.	252.75
261713		MISC	WEDDELL, GREGORY	1,200.00
261714		004672	WEST MARINE PRO	79.96
261716		MISC	WINSTON AND SONS HOME IMPROVEMENT L	100.00
261717		003925	WIZBANG PRODUCTS CO	372.40
261718		005360	WORRY FREE INC	2,300.00
261719		008391	XEROX CORPORATION	1,373.91
261720		MISC	ZANY LLC	37.50
261721		008902	ZORO TOOLS, INC.	38.21
			SUBTOTAL PAPER CHECK	\$538 , 386.49
ACH TRANSACT	<u>l'ION</u>			
	*	008847	ABS- AUTOMATED BENEFIT SVCS, INC	33,187.22
		002284	ABEL ELECTRONICS INC	687.50
		008555	ABELL PEST CONTROL INC	40.00
		003858	ADVANCED LIGHTING & SOUND	2,270.00
		007440	AMICI PET SERVICES, INC	250.00
		008655	ANGELO IAFRATE CONSTRUCTION	510,830.35
	*	000517	BEIER HOWLETT P.C.	146.62
		000518	BELL EQUIPMENT COMPANY	1,593.34
		007345	BEVERLY HILLS ACE	6.29
		008840	BIRMINGHAM PUBLIC SCHOOLS-TAXES	152,969.18
		001035	DOUGLASS SAFETY SYSTEMS LLC	102.78
		000207	EZELL SUPPLY CORPORATION	447.38
		001230	FIRE SYSTEMS OF MICHIGAN INC	1,202.00
		001023	GABRIEL, ROEDER, SMITH & CO.	14,000.00
		003870	GREAT LAKES TURF, LLC	3,700.25
		001672	HAYES PRECISION INC	60.50
	*	007465	IN-HOUSE VALET INC	1,500.00
		000261	J.H. HART URBAN FORESTRY	31,088.25
		000186	JACK DOHENY COMPANIES INC	81.00
		003458	JOE'S AUTO PARTS, INC.	557.70
	*	003458	JOE'S AUTO PARTS, INC.	20.25
				= ; . 20
	*	000891	KELLER THOMA	2,999.95

Check Number	Early Release	Vendor #	Vendor	Amount
	*	005550	LEE & ASSOCIATES CO., INC.	1,065.70
		001089	MUNICIPAL CODE CORP.	671.48
		006359	NYE UNIFORM COMPANY	904.87
		008843	OAKLAND COUNTY TREASURER- TAX PYMNT	237,337.81
		008269	PREMIER SAFETY	1,275.00
	*	003554	RKA PETROLEUM	1,464.34
		006497	RNA OF ANN ARBOR INC	2,210.00
		001181	ROSE PEST SOLUTIONS	71.00
		000254	SOCRRA	73,457.00
	*	001097	SOCWA	207,828.80
		000273	TERMINAL SUPPLY CO.	26.44
		002037	TOTAL ARMORED CAR SERVICE, INC.	736.27
		000969	VIGILANTE SECURITY INC	85.00
		007278	WHITLOCK BUSINESS SYSTEMS, INC.	1,816.68
			SUBTOTAL ACH TRANSACTION	\$1,287,070.95
			GRAND TOTAL	\$1,825,457.44
			GRAND TOTAL	\$1,825,457.4

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mark Gerber Finance Director/ Treasurer

 $[\]star$ -Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
261722	*	000855	48TH DISTRICT COURT	100.00
261723		MISC	A FRAME CONSTRUCTION INC	100.00
261725		004657	AKT PEERLESS	2,800.00
261726		MISC	ALBAUGH MASONRY STONE AND TILE	200.00
261727		007745	ALL COVERED	1,192.00
261728		MISC	ANTO GLASS BLOCK INC	100.00
261729		MISC	ARNOLD ROOFING & CONSTRUCTION INC	200.00
261730		000500	ARTECH PRINTING INC	106.00
261731	*	006759	AT&T	1,441.48
261732	*	006759	AT&T	174.91
261733	*	006759	AT&T	225.58
261734	*	006759	AT&T	238.43
261735	*	006759	AT&T	65.35
261736		MISC	B-DRY SYSTEM OF MICHIGAN INC	100.00
261740		MISC	BCD CONSTRUCTION LLC	200.00
261741		MISC	BECHARD, KENNETH J	100.00
261742		004931	BIDNET	30.22
261743	*	008909	CITY OF BIRMINGHAM #235	11,638.69
261744		006683	BIRMINGHAM LAWN MAINTENANCE	456.00
261745		000524	BIRMINGHAM LOCKSMITH	381.00
261747		MISC	BIRMINGHAM SEALCOAT INC	100.00
261750	*	MISC	BRIAN BOLYARD	1,616.06
261752	*	005289	BUSINESS CARD	361.58
261753		006257	C.S. MCKEE LP	2,403.41
261755		005238	CBTS	13,987.00
261756	*	000444	CDW GOVERNMENT INC	320.09
261757	*	002067	CENTRAL PARKING SYSTEM	24.00
261758		MISC	CHAMPINE SERVICES INC	100.00
261759		008306	CHARTER TOWNSHIP OF BLOOMFIELD	1,206.50
261760		000605	CINTAS CORPORATION	105.65
261761		001367	CONTRACTORS CONNECTION INC	201.50
261762		008512	COOL THREADS EMBROIDERY	274.98
261763		MISC	COUNTRYSIDE CONSTRUCTION COMPANY, I	200.00
261764		MISC	CURRAN DEVELOPMENT CO INC	200.00
261765		MISC	CZERWINSKI, WLODZIMIERZ JAN	100.00
261766		MISC	DAN LYNCH	2,100.00
261767		008005	DE LAGE LANDEN FINANCIAL SVCS INC	173.75
261768		MISC	DELGHAN, JOSEPH P	100.00
261769		002473	DELL MARKETING L.P.	225.98
261771		MISC	DEVONSHIRE DESIGNS	100.00
261772	*	003807	DOETSCH INDUSTRIAL SVCS INC	91,148.23
261773		MISC	DOMINIC'S CEMENT WORKS, INC.	100.00

Check Number	Early Release	Vendor #	Vendor	Amount
261774		MISC	DONALD A BOSCO BUILDING INC	5,500.00
261775		007505	EAGLE LANDSCAPING & SUPPLY	145.00
261776		000493	ED RINKE CHEVROLET BUICK GMC	9.25
261777		000196	EJ USA, INC.	1,388.07
261778		008474	ELITE DEFENSE	417.14
261781		007782	FIRE STATION SOFTWARE LLC	315.00
261782		001056	GALLS, LLC	77.44
261783		007172	GARY KNUREK INC	797.36
261784		000223	GASOW VETERINARY	826.10
261785	*	004604	GORDON FOOD	128.93
261787		001531	GUNNERS METER & PARTS INC	1,525.00
261788		001447	HALT FIRE INC	117.24
261790		006845	HAWTHORNE	80.00
261791		002535	HENDERSON GLASS INC	272.00
261792		001415	HORNUNG'S PRO GOLF SALES INC	54.49
261793		000948	HYDROCORP	1,315.00
261794	*	007870	J.C. EHRLICH CO. INC.	68.00
261795		000344	J.T. EXPRESS, LTD.	2,316.71
261796		MISC	JAMES R LIGHTBODY	100.00
261797		MISC	JARADI, AVIS J	2,000.00
261798	*	002576	JAX KAR WASH	4,678.44
261799	*	008917	JONES LANG LASALLE AMERICAS, INC.	9,874.00
261800		007423	K/E ELECTRIC SUPPLY	165.00
261802		MISC	KEARNS BROTHERS INC	100.00
261803		008740	KENTWOOD OFFICE FURNITURE	1,125.00
261804	*	000362	KROGER COMPANY	119.85
261806		000287	LIGHTING SUPPLY COMPANY	227.47
261807		MISC	LM POTOROKA	100.00
261808	*	008158	LOGICALIS INC	9,700.00
261809		MISC	LOPICCOLO HOMES INC	2,000.00
261811		MISC	MASSIMO D AGOSTINO	100.00
261812	*	MISC	MATTHEW CONLEN	1,891.62
261813		MISC	MAZZA COMPANY CONCRETE INC	100.00
261814	*	004663	MGIA	555.00
261815		000644	MICHIGAN STATE UNIVERSITY	80.00
261816		005024	MIDWEST GLASS FABRICATORS, INC	128.92
261820		000230	MIKE SAVOIE CHEVROLET INC	795.10
261821		001950	MILLER CANFIELD PADDOCK AND	6,289.88
261822		001783	MMTA	100.00
261823		MISC	MR ROOF HOLDING CO LLC	200.00
261824		MISC	MUSCAT BROTHERS CONSTRUCTION CO	100.00
261825	*	007755	NETWORK SERVICES COMPANY	1,895.40
261826		MISC	NEW GENERATIONS SIGNS LLC	100.00

City of Birmingham Warrant List Dated 10/17/2018

Check Number	Early Release	Vendor #	Vendor	Amount
261827	*	002792	PAUL O'MEARA	80.00
261828		MISC	OAKES ROOFING SIDING & WINDOWS INC	100.00
261829	*	000477	OAKLAND COUNTY	424,234.30
261830		008214	OAKLAND COUNTY WATER DEPARTMENT	5,588.72
261832	*	000481	OFFICE DEPOT INC	213.61
261834		006625	PACIFIC TELEMANAGEMENT SERVICES	78.00
261836	*	001753	PEPSI COLA	705.12
261837		005501	POISON IVY CONTROL OF MI	375.00
261837	*	005501	POISON IVY CONTROL OF MI	2,900.00
261838	*	000897	PRINTING SYSTEMS INC	20.00
261839		002852	QMI GROUP INC	320.00
261841		MISC	RENEWAL BY ANDERSEN	500.00
261842		MISC	ROBERT R BRANDS	200.00
261843		MISC	S & A CONCRETE CONSTRUCTION INC	100.00
261845		007817	SAND SALES COMPANY LLC	1,714.02
261846		007697	SAVE THE MOMENT	153.00
261848		003483	SHERWIN WILLIAMS COMPANY	57.80
261849		007142	SHERWIN-WILLIAMS COMPANY	10.18
261850		MISC	SIGNARAMA/TROY	200.00
261851		002871	SIR SPEEDY PRINTING INC	2,330.70
261853		000260	SPARTAN DISTRIBUTORS INC	7,436.04
261854		001076	TAYLOR FREEZER OF MICH INC	325.00
261856		008845	TOWER GROUP, LLC	3,965.00
261857		MISC	TUFF SHED INC	100.00
261858		008728	TWO THE RESCUE LLC	1,000.00
261859		MISC	UNITED HOME SERVICES	200.00
261860	*	000293	VAN DYKE GAS CO.	491.34
261861	*	008411	VARIPRO	1,576.50
261862		MISC	VENTURES DESIGN	100.00
261863	*	000158	VERIZON WIRELESS	76.02
261864	*	000158	VERIZON WIRELESS	76.02
261865	*	000158	VERIZON WIRELESS	194.55
261866	*	000158	VERIZON WIRELESS	3,450.73
261867	*	000158	VERIZON WIRELESS	426.88
261868		MISC	WALLSIDE INC	500.00
261869		001438	WINDER POLICE EQUIPMENT	65.00
261870		MISC	WINDOW PRO HOLDINGS LLC	1,000.00
261872		008391	XEROX CORPORATION	121.89
261874		MISC	ZUCCARO, JAMES	100.00
			SUBTOTAL PAPER CHECK	\$653,962.22
ACH TRANSACT	ION			
	*	008847	ABS- AUTOMATED BENEFIT SVCS, INC	43,580.56
		002284	ABEL ELECTRONICS INC	515.00

City of Birmingham Warrant List Dated 10/17/2018

Check Number	Early Release	Vendor #	Vendor	Amount
	*	002909	ACOM SOLUTIONS, INC.	250.00
		007345	BEVERLY HILLS ACE	51.25
		007624	BIRMINGHAM OIL CHANGE CENTER, LLC	39.96
	*	000157	BOB ADAMS TOWING INC	1,380.00
		007875	CANFIELD EQUIPMENT SERVICE INC.	190.00
		004232	DEARBORN LITHOGRAPH INC	2,971.00
		000956	DELTA TEMP INC	1,282.00
	*	001077	DUNCAN PARKING TECH INC	7,977.60
	*	007538	EGANIX, INC.	720.00
		000331	HUBBELL ROTH & CLARK INC	32,978.93
	*	007465	IN-HOUSE VALET INC	1,500.00
		003458	JOE'S AUTO PARTS, INC.	822.31
		005876	KROPF MECHANICAL SERVICE COMPANY	886.00
	*	003554	RKA PETROLEUM	12,966.09
		006497	RNA OF ANN ARBOR INC	2,210.00
		003785	SIGNS-N-DESIGNS INC	55.00
		008711	VOLVIK USA	384.77
	*	000306	WOLVERINE CONTRACTORS INC	899.50
			SUBTOTAL ACH TRANSACTION	\$111,659.97
			GRAND TOTAL	\$765,622.19

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mark Gerber Finance Director/ Treasurer

 \star -Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.



MEMORANDUM

Department of Public Services

DATE: October 12, 2018

TO: Joseph A. Valentine, City Manager

FROM: Lauren A. Wood, Director of Public Services

SUBJECT: 2018 Fall Tree Purchase and Planting Project

INTRODUCTION:

Twice a year, the City plants trees in residential and major street rights-of-ways and parks as part of our tree replacement program. Sealed bids were opened on Tuesday, October 9, 2018 for the cost to provide and plant one-hundred and thirty-nine (139) trees. The request for proposals was entered into the Michigan Inter-Governmental Trade Network (MITN) purchasing system. The trees to be planted will be placed on various street rights-of-way and parks during the fall of 2018.

BACKGROUND:

This purchase will include providing all trees, planting, topsoil, pruning and necessary watering. The trees also come with a two-year warranty. The bulk of the planting will occur in the right of way on various residential streets. Twenty-four trees will be planted along the trail system between Booth Park and Linden Park. The City applied for and was awarded a grant through DTE for the planting of the park trees in the amount of \$3,000.

Two (2) bidders responded to the request for proposals. The result of the sealed bids follows in the table below.

Bidder	Base Bid	Complete Bid?
KLM Landscape	\$44,327	Yes
Greg Davis Landscape	\$45,150	Yes

KLM Landscape is able to supply all trees and perform all work as requested.

LEGAL REVIEW:

The City Attorney has completed a review of this contract agreement and approved with signature.

FISCAL IMPACT:

This project was included in the 2018-2019 Approved Budget. Funds are available from the Local Streets Fund-Forestry Service Contract account, the Major Streets Fund-Forestry Service Contract account, the Local Streets Fund-Operating Supplies account, the Major Streets Fund-Operating Supplies account, the Parks Other Contractual Services account, and the Parks Operating Supplies account for these services.

SUMMARY:

The Department of Public Services recommends awarding the Fall 2018 tree purchase and planting project to KLM Landscape; they are considered the lowest responsible and responsive bidder for the 2018 Fall Tree Purchase and Planting Project.

We have awarded planting projects to KLM Landscape in previous seasons and have been completely satisfied with the quality of tree stock and service provided. The average cost per tree planted this season will be \$318.90. The fall planting project of 2017 consisted of 134 trees and the total bid amount was \$43,280.00, an average of \$322.99 per tree planted.

ATTACHMENTS:

The Agreement including the required Insurance Certificate, Bidder's Agreement, Cost Proposal, Completion Date, and Iran Sanctions Act Vendor Certification Form are attached for your review.

SUGGESTED RESOLUTION:

To approve the purchase and planting of 139 trees from KLM Landscape for the 2018 Fall Tree Purchase and Planting Project for a total project cost not to exceed \$44,327.00. Funds are available from the Local Streets Fund-Forestry Service Contract account #203-449.005-819.0000, the Major Streets Fund-Forestry Service Contract account #202-449.005-819.0000, the Local Streets Fund-Operating Supplies account #203-449.005-729.0000, the Major Streets Fund-Operating Supplies account #202-449.005-729.0000, the Parks Other Contractual Services account #101-751.000-811.0000, and the Parks Operating Supplies account, #101-751.000-729.0000 for these services. Further, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City upon receipt of required insurances.

ATTACHMENT A - AGREEMENT For Fall 2018 Tree Purchase and Planting Project

Str ha	This AGREEMENT, made thisday of, 2018, by and tween CITY OF BIRMINGHAM, having its principal municipal office at 151 Martin reet, Birmingham, MI (hereinafter sometimes called "City"), and <u>KLM Landscape</u> , ving its principal office at <u>70570 Powell, Armada, MI 48005</u> ereinafter called "Contractor"), provides as follows:
	WITNESSETH: WHEREAS, the City of Birmingham, through its Public Services Department, is sirous of having work completed to supply and install trees in the right of ways, and rks in the City of Birmingham.
3"- hui for	WHEREAS, the City has heretofore advertised for bids for the procurement and rformance of services required to perform tree supply and planting of ninety-eight (98) 3 ½" caliper B&B trees and forty-one (41) 2"-2.5" caliper B&B trees, a total of one-ndred and thirty-nine (139) trees, and in connection therewith has prepared a request sealed proposals ("RFP"), which includes certain instructions to bidders, ecifications, terms and conditions.
	WHEREAS, the Contractor has professional qualifications that meet the project quirements and has made a bid in accordance with such request for cost proposals to rform tree supply and planting.
une	OW, THEREFORE, for and in consideration of the respective agreements and dertakings herein contained, the parties agree as follows: It is mutually agreed by and between the parties that the documents consisting of the Request for Proposal to perform tree supply and planting and the Contractor's cost proposal dated October 8, 2018 shall be incorporated herein by reference and shall become a part of this Agreement, and shall be binding upon both parties hereto. If any of the documents are in conflict with one another, this Agreement shall take precedence, then the RFP.
2.	The City shall pay the Contractor for the performance of this Agreement in an amount not to exceed \$44, 327.00 , as set forth in the Contractor's October 8 , 2018 cost proposal.
3.	This Agreement shall commence upon execution by both parties, unless the City exercises its option to terminate the Agreement in accordance with the Request for Proposals.
4.	The Contractor shall employ personnel of good moral character and fitness in performing all services under this Agreement.

- 5. The Contractor and the City agree that the Contractor is acting as an independent Contractor with respect to the Contractor 's role in providing services to the City pursuant to this Agreement, and as such, shall be liable for its own actions and neither the Contractor nor its employees shall be construed as employees of the City. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the City nor the Contractor shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The Contractor shall not be entitled or eligible to participate in any benefits or privileges given or extended by the City, or be deemed an employee of the City for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the City.
- 6. The Contractor acknowledges that in performing services pursuant to this Agreement, certain confidential and/or proprietary information (including, but not limited to, internal organization, methodology, personnel and financial information, etc.) may become involved. The Contractor recognizes that unauthorized exposure of such confidential or proprietary information could irreparably damage the City. Therefore, the Contractor agrees to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Contractor shall inform its employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Contractor further agrees to use such confidential or proprietary information only for the purpose of performing services pursuant to this Agreement.
- 7. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan. The Contractor agrees to perform all services provided for in this Agreement in accordance with and in full compliance with all local, state and federal laws and regulations.
- 8. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.
- 9. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Contractor without the prior written consent of the City. Any attempt at assignment without prior written consent shall be void and of no effect.
- 10. The Contractor agrees that neither it nor its subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to

employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Contractor shall inform the City of all claims or suits asserted against it by the Contractor's employees who work pursuant to this Agreement. The Contractor shall provide the City with periodic status reports concerning all such claims or suits, at intervals established by the City.

- 11. The Contractor shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with carriers acceptable to the City of Birmingham.
- 12. The Contractor shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:
 - A. <u>Workers' Compensation Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
 - B. Commercial General Liability Insurance: Contractor shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
 - C. Motor Vehicle Liability: Contractor shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
 - D. <u>Additional Insured</u>: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following shall be *Additional Insureds*: The City of Birmingham, including all elected and appointed officials, all employee and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any other coverage that may be available to the additional insured, whether any other available coverage by primary, contributing or excess.
 - E. <u>Professional Liability</u>: Professional liability insurance with limits of not less than \$1,000,000 per claim if Contractor will provide service that are customarily subject to this type of coverage.

- F. <u>Pollution Liability Insurance</u>: Contractor shall procure and maintain during the life of this Agreement Pollution Liability Insurance, with limits of liability of not less than \$1,000,000, per occurrence preferred, but claims made accepted.
- G. Owners Contractors Protective Liability: The Contractor shall procure and maintain during the life of this contract, an Owners Contractors Protective Liability Policy with limits of liability not less than \$3,000,000 per occurrence, combined single limit, Personal Injury, Bodily Injury and Property Damage. The City of Birmingham shall be "Name Insured" on said coverage. Thirty (30) days Notice of Cancellation shall apply to this policy.
- H. <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance (and Professional Liability Insurance, if applicable), as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal, shall be sent to: Finance Director, City of Birmingham, PO Box 3001, 151 Martin Street, Birmingham, MI 48012-3001.
- I. <u>Proof of Insurance Coverage</u>: Contractor shall provide the City of Birmingham at the time the Agreement is returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below.
 - 1) Two (2) copies of Certificate of Insurance for Workers' Compensation Insurance;
 - 2) Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance;
 - 3) Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
 - 4) Two (2) copies of Certificate of Insurance for Professional Liability Insurance:
 - 5) If so requested, Certified Copies of all policies mentioned above will be furnished.
- J. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this Agreement, Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least (10) days prior to the expiration date.
- K. <u>Maintaining Insurance</u>: Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the Agreement, the City of Birmingham may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the Agreement amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.
- 13. To the fullest extent permitted by law, the Contractor and any entity or person for whom the Contractor is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and

appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.

- 14. If, after the effective date of this Agreement, any official of the City, or spouse, child, parent or in-law of such official or employee shall become directly or indirectly interested in this Agreement or the affairs of the Contractor, the City shall have the right to terminate this Agreement without further liability to the Contractor if the disqualification has not been removed within thirty (30) days after the City has given the Contractor notice of the disqualifying interest. Ownership of less than one percent (1%) of the stock or other equity interest in a corporation or partnership shall not be a disqualifying interest. Employment shall be a disqualifying interest.
- 15. If Contractor fails to perform its obligations hereunder, the City may take any and all remedial actions provided by the general specifications or otherwise permitted by law.
- 16. All notices required to be sent pursuant to this Agreement shall be mailed to the following addresses:

City of Birmingham Attn: Lauren Wood, Director of Public Services 851 South Eton Birmingham, MI 48009

1. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.

2. <u>FAIR PROCUREMENT OPPORTUNITY:</u> Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham.

IN WITNESS WHEREOF, the said parties have caused this Agreement to be executed as of the date and year above written.

WITNESSES:	CONTRACTOR
	BY KICKKNOBLOCH, KLM Its: CWNER
	CITY OF BIRMINGHAM
	By: Andrew M. Harris Its: Mayor
	By: J. Cherilynn Mynsberge Its: City Clerk
Approved: Approved: Auren A. Wood, Director of Public Services (Approved as to substance)	Mark Gerber, Director of Finance (Approved as to financial obligation)
Timothy J. Currier, City Attorney	Joseph A. Valentine, City Manager



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 01/05/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDI' If SUBROGATION IS WAIVED, subject to the tern this certificate does not confer rights to the certi	ns and conditions of the po	licy, certain policie:	DDITIONAL I s may requir	NSURED provisions or b an endorsement. A sta	a endon tement (sed. on
PRODUCER	CONTACT Mining Inc. Appear					
The Whims Insurance Agency	PHONE /249/651,7324 FAX /249/654 2002					
322 Main Street		IA/G. NO. EXT.	@whimsinsun		(240)0	00002
Suite 200						
Rochester	MI 48307	INSURER(S) AFFORDING COVERAGE NAIC # INSURER A EMCASCO Insurance Company 21407				
INSURED	161 40307	Heier I				21407
KLM LANDSCAPE KLM SCAPE & SNOW		INSURER B : Union Insurance Company of Providence			21423	
70570 POWELL RD	ALLO DBA	midding.re		ualty Company		21415
70370 POWELL RD		INSURER D. Acciden	t Fund			10166
47		INSURER E .			1	
ARMADA	MI 48005-4009	INSURER F:				
COVERAGES CERTIFICATE				REVISION NUMBER:		
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TO CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE IN EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIFT IN THE INFORMATION OF SUCH POLICIES LIFT.	TERM OR CONDITION OF ANY (ISURANCE AFFORDED BY THE MITS SHOWN MAY HAVE BEEN RI	CONTRACT OR OTHER POLICIES DESCRIBE REDUCED BY PAID C	R DOCUMENT D HEREIN IS S LAIMS	WITH RESPECT TO MAJICUIT	THIS.	
	POLICY NUMBER	POLICY EFF (MM/DO/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT		
				EACH OCCURRENCE	\$ 1,000	0,000
CLAIMS-MADE X GCCUR				DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 500,0	
Contractual Liability				MED EXP (Any one person)	\$ 10,00	
^ Y	5D58776	01/11/2018	01/11/2019	PERSONAL & ADV INJURY	s 1,000	1,000
GEN'L AGGREGATE LIMIT APPLIES PER				GENERAL AGGREGATE	s 2,000	0,000
POLICY X PRO-				PRODUCTS - COMP/OP AGG	2,000	0.000
OTHER					S	
AUTOMOBILE LIABILITY		l i		COMBINED SINGLE LIVIT	\$ 1,000	,000,
ANY AUTO		i		BOOILY INJURY (Per person)	3	
B CWNED SCHEDULED Y AUTOS ONLY	5E58776	01/11/2018	01/11/2019	BODILY INJURY (Per accident)	S	
HIRED NON-CANED AUTOS ONLY				PROPERTY DAMAGE (Per accident)	\$	
				Underinsured motorist	\$ 1,000	.000
➤ UMBRELLA LIAB ➤ OCCUR				EACH OCCURRENCE	10,00	0.000
C EXCESSIVAB CLAIMS WADE	5J58776	01/11/2018	01/11/2019	AGGREGATE	. 10.00	0.000
DED RETENTION S		0.00	667 64 60		\$	
WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				X PER OTH-	*	
ANY PROPRIETOR PARTNER/EXECUTIVE		Δ		E L EACH ACCIDENT	\$ 500,0	00
OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	WCV6157946 -	01/11/2018	01/11/2019		£60.0	
If yes, describe under DESCRIPTION OF OPERATIONS below				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	500.0	
	1			E.L. DISEASE - POLICY LIMIT	\$ 200,0	-
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 1						
Coverage as defined in policies. The City of Birmingham, in boards, commissions and/or authorities and board member Gerneral Liability policy and automobile Liability for service: written contract with the named insured subject to the terms	 including employees and vol s performed by KLM Landscape 	unteers are included a	as Additional In	sureds on the		
ACCUSED ATT LIGHT DEP					in	
CERTIFICATE HOLDER		CANCELLATION				
City of Birmingham PO Box 3001		THE EXPIRATION DA ACCORDANCE WITH	ATE THEREOF, H THE POLICY	CRIBED POLICIES BE CANC NOTICE WILL BE DELIVERE PROVISIONS.		BEFORE
15 Nartin Street	l′	AUTHORIZED REPRESEN	SALLE	01		
B.mingham	MI 48012-3001	@fth-				

ATTACHMENT B - BIDDER'S AGREEMENT

For Fall 2018 Tree Purchase and Planting Project

In submitting this proposal, as herein described, the Contractor agrees that:

- 1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- 2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

ADDRESS	198 198 19	
NAME OF PARENT COMPANY	PHONE	
N/A		
ADDRESS	PHONE	
70570 Powell Armada, MI 48005	586.752.5562	
COMPANY		
KLM Landscape		
AUTHORIZED SIGNATURE	E-MAIL ADDRESS	
May a. Royen	klm@klmlandscape.net	
TITLE	DATE	
(Print Name) Project Administrator	10/08/2018	
BID PREPARED BY	DATE	
Mary A. Rogers	10/08/2018	

ATTACHMENT C - COST PROPOSAL For Fall 2018 Tree Purchase and Planting Project

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be a lump sum, as follows:

ITEM			BID AMOUNT		
SPECIËS	QUANTITY	UNIT	WITH 2 YEAR WARRANTY	PROPOSED ALTERNATE (IF APPLICABLE)	NOTES
BUR OAK	3 @ 2"-2.5"	\$265.00	\$795.00/		
DISEASE RESISTANT ELM "FRONTIER"	50 @ 3"-3.5"	\$395.00	\$19,750.00		
FLOWERING CRAB	2 @ 2"-2.5"	\$190.00	\$380.00		
GINKGO	4 @ 2"-2.5"	\$190.00	\$760.00		
HONEY LOCUST	7 @ 3"-3.5"	\$310.00	\$2170.00		T.T.
HONEY LOCUST	5 @ 2"-2.5"	\$260.00	\$1300.00		
HOPHORNBEAM	5 @ 2"-2.5"	\$220.00	\$1100.00		
HORNBEAM	3 @ 3"-3.5"	\$320.00	\$960.00		
KENTUCKY COFFEE	4 @ 2"-2.5"	\$220.00	\$880.00		
LINDEN	4 @ 3"-3.5"	\$268.00	\$1072.00		
RED MAPLE	6 @ 2"-2.5"	\$190.00	\$1140.00		
SWEETGUM SEEDLESS VARIETY ONLY	40 @ 3"-3.5"	\$310.00	\$12400.00		
ZELKOVA	6 @ 2"-2.5"	\$270.00	\$1620.00		

TOTAL PROJECT COST:	\$44,327.00
Trop stock related planting	motorials and installation (nor enacifications).

Tree stock, related planting materials and installation (per specifications).

ATTACHMENT D - COMPLETION DATE For Fall 2018 Tree Purchase and Planting Project

COMPLETION DATE: December 21, 2018

A work schedule shall be provided to the Designated City Representative. The work schedule shall be approved by the Designated City Representative prior to the start of the work. His decision as to acceptability shall be deemed in the City of Birmingham's best interest. The City of Birmingham is the only party to this contract that may authorize amendment of this schedule. The contractor is required to start the project within 10 working days after notified to start work.

IL IS II	landatory that the entire project is completed on or before <u>December 21, 2016.</u>
(X) Our company can meet the completion date.
()	Our company cannot meet the completion date but offers:
	The reason our company cannot complete the work as required is as follows:
Cor	mnany Name: KLM LANDSCAPE

ATTACHMENT E - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM For Fall 2018 Tree Purchase and Planting Project

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

Mary Rogers	10/08/2018
PREPARED BY	
(Print Name)	
Project Administrator	10/08/2018
TITLE	
Mary a Roye	klm@klmlandscape.net
AUTHORIZED SIGNATURE	E-MAIL ADDRESS
KLM Landscape	
COMPANY	
70570 Powell	586.752.5562
ADDRESS	PHONE
ADDITEGO	THORE
N/A	
NAME OF PARENT COMPANY	PHONE
NAIVIE OF PARENT COMPANY	PHONE
ADDRESS	
20 2204074	
38-3304871	
TAYPAYER I D #	



MEMORANDUM

Planning Division

DATE: October 22, 2018

TO: Joseph A. Valentine, City Manager

FROM: Jana L. Ecker, Planning Director

SUBJECT: Set Public Hearing for Amendment to Article 3, Section 3.08(E) of

the Zoning Ordinance

INTRODUCTION:

Current City policy in the Triangle Overlay District allows for additional height if two out the five options in Section 3.08(E) of the Zoning Ordinance are met. Section 3.08(E)(1) states that "The applicant may provide a payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location at the rate of \$15,000 per parking space." The ordinance was written in 2007 and the construction costs of parking decks have increased since then.

BACKGROUND:

On August 8, 2018, the Planning Board discussed changing the price per space in the Triangle Overlay District to meet current market rate construction costs. It was also suggested to implement an annual price increase at a certain percentage. The Planning Board wanted clarification of the intent of the ordinance as to whether it was meant to be tied to current market rate price, or if it was meant to incentivize payment into a parking fund by offering a discounted rate.

On September 12, 2018, it was clarified by the City Manager that the intent of the ordinance is to maintain market rate construction costs for the payment-in-lieu policy of Section 3.08(E)(1) Triangle Overlay District. Local comparisons of recent parking structures that have been built or were approved to be built were also provided from the cities of Royal Oak, Rochester, and Detroit. It was noted that Royal Oak recently built a seven level parking structure with 521 spaces that was quoted at \$15,500,000 which is \$29,750 per space. The bid quotes that Royal Oak received were also provided which ranged from \$27,716 to \$31,770 per space. Royal Oak plans to build another parking structure next to its planned City Hall and has quoted \$27,500 per space for the 581 spaces planned.

The Planning Board decided on increasing the price to \$27,500 per space and to implement a 3% annual price increase beginning July 1st, 2019.

On October 10, 2018 the Planning Board held a public hearing for increasing the price per space to \$27,500 with a 3% increase every year beginning July 1st, 2019 and voted unanimously to recommend approval of the amendment to Article 3, Section 3.08(E) of the Zoning Ordinance to amend the amount of the payment in-lieu of parking for extra height in in the Triangle District.

LEGAL REVIEW:

The City Attorney has reviewed the draft language and has no concerns.

FISCAL IMPACT:

Increasing the amount of payment per space will increase the amount of funding available for a parking structure in the Triangle District and ease the burden of funding for the City.

SUMMARY:

The Planning Board has recommended increasing the payment-in-lieu rate from \$15,000 to \$27,500 per parking space in the Triangle District Overlay, and having this amount increase by 3.00% annually beginning July 1st, 2019.

ATTACHMENTS:

- Proposed ordinance language
- Planning Board report from October 10, 2018 Planning Board meeting
- Carl Walker Parking Structure Cost Outlook for 2014
- Royal Oak, MI parking structure information
- Detroit Tigers parking deck news article
- City of Rochester, MI parking deck news article
- Relevant meeting minutes

SUGGESTED RESOLUTION:

To set a public hearing date of November 19th, 2018 to consider an amendment to the Zoning Ordinance, Article 3, Section 3.08(E) to increase the one-time payment-in-lieu of parking fee in the Triangle District.

ORDINANCE NO. _	
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THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.08 (E), ADDITIONAL BUILDING HEIGHT, TO AMEND THE OPTION ITEMS TO GAIN ADDITIONAL BUILDING HEIGHT/STORIES

Section 3.08 (E) Additional Building Height

- E. Additional Building Height: Buildings or portions of buildings that are 100 feet or more from a single-family residential zoning district may have the additional building height (in number of stories and/or feet of height) noted in Section 3.08B, Section 3.08C, and Section 3.08D where 2 or more of the following are provided as part of the development. Additional stories shall be stepped back at a 45-degree angle from the top story allowed by right without the height bonus.
 - 1. A multi-level parking structure that offers parking available to the public at the rate of one parking space available to the public for every 300 square feet of building floor area allowed in the additional stories. Where additional building height is proposed without additional stories, then the parking shall be based upon the building floor area in the top floor. The applicant may provide payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location. at the rate of \$15,000 per parking space. Parking rates will be calculated as follows:
 - a. The rate of \$27,500 per space to match the current cost per above-ground structured parking space in 2018.
 - b. Starting July 1st, 2019, the rate of payment per parking space shall be increased by 3 percent each year.

ORDAINED this day of	, 2018 to become effective 7 days after publication
Andrew Harris, Mayor	
Cherilynn Mynsberge, City Clerk	



MEMORANDUM

Planning Division

Date: October 4, 2018

To: Planning Board

From: Nicholas Dupuis, Planning Intern

Approved: Jana L. Ecker, Planning Director

Subject: Triangle District – Additional Building Height

In Birmingham's Triangle District, developers are required to maintain a maximum building height depending on the zoning district being built upon. However, unique to the Triangle District, there are a series of provisions that allow for the addition of building height if completed. Section 3.08(E) of the Zoning Ordinance reads as follows:

- E. <u>Additional Building Height</u>: Buildings or portions of buildings that are 100 feet or more from a single-family residential zoning district may have the additional building height (in number of stories and/or feet of height) noted in Section 3.08B, Section 3.08C, and Section 3.08D where 2 or more of the following are provided as part of the development. Additional stories shall be stepped back at a 45-degree angle from the top story allowed by right without the height bonus.
 - 1. A multi-level parking structure that offers parking available to the public at the rate of one parking space available to the public for every 300 square feet of building floor area allowed in the additional stories. Where additional building height is proposed without additional stories, then the parking shall be based upon the building floor area in the top floor. The applicant may provide payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location at the rate of \$15,000 per parking space.
 - 2. Dedication of an improved public plaza with an area that is at least equal to 25% of the additional floor area of building area allowed in the additional stories. Where additional building height is proposed without additional stories, then public plaza space shall be based upon 25% of the building floor area on the top floor. The location and design of the plaza shall be approved by the Planning Board and shall be in accordance with the Triangle District Urban Design Plan.
 - 3. A mixed use building that provides residential dwelling units above first-floor commercial where a minimum of 50% of the buildings floor area is residential.
 - Leadership in Energy and Environmental Design (LEED) building design, accredited based upon the rating system of the United States Green Building Council.

5. Transfer of development rights for additional floor area that zoning would permit on a site containing an historic building or resource designated under Section 127 of the Birmingham Code. The development rights shall be dedicated through recording a conservation easement on the designated historic resource, which shall be reviewed and approved by the Historic District Commission. F. MU3, MU5 and MU7 Front Yard Building Setback Exceptions: In the MU3, MU5

The City has recently discussed the dollar amount in the first requisite item option for a height bonus in the Triangle District shown in Section 3.08(E)(1) noted in bold above. The City understands that due to geography, number of parking levels, façade treatments, number of parking spaces, inflation, market conditions and other factors, the price of constructing structured parking may increase as time goes on. In 2007, when this provision was added, the City deemed the amount of \$15,000 per space to be enough money to satisfy the first item in the additional height bonus section.

However, a study performed by Carl Walker, Inc. determined that the median cost per structured parking space in the City of Detroit in 2017 was \$19,873 per space, and \$59.59 per square foot. Historical Carl Walker, Inc. studies supply these figures:

Year	Median Cost Per Space	Percent Change
2013	\$18,129	-
2014	\$18,543	2.2% increase
2015	\$19,138	3.1% increase
2016	\$19,597	2.4% increase
2017	\$19,837	1.2% increase
2018	\$20,273	2.2% increase

Using the average percent change from 2014-2017, it can be estimated that the cost of a structured parking space might increase by at least 2.2 percent in 2018, bringing the median cost per structured parking space to \$20,273. In an effort to stay current with the pricing trends in the parking structure construction market, the City of Birmingham would like to update its ordinance to reflect a yearly percentage increase in the figure presented in the ordinance. **The goals of the proposed price increase are to stay current with the construction costs, inflation and material costs (etc.) associated with building a parking structure in the future.** The proposed language of Section 3.08 (E)(1) may be amended as follows:

1. A multi-level parking structure that offers parking available to the public at the rate of one parking space available to the public for every 300 square feet of building floor area allowed in the additional stories. Where additional building height is proposed without additional stories, then the parking shall be based upon the building floor area in the top floor. The applicant may provide payment- in-lieu to the City for construction of parking in a public parking deck at an offsite location within the Triangle District. at the rate of \$15,000 per parking space. Parking rates will be calculated as follows:

- a. The rate of \$20,330 per space to match the national median cost per above-ground structured parking space in 2018.
- b. Starting July 1, 2019 the rate of payment per parking space shall be increased by 3 percent each year.

On August 8, 2018 the Planning Board discussed the proposed ordinance amendment to Article 3, section 3.08(E)(1), and directed staff to request clarification from the City Manager as to whether the purpose of the proposed amendments was to simply keep the amount consistent with current and future construction costs, or whether the purpose was to incentivize payment in lieu of parking by keeping the amount per space lower than the actual construction costs for a parking space.

The City Manager has advised that the goal of the proposed ordinance amendment is to ensure that the payment in lieu of parking amount stays current based on actual construction costs, inflation and material costs (etc.) now and into the future.

On September 12, 2018 the Planning Board discussed the proposed amendment as well as additional research on actual parking deck construction costs in Royal Oak and Rochester which showed a significantly higher cost per space than the Carl Walker study. After discussion, board members reached consensus that the Royal Oak recent costs should be used as a basis for the current cost in the draft ordinance amendment of \$27,500 per space. The Planning Board then voted to set a public hearing for October 10, 2018 to consider amending Article 3, Section 3.08 (E)(1) of the Zoning Ordinance to adjust the payment in lieu of parking amount over time.

SUGGESTED ACTION:

To recommend approval to the City Commission to amend Article 3, Section 3.08 (E)(1) of the Zoning Ordinance to adjust the payment in lieu of parking amount over time.

ORDINANCE	NO
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THE CITY OF BIRMINGHAM ORDAINS:

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TO AMEND ARTICLE 3, SECTION 3.08 (E), ADDITIONAL BUILDING HEIGHT, TO AMEND THE OPTION ITEMS TO GAIN ADDITIONAL BUILDING HEIGHT/STORIES

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 - 1. A multi-level parking structure that offers parking available to the public at the rate of one parking space available to the public for every 300 square feet of building floor area allowed in the additional stories. Where additional building height is proposed without additional stories, then the parking shall be based upon the building floor area in the top floor. The applicant may provide payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location. at the rate of \$15,000 per parking space. Parking rates will be calculated as follows:
 - a. The rate of \$27,500 per space to match the current cost per above-ground structured parking space in 2018.
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Parking Structure Cost Outlook for 2014

By Gary Cudney, P.E. - President/CEO

National Median
Parking Structure
Construction Cost 2014
\$18,038 per space
\$54.05 per square foot

It's that time of year again when *Carl Walker*, *Inc.* prepares a statistical analysis of parking structure construction costs and provides a

market forecast for the remainder of the year.

At *Carl Walker*, *Inc.*, we specialize in parking structure design, structural engineering, parking studies, parking operations consulting, and restoration of parking structures, plazas, facades, and other buildings. Thus, we maintain a database of completed parking structure projects and have developed a methodology to analyze the historical cost information to assist our clients and the industry.

Our construction cost database contains a list of hundreds of completed parking structures of various sizes, scopes and locations. The cost data is assigned a factor based on the time of bidding and location. The time factor is based on the Building Cost Index (BCI), published by Engineering News-Record (ENR). The location factor is taken from the yearly edition of the RS Means Building Construction Cost Data. Applying these two factors to actual construction cost data adjusts the cost to a current national basis and from that we determine the national median, which can then be re-adjusted to reflect a median construction cost in almost every American city.

As of March 2014, our statistical data indicates that the median construction cost for a new parking structure is \$18,038 per space and \$54.05 per square foot. This is the first time the median cost has exceeded \$18,000 per space, increasing 2.9% from 2013 when the median cost was \$17,533 per space based on our historical database. This relatively minor increase is reflective of the fact that while construction markets are beginning to recover, material price increases were very low due to foreign competition and labor rates were stable as the competitive market place continued. The table below lists the 2014 median cost in various U.S. cities.



Median Parking Structure Construction Costs 2014

City	Index	Cost/Space	Cost/SF
Atlanta	87.5	\$15,783	\$47.29
Baltimore	92.8	\$16,739	\$50.15
Boston	117.6	\$21,212	\$63.56
Charlotte	80.8	\$14,575	\$43.67
Chicago	117.6	\$21,212	\$63.56
Cleveland	99.4	\$17,930	\$53.72
Denver	93.3	\$16,829	\$50.42
Dallas	85.2	\$15,368	\$46.05
Detroit	102.8	\$18,543	\$55.56
Houston	86.6	\$15,621	\$46.80
Indianapolis	92.6	\$16,703	\$50.05
Kansas City	103.8	\$18,723	\$56.10
Los Angeles	107.3	\$19,355	\$57.99
Miami	87.6	\$15,801	\$47.34
Minneapolis	109.0	\$19,661	\$58.91
Nashville	87.5	\$15,783	\$47.29
New York	131.1	\$23,648	\$70.85
Philadelphia	113.9	\$20,545	\$61.56
Phoenix	88.7	\$16,000	\$47.94
Pittsburgh	102.3	\$18,453	\$55.29
Portland	99.1	\$17,875	\$53.56
Richmond	86.7	\$15,639	\$46.86
St. Louis	103.1	\$18,597	\$55.72
San Diego	104.1	\$18,777	\$56.26
San Francisco	122.5	\$22,096	\$66.21
Seattle	103.5	\$18,669	\$55.94
Washington, D.C.	97.2	\$17,533	\$52.53
National Average	100	\$18,038	\$54.05

PARKING INDUSTRY CONSTRUCTION ECONOMIC FORECAST

According to McGraw Hill Construction's 2014 forecast "we will see 2014 as another year of measured expansion for the construction industry." 1 Further, they report that while the construction spending in the institutional sector (higher education, hospitals, government) industry is down about 32% below 2008, the "five-year decline for the institutional building market is finally reaching its end" with a slight 2% increase projected for 2014.1

Digging out of the deep construction industry recession has been sluggish and hampered by uncertainty. After a nearly 50% plummet in volume in the non-residential building market, and very slow growth for the past five years, current predictions by industry experts point to greater optimism for 2014 and 2015:

- The American Institute of Architects (AIA) chief economist Kermit Baker, PhD stated that "2014 looks to be a better year with non-residential building activity increasing 5.8%" and that the "recovery will continue into 2015 with spending increasing 8%." While there has been fluctuation and regional differences in the AIA Architectural Billings Index (ABI), Baker further reports that the "ABI has risen in vast majority of the last 16 months. With such sustained growth in design activity, continued improvement in construction activity will follow suit".2 Unfortunately, the AIA Architectural Billings Index for March 2014 of 48.8 indicates the year is getting off to a slower start than expected.3
- The AIA also compiles a Consensus Construction Forecast based on predictions of seven leading non-residential construction forecasters in the U.S. According to the Consensus Construction Forecast, the non-residential construction industry is expecting better growth than the past five years, with increases in activity projected for the office sector of 9.2% (2014) and 10.8% (2015), healthcare sector of 5.2% (2014) and 7.8% (2015), education sector of 2.8% (2014) and 5.8% (2015).2

(continued from Page 2)

Carl Walker

- Gilbane Building Company, in their Market Conditions in Construction report, predicts a 7.4% upturn in non-residential building spending in 2014. Construction cost escalation will be higher than normal as spending continues to increase. Labor and material costs will increase as fees and margins expand 4-7% for 2014 and 5-8% for 2015. Gilbane also reported that the "construction workforce is still 25% below the peak and it will take a minimum of four more years to return to peak levels."
- Turner Construction's Turner Building Cost Index rose 4.65% during 2013. Their 2013 Fourth Quarter Forecast states that "growing demand is fueling optimism in the design and construction industries. Private sector building construction work continues to grow, offsetting reductions in the public sector. Labor costs and material prices are inching up as demand increases." 5 Additionally, the Turner 2014 First Quarter Forecast indicates a 0.80% increase in costs for the quarter, a "reflection of constrained availability of labor, stability in commodity prices and competition in the market." 6
- The Engineering News-Record (ENR) recently reported their first quarter 2014 Construction Industry Confidence Index (CICI) increased to a record 72 points on a scale of 100, which represents a growing market. The vast majority of the 414 executives of large construction and design firms responding to the survey believe that the market is stable and growing. The ENR also reported "the U.S. Economy's CICI rating is five points lower than the overall construction market's rating, showing continuing economic concerns". 7
- Dale Denda, Parking Market Research Co.'s
 Director of Research, presented at the Parking
 Industry Exhibition (PIE) in March 2014 on
 the parking structure construction market.
 He estimated an 8.5% increase in project
 commitments/starts in 2013 over 2012 and
 predicts about a 5-7% gain nationally in 2014.
 The parking structure construction market
 strength will vary greatly by regional and local

geographic area.8

SUMMARY

The projected improvement in the architectural firm backlog reported by the Architectural Billings Index (ABI) and the record-high Construction Industry Confidence Index (CICI) are positive signs for the construction and parking industries. In absence of any major economic event or additional federal government budget/debt ceiling debacles, construction activity should be at the highest levels since the market collapse.

With the improved construction activity, project costs are expected to escalate to a greater level than the small projected increase in material and labor costs would indicate. Further, shortages of skilled construction workers who left the industry during the downturn could restrain market growth and raise costs. Thus, there may be a small bubble of pent-up demand that could spring loose as owners seek to have their projects bid ahead of the competition.

Carl Walker's parking professionals will be happy to assist with budgeting of your next parking structure. If you have questions or would like specific cost information for your area, contact Gary Cudney at gcudney@carlwalker.com or 800-FYI-PARK (800-394-7275).

References:

- "Housing Leads Construction Industry to Moderate Growth in 2014, According to McGraw Hill Construction," McGraw Hill Construction Press Release, October 25, 2013.
- "After a Year of Moving Sideways, Nonresidential Building Activity Poised to Resume Recovery in 2014," by Kermit Baker, PhD, The American Institute of Architects AlArchitect, January 24, 2014.
- 3. "Architectural Billings Index Mired in Slowdown," Press Release by Scott Frank, The American Institute of Architects, April 23, 2014.
- 4. "Market Conditions in Construction December 2013," by Gilbane Building Company.
- 5. "Turner Building Cost Index 2013 Fourth Quarter Forecast," Turner Construction Company.
- "Turner Building Cost Index 2014 First Quarter Forecast," Turner Construction Company.
- "Industry Executives Expect Growth to Accelerate in 2014," by Gary J. Tulacz, Engineering News – Record, March 24/31, 2014.
- 8. "Behind the National Forecast Multi-Year Trends in Local Markets Parking Garage Construction," by Dale F. Denda, Director of Research, Parking Market Research Company, Parking Industry Exhibition (PIE) March, 2014.



PROJECT HIGHLIGHTS

PARKING STUDY AT LSU HEALTH SCIENCES CENTER WRAPS UP

NEW ORLEANS, LA - Carl Walker, Inc. recently wrapped up a parking study at Louisiana State University Health Sciences Center (LSUHSC), assessing current and future parking needs as well as providing options for improv-



ing the management and operation of existing parking supplies. Another key objective was to maximize the effective utilization of existing parking resources. Opportunities to add on- and off-street surface parking spaces were identified and cost estimates of proposed options were prepared.

CARL WALKER, INC. EXPLORES FEASIBILITY OF UNDERGROUND PARKING IN SOUTH ARENA DISTRICT



GRAND RAPIDS, MI - The City of Grand Rapids (City) and Downtown Grand Rapids Inc. (DGRI)(DDA) retained *Carl Walker, Inc.* to explore the feasibility of underground parking in the South Arena District, an area currently occupied by four publicly owned surface parking lots. The underground parking analysis was the recommendation of the recently completed Arena South Visioning Plan, which recommends reclaiming scarce downtown land for people by improving pedestrian connections, adding green space, and supporting mixed-use development that provides residential, office and commercial

uses. The study will help the city, DGRI, and developers decide whether the anticipated higher financial returns and improved downtown experience for pedestrians will justify the added cost of underground parking.



April 2014 Issue

MESSAGE FROM THE PRESIDENT

Our current feature article, Parking Structure Cost Outlook for 2014, indicates 2014 and 2015 should have better growth than recent years. However, the first quarter was slower than expected, perhaps due to the

harsh winter many of us experienced. Hopefully, the economist's predictions will come true this summer.

The median national parking structure cost is now \$18,038 per space, based on average national construction costs, and will vary depending on geographic location and project features. Our historical cost database goes back over 30 years when our firm was founded. Interestingly, more recent projects have a higher median cost than older projects as the "quality" of many parking structures has improved. Projects in the median cost range typically include many amenities and features desired by owners and

users. However, if enhancements that are becoming more common nowadays are used, such as wider parking spaces, fancier façade treatments, LED lights with computerized occupancy sensor controls, 75- to 100-year service life, painted ceilings, underground construction, advanced sustainability features (solar panels, storm water detention, lighting, green roofs, etc.), parking space guidance, etc. then costs will likely exceed the median. However, our understanding of project costs means we can design a parking structure to whatever the project budget allows!

We welcome the opportunity to assist you in evaluating plans for parking development and how to achieve the best balance between function, aesthetics, first-cost, and life-cycle costs!

Gary Cudney, P.E.

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Parking Structure Cost Outlook for 2015

By Gary Cudney, P.E., President/CEO

National Median
Parking Structure
Construction Cost 2015
\$18,599 per space
\$55.66 per square foot

Carl Walker is pleased to provide its annual statistical analysis of parking structure construction costs and new parking structure market forecast, albeit a little later than usual this year. At

Carl Walker, we specialize in parking structure design, structural engineering, parking studies, parking operations consulting, and restoration of parking structures, plazas, facades, and other buildings. We maintain a database of completed parking structure projects and have developed a methodology to analyze the historical cost information to assist our clients and the industry.

Our construction cost database contains hundreds of completed parking structure projects of varying size, scope, and geographic location. For this forecast, we only omit the cost of parking structures that are completely below grade, since the cost of such structures is much higher. The cost data is assigned factors based on the time of bidding and location of the parking structure. The time factor is based on the Building Cost Index (BCI), published by Engineering News-Record (ENR). The location factor is taken from the yearly edition of the RS Means Building Construction Cost Data. Applying these two factors to actual construction cost data adjusts

the cost to a current national basis and from that we determine the national median. The national median can then be re-adjusted to reflect a median construction cost in almost every city in America.

As of March 2015, our statistical data indicates that the median construction cost for a new parking structure is \$18,599 per space and \$55.66 per square foot, increasing 3.1% from March, 2014 when the median cost was \$18,038 per space based on our historical database. This relatively minor increase is reflective of the fact that while construction markets are in a recovery, material price increases were very low due to foreign competition, fuel prices were considerably lower, and labor rates were stable as the competitive market place continued. The following table lists the 2015 median parking structure construction cost in various U.S. cities.

It should be noted that the construction cost data does not include costs for items such as land acquisition, architectural and engineering fees, environmental evaluations, materials testing, special inspections, geotechnical borings and recommendations, financing, owner administrative and legal, or other project soft costs. Soft costs are typically about 15% to 20% of construction costs, but can be higher for owners who allocate their internal costs directly to the project.



Median Parking Structure Construction Costs 2015

City	Index	Cost/Space	Cost/SF
Atlanta	87.5	\$16,274	\$48.70
Baltimore	92.6	\$17,222	\$51.54
Boston	118.1	\$21,965	\$65.74
Charlotte	82.2	\$15,288	\$45.75
Chicago	117.2	\$21,797	\$65.23
Cleveland	99.6	\$18,524	\$55.44
Denver	92.5	\$17,204	\$51.49
Dallas	85.5	\$15,902	\$47.59
Detroit	102.9	\$19,138	\$57.28
Houston	86.8	\$16,144	\$48.31
Indianapolis	92.9	\$17,278	\$51.71
Kansas City	103.3	\$19,212	\$57.50
Los Angeles	107.2	\$19,938	\$59.67
Miami	88.2	\$16,404	\$49.09
Minneapolis	108.9	\$20,254	\$60.62
Nashville	87.8	\$16,330	\$48.87
New York	131.8	\$24,513	\$73.36
Philadelphia	114.5	\$21,295	\$63.73
Phoenix	88.1	\$16,385	\$49.04
Pittsburgh	102.0	\$18,970	\$56.77
Portland	99.5	\$18,506	\$55.38
Richmond	87.1	\$16,199	\$48.48
St. Louis	102.7	\$19,101	\$57.16
San Diego	104.5	\$19,435	\$58.17
San Francisco	122.7	\$22,820	\$68.30
Seattle	102.8	\$19,119	\$57.22
Washington, D.C.	97.1	\$18,059	\$54.05
National Average	100	\$18,599	\$55.66

MEDIAN CONSTRUCTION COST

I am often asked what features are included within the "median construction cost". A median cost parking structure typically includes such features as:

- 8' 6" wide parking spaces
- Precast concrete superstructure
- Attractive precast concrete façade with basic reveal pattern
- Glass backed elevators and unenclosed stairs clad with glass curtain wall to the exterior
- Basic wayfinding and signage
- Shallow spread footing foundations
- All above grade construction
- Open parking structure with natural ventilation without mechanical ventilation or fire sprinklers
- Little or no grade level commercial space
- Basic parking access and revenue control system
- · Energy efficient fluorescent lighting

The construction cost of the parking structure would be higher than the median if it includes such enhanced features as:

- 9' 0" wide parking spaces for better user comfort
- Cast-in-place post-tensioned concrete superstructure for lower maintenance
- Attractive façade with precast, brick, metal panels, and other materials
- Green Garage Certification following the Green Parking Council standards
- Energy efficient LED lighting with occupancy and photocell computer controls
- Custom wayfinding and signage system
- Storm water management including on-site retention/ detention
- · Deep foundations, such as caissons or piling
- Below grade construction
- Enclosed stair towers due to local code requirements
- Enclosed parking structure without natural ventilation where mechanical ventilation and fire sprinklers are required
- · Grade level commercial space
- Mixed use development where the parking is integrated with office, retail, residential, or other uses
- State-of-the-art parking access and revenue control system
 - License plate recognition
 - Parking guidance system
 - Count system with variable message LED signs
 - Pay-on-foot stations
- Wi-Fi and cellular services





PARKING INDUSTRY CONSTRUCTION ECONOMIC FORECAST

Thankfully, the construction industry is in the midst of a sustained recovery. In the parking industry, growth should be buoyed as the institutional sector (i.e. city governments, higher education, and healthcare) returns to growth in construction spending.

As the construction economy improves, escalation of construction costs and longer construction schedules can be expected in many areas of the country due to labor shortages in construction trades and professional positions and as construction companies increase margins that have been depressed for more than five years. It is predicted that construction inflation could be approximately double consumer inflation!¹ Predictions by industry experts point to increased levels of construction in all sectors for 2015 and 2016:

- The American Institute of Architects (AIA) chief economist Kermit Baker, PhD, stated that "For the coming year, prospects look to continue to improve, with overall growth projected to increase almost eight percent. Institutional activity is expected to return to the positive column, with spending gains of five percent." While there has been fluctuation and regional differences in the AIA Architectural Billings Index (ABI), Baker further reports that "Since May of last year, ABI scores have been very positive...with all of the major sectors participating in the recovery".²
- The AIA also compiles a Consensus Construction Forecast based on predictions of seven leading U.S. non-residential construction forecasters in the U.S. The Consensus Construction Forecast indicates the non-residential building construction industry is expecting better growth than the past five years, with increases in activity projected for the office sector of 12.9% (2015) and 12.0% (2016), healthcare sector of 4.7% (2015) and 6.2% (2016), education sector of 4.7% (2015) and 5.2% (2016).²
- Gilbane Building Company, in their Market Conditions in Construction report, reported a 6.8% increase in nonresidential building construction in 2014 and they forecast a doubling of last year's growth during 2015 to 14.0%! Gilbane also reports that labor and material costs will increase as fees, margins, and material costs expand such that construction escalation could increase 5% to 8% for 2015 and 2016.¹
- Turner Construction's Turner Building Cost Index, which tracks construction cost escalation, rose 4.4% during 2014.
 Their 2014 Fourth Quarter Forecast states that "Higher construction cost escalations in urban centers with increased construction activity, as well as selective mega-projects, are driving the average domestic construction cost increases."³

Additionally, the Turner 2015 First Quarter Forecast indicates a 1.09% increase in costs for the quarter and that "material lead times have been extended due to increased demands and a reduced availability of production facilities to support those demands."

 The Engineering News-Record (ENR) recently reported their first quarter 2015 Construction Industry Confidence Index (CICI) increased to a record 78 points on a scale of 100, which represents a growing market. The vast majority of the 305 executives of large construction and design firms responding to the survey believe that the market is stable and growing and will continue to pick up steam over the next 18 months.⁵

SUMMARY

The sustained improvement in the architectural firm backlog reported by the Architectural Billings Index (ABI) and the record-high Construction Industry Confidence Index (CICI) are positive indicators for near term growth in the construction of parking structures. In absence of any major political or economic event, construction activity is forecasted to grow about 8% the next two years.

With the improved construction activity, project costs are expected to escalate to a greater level than the projected increase in material and labor costs would indicate. Further, shortages of skilled construction workers who left the industry during the long downturn could restrain market growth and raise costs. Because of these factors, Gilbane forecasts construction inflation will be approximately double that of consumer inflation and in the 5% to 8% range over the next two years.¹

The parking professionals at *Carl Walker* will be happy to assist with budgeting of your next parking structure. If you have any questions or would like specific cost information for your area, contact Gary Cudney at gcudney@carlwalker.com or 800-FYI-PARK (800-394-7275).

REFERENCES

- "Market Conditions in Construction December 2014," by Gilbane Building Company.
- 2. "Steady Construction Growth in the Forecast," by Kermit Baker, PhD, The American Institute of Architects AlArchitect, January 24, 2014.
- 3. "Turner Building Cost Index 2014 Fourth Quarter Forecast," Turner Construction Company.
- "Turner Building Cost Index 2015 First Quarter Forecast," Turner Construction Company.
- "Industry Market Confidence Hits Record High," by Gary J. Tulacz, Engineering News – Record, March 24, 2015





Parking Structure Planning & Design

At *Carl Walker*, parking is as much an art as it is a science. It is a structural challenge that skillfully blends parking and engineering concepts with innovative solutions designed to streamline and simplify a world in motion.

Parking structures have unique characteristics that distinguish them from other buildings. As parking consultants, one of our strengths is an extensive background in planning and designing parking structures for virtually every use and for every type of client, and in each case intelligently balancing aesthetics, functionality, durability, and cost for maximum benefit to the owner, the user, and the environment.

Over the years, our parking professionals and structural engineers have been responsible for more than 5,500 successful projects. We are "All Things Parking" and provide the entire range of parking design capabilities:

- Structural Engineering
- Feasibility & Site Analyses
- Planning/Functional Design
- Structural Engineering
- Sustainable Design

- Lighting & Drainage
- Revenue, Security & Access Control Systems
- Design/Build Scope Documents
- Graphics & Wayfinding Systems
- Owner's Representative Services

Studies & Operations Consulting

Parking is not simply about storing cars. It is about providing a valuable link in the transportation system between where you live and your destination. Whether that is a city center, the office, university, hospital, airport or an event, you want to get where you are going without inconvenience, interruptions and lost time. The *Carl Walker* team specializes in solving problems and providing successful solutions for real world applications.

For any parking system to be successful, there needs to be a combination of visionary strategic planning, defined organizational goals and effective management. *Carl Walker* provides comprehensive downtown, campus, and transportation planning services, along with organizational assessments and policy development assistance for a wide range of client types. We understand how planning is supported by strong management and organizational success. We can help make the most of your parking investment with enhanced customer service, proper technology applications, maximizing revenue, and implementing practical, common sense policies that actually work.

- Management & Operational Reviews
- Organizational & Policy Assessment
- Supply & Demand Analysis
- Transportation & Parking Master Plans
- Marketing, Branding & Customer Service
- Feasibility Studies
- Technology Assessments
- Revenue & Rate Analysis
- Enforcement Policy & Operations

Restoration Engineering

Carl Walker provides restoration engineering for existing parking structures, but our expertise does not end there. Our group of Restoration Specialists is knowledgeable and experienced in the evaluation and repair of a variety of structures, including building facades/enclosures, supported plaza systems, tunnels, bridges, stadiums, etc.

Carl Walker's restoration specialists help clients understand the condition of their facilities, assess repair and maintenance options, and design and facilitate the restoration program. Our goal is to work with our clients to develop a balanced restoration program to meet the repair and maintenance needs of the structure as well as the functional and operational goals of a facility.

Program Development

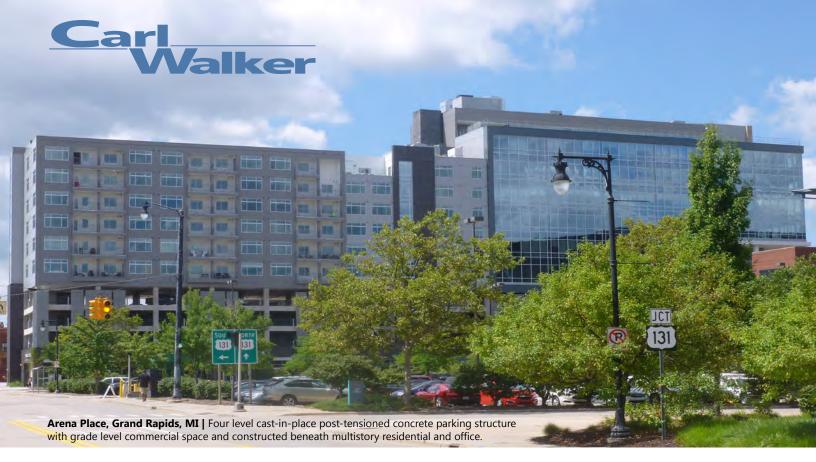
- Captal Improvement Plan Development
- Life Cycle Cost Analysis
- Maintenance Manual Preparation
- Due Diligence Review
- Public Private Partnerships

Evaluation Services

- Structural Analysis
- Forensic Investigation
- Condition Assessment
 - » Parking Garage Survey
- » Façade/Building Envelope Survey
- » Plaza Leaking/Waterproofing Review

Restoration Engineering

- Repair/Rehabilitation
- Leak Mitigation
- Corrosion Protection
- Building Envelope Repair
- Structural Strengthening & Adaptive Reuse



Parking Structure Cost Outlook for 2017

By Gary Cudney, P.E., President/CEO

National Median
Parking Structure
Construction Cost 2017
\$19,700 per space
\$59.06 per square foot

Carl Walker is pleased to provide its annual statistical analysis of parking structure construction costs and new parking structure market forecast. At Carl Walker,

we specialize in parking structure design, structural engineering, parking studies, parking operations consulting, and restoration of parking structures, plazas, facades, and other buildings. We maintain a database of completed parking structure projects and have developed a methodology to analyze the historical cost information to assist our clients and the industry.

Our construction cost database contains hundreds of completed parking structure projects of varying size, scope, and geographic location. For this forecast, we only omit the cost of parking structures that are completely below grade, since the cost of such structures is much higher. The cost data is assigned factors based on the time of bidding and location of the parking structure. The time factor is based on the Building Cost Index (BCI), published by *Engineering News-Record* (ENR). The location factor is taken from the yearly edition of the *RS Means Building Construction Cost Data*. Applying these two factors to actual

construction cost data adjusts the cost to a current national basis and from that we determine the national median. The national median can then be re-adjusted to reflect a median construction cost in almost every city in America.

As of March 2017, our statistical data indicates that the **median** construction cost for a new parking structure is \$19,700 per space and \$59.06 per square foot, increasing 3.5% from March 2016, when the median cost was \$19,037 per space based on our historical database. This relatively minor increase is reflective of the fact that while construction markets are growing, material price increases were very low due to foreign competition, low fuel prices, and labor rates were stable even as the market ramped up. The table on the following page lists the 2017 **median** parking structure construction cost in various U.S. cities.

It should be noted that the construction cost data <u>does not include costs</u> for items such as land acquisition, architectural and engineering fees, environmental evaluations, materials testing, special inspections, geotechnical borings and recommendations, financing, owner administrative and legal, or other project soft costs. Soft costs are typically about 15% to 20% of construction costs, but can be higher for owners who allocate their internal costs directly to the project.



Median Parking Structure Construction Costs 2017

City	Index	Cost/Space	Cost/SF
Atlanta	88.5	\$17,430	\$52.27
Baltimore	94.0	\$18.514	\$55.51
Boston	114.7	\$22,591	\$67.74
Charlotte	85.8	\$16,899	\$50.67
Chicago	120.0	\$23,634	\$70.87
Cleveland	96.9	\$19,085	\$57.23
Denver	89.8	\$17,686	\$53.03
Dallas	86.2	\$16,977	\$50.91
Detroit	100.9	\$19,873	\$59.59
Houston	85.2	\$16,780	\$50.32
Indianapolis	91.6	\$18,041	\$54.10
Kansas City, MO	102.5	\$20,188	\$60.53
Los Angeles	113.4	\$22,334	\$66.97
Miami	83.8	\$16,505	\$49.49
Minneapolis	105.7	\$20,818	\$62.42
Nashville	87.4	\$17,214	\$51.62
New York	134.6	\$26,510	\$79.49
Philadelpphia	115.0	\$22,650	\$67.92
Phoenix	87.3	\$17,194	\$51.56
Pittsburgh	102.3	\$20,148	\$60.42
Portland, OR	99.5	\$19,597	\$58.76
Richmond	87.3	\$17,194	\$51.56
St. Louis	101.7	\$20,030	\$60.06
San Diego	109.1	\$21,488	\$64.43
San Francisco	128.6	\$25,328	\$75.95
Seattle	104.9	\$20,660	\$61.95
Washington D.C.	94.0	\$18,514	\$55.51
National Average	100	\$19,700	\$59.06

MEDIAN CONSTRUCTION COST

I am often asked what features are included within the "median construction cost". A median cost parking structure typically includes such features as:

- 8' 6" to 8' 9" wide parking spaces
- Precast concrete superstructure
- Attractive precast concrete façade, but with basic reveal pattern
- Glass backed elevators and unenclosed stairs clad with glass curtain wall to the exterior
- · Basic wayfinding and signage
- · Shallow spread footing foundations
- · All above grade construction
- Open parking structure with natural ventilation, without mechanical ventilation or fire sprinklers
- Little or no grade level commercial space
- Basic parking access and revenue control system
- Energy efficient fluorescent lighting



City of Orland Park, IL Main Street Triangle
Five-level, precast concrete mixed-use parking structure
with grade-level commercial and built over a street.



The construction cost of the parking structure will typically be higher than the median if it includes such enhanced features as:

- 9' 0" wide parking spaces for better user comfort
- Cast-in-place post-tensioned concrete superstructure for lower maintenance
- Attractive façade with precast, brick, metal panels, and other materials
- ParkSmart Certification following the Green Business Certification, Inc (GBCI) program (formerly Green Garage Certification by the Green Parking Council)
- Energy efficient LED lighting with occupancy and photocell computer controls
- Custom wayfinding and signage system
- Storm water management including on-site retention/ detention
- Deep foundations, such as caissons or pilings
- Below grade construction
- Enclosed stair towers due to local code requirements
- Enclosed parking structure without natural ventilation where mechanical ventilation and fire sprinklers are required
- Grade level commercial space
- Mixed use development where the parking is integrated with office, retail, residential, or other uses
- State-of-the-art parking access and revenue control system
 - License plate recognition
 - Parking guidance system
 - Count system with variable message LED signs
 - Pay-on-foot stations
- · Wi-Fi and cellular services

PARKING INDUSTRY CONSTRUCTION ECONOMIC FORECAST

The construction industry is quite busy and "there is a growing belief among industry execs that the market will continue to expand." Likewise, construction of mixed use and standalone parking structures should see continued growth in the near term as construction spending in the institutional sector (i.e. city governments, higher education, and healthcare) is predicted to grow almost 6% during 2017 and 2018 and growth in the commercial, office, and retail sectors are predicted to be even higher during 2017 with some slowing in 2018.

Over the past couple of years, warnings have been coming from the construction industry that projected economic growth would lead to escalation of construction costs and longer construction schedules due to labor shortages in construction trades and professional positions and as construction companies increase margins.



University of North Carolina-Charlotte
Craige Parking Structure Expansion and Restoration



Parking Structure Cost Outlook for 2017



The Engineering News-Record (ENR) Building Cost Index increased 3.3% from March 2016 to March 2017 and Turner Construction's Turner Building Cost Index rose 5.05% over the same period. The Consumer Price Index for All Urban Consumers (CPI-U) rose 2.4 percent for the 12 months ending March 2017, indicating construction inflation reported by both the ENR and Turner indexes well exceeded consumer inflation over the same period. Industry experts recently reported the following on construction activity:

- The American Institute of Architects (AIA) chief economist Kermit Baker, PhD stated that "The prospects for the construction sector for this year (2017) and next (2018) remain quite positive...and the expectations are that construction spending will outperform the broader economy this year and next."² While there has been fluctuation and regional differences in the AIA Architectural Billings Index (ABI), AIA further reports that the "The average ABI score in 2016 was 51.3", suggesting "moderate growth in 2017".
- The AIA also compiles a Consensus Construction Forecast based on predictions of seven leading U.S. non-residential construction forecasters in the U.S. The Consensus Construction Forecast indicates the non-residential building construction industry is expecting continued growth the next two years. After an estimated 8% growth in nonresidential construction during 2016, the consensus panel projects about 6% growth for 2017 and 5% for 2018, with increases in activity projected for the office sector of 10.6% (2017) and 4.6% (2018), healthcare sector of 4.9% (2017 & 2018), and education sector of 6.3% (2017) and 6.7% (2018).
- Turner Construction's Turner Building Cost Index which tracks construction cost escalation rose 4.7% during 2016. Their 2016 Fourth Quarter Forecast states that "The shortage of skilled labor continues to be a key factor towards cost impacts across the construction industry. As we move into 2017, this focus on skilled labor is expected to intensify." Additionally, the Turner 2017 First Quarter Forecast indicates a 1.29% increase in costs for the quarter and that "the availability of skilled labor continues to influence the decision making of subcontractors, who are making a selective approach to pursuits...and a continued high level of construction activity has potential to extend lead times (for materials and project delivery) in the future." 5
- The Engineering News-Record (ENR) recently reported their first quarter 2017 Construction Industry Confidence Index

(CICI) increased to 76 points on a scale of 100 compared to 61 at this time last year. "The sharp increase in the CICI the past two quarters shows that, of the 263 executives of large construction and design firms responding to the survey, most believe market growth will continue at least through the middle of 2018".1

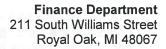
SUMMARY

The sustained growth in architectural firm backlogs reported by the Architectural Billings Index (ABI) is a positive indicator for near term growth in the construction of parking structures. In absence of any major political or economic event, construction activity is forecasted to grow about 5% to 6% the next two years, including the institutional and commercial sectors that traditionally build parking structures. With the improved construction activity, project costs are expected to escalate to a greater level than the projected increase in material and labor costs would indicate. Further, shortages of skilled construction workers could restrain market growth and raise construction inflation greater than consumer inflation over the next two years as well as lengthen project schedules.

The parking professionals at Carl Walker will be happy to assist with budgeting of your next parking structure. If you have any questions or would like specific cost information for your area, contact Gary Cudney at gcudney@carlwalker. com or 800-FYI-PARK (800-394-7275).

REFERENCES

- 1. "Executives See Gains From Trump Administration Agenda," by Gary J. Tulacz, Engineering News Record, March 20/27, 2017.
- "Even with uncertainties looming, healthy gains projected for 2017 building activity," by Kermit Baker, PhD, The American Institute of Architects AIArchitect, January 25, 2017.
- 3. The American Institute of Architects (2016, December). "ABI December 2016: Architecture firms report strong finish to the year." Retrieved April 2016 from AIA website: https://www.aia.org/pages/26736-abi-december-2016-architecture-firms-report-.
- 4. Turner Construction Company. "Turner Building Cost Index 2016 Fourth Quarter Forecast." Retrieved April 2016 from Turner Construction Company website: http://www.turnerconstruction.com/news/item/7619/Turners-Fourth-Quarter-Building-Cost-Index-Reflects-Increasing-Construction-Activity.
- Rivetti, Attilio. "Turner's First Quarter Building Cost Index Reflects Strong Market Conditions." Retrieved April 2016 from Turner Construction Company website: http://www. turnerconstruction.com/cost-index.





Second Street Parking Structure Bond Authorization and Downtown Development Authority Financing Agreement

521 Total Spaces

November 8, 2016

The Honorable Mayor Ellison and Members of the City Commission:

\$29,750 / Space

The approval of the bond authorizing resolution (Attachment 1) to issue auto parking system revenue bonds in the amount of \$13,500,000 for construction costs of the proposed Second Street parking structure is requested. The total cost for construction (including a five percent contingency and the cost to issue bonds) is estimated at \$15,500,000. It is proposed to use approximately \$2,000,000 from the auto parking fund to help fund the difference between the cost of the project and the bond proceeds. In future years, it may be requested of the Downtown Development Authority (DDA) to reimburse the auto parking fund a portion of the \$2,000,000, as the DDA funds forecast shows an anticipated improvement in the fund balance (Attachment 2).

The 37-page resolution was drafted by bond counsel Mr. Robert Schwartz of Dickinson Wright PLLC, for your review and consideration. The proposed resolution includes (but is not limited to) the following noteworthy provisions:

- The term of the bond is no longer than twenty years however it's likely to be fifteen year amortization. (Section 29(b)).
- A statutory first lien upon the net revenues of the parking system. (Section 12)
- Official city approval of an agreement (Attachment 2) drafted by Mr. Schwartz between the city and the DDA, that requires the DDA to pay no less than 50% of the debt service for the term of the bond. (Section 4)
- A statutory first lien upon the DDA payments received by the city. (Section 12)
- The principal and interest are not general obligations of the city. (Section 12)
- Not less than once per fiscal year, the city must set parking system rates to produce net revenue at least equal to 100% (up to 110% if required by the purchaser) of the annual principal and interest on all related bonds during such fiscal year. (Section 16)
- Cannot issue additional bonds of equal standing with respect to the net revenues with
 the series 2016 bonds (may issue junior lien bonds only) unless net revenues of the
 system for the last preceding audited fiscal year are equal to 110% (up to 125% if
 required by the purchaser) of the maximum annual debt service payment on any
 outstanding bonds and the additional bonds then being issued. (Section 27)
- The city will not sell, lease, mortgage or in any manner dispose of all or any substantial part of the system until all bonds payable from the net revenues of the system have been paid in full or provision has been made for the payment. (Section 26)
- The bonds will be sold pursuant to a negotiated sale. (Section 29)

At the 11 Mile Parking Starture Next to Planned City Hall is \$27,500 /space (581 Spaces)

Should the city commission desire to authorize the issuance of parking system revenue bonds for the Second Street parking structure project and the DDA agreement then your consideration of the proposed resolution is requested.

Respectfully submitted, Julie Rudd Finance Director

Approved,

Donald E. Johnson City Manager

2 Attachments



Community Development Department Planning Division

211 South Williams Street Royal Oak, MI 48067

Award of Contract CAP1709 and Construction Inspection Services Second Street Parking Deck Project

November 4, 2016

The Honorable Mayor Ellison and Members of the City Commission:

At its September 12, 2016 meeting, the city commission authorized city staff to solicit bids for the construction of a new parking structure and related streetscape.

Bids were received and opened at 11:00a.m. local time on October 14, 2016, at the Royal Oak City Hall for the subject work. The project scope includes construction of a new parking structure on the existing surface parking lot located on W. Second St. between S. Center St. and S. Washington Ave. Also included in the design are surrounding streetscape modifications.

Six bids were submitted and evaluated as shown in the table below.

<u>Firm</u>	Bid Amounts	# Per Space 27,716
Colasanti Construction Services, Inc Macomb Twp MI	\$ 14,440,000	
Frank Rewold and Son, Inc. Rochester MI	\$ 14,695,000	*28, 205
Clark Construction Co. Lansing MI	\$ 14,795,000	
George W. Auch Company Pontiac MI		28,724
Roncelli, Inc. Sterling Heights MI		†30,902
Spence Brothers Ann Arbor MI	\$ 16,552,000	*31,770

The planning division recommends that the firm of Colasanti Construction Services, Inc. be awarded the construction contract. Colasanti has extensive experience building parking structures and has received favorable reviews from its clients.

The general contractor will be required to obtain a wide variety of building and trade permits. However, staff from the building division of the community development department does not have the level of expertise to regularly supervise or provide clarification and direction to the general contractor on many technical issues that arise during construction. It's customary to retain the services of a firm that specializes in the administration of the construction. The planning division requested a price proposal from Rich and Associates, Inc., who designed the structure, to perform construction administration service. Rich and Associates, Inc. performed the design work for the construction of the parking structure, and has numerous staff with extensive experience.

The city's engineering inspection staff is fully committed to other construction projects and does not have the ability to inspect the streetscape improvements associated with the project. The planning division requested a price proposal from Anderson, Eckstein and Westrick, Inc. (AEW), who designed the



streetscape improvements, to perform construction inspection services. AEW designed the proposed streetscape, and has the specialized experience for inspection of the streetscape installation.

Lastly, an independent party is needed to test the construction materials associated with the project. The planning division requested a price proposal from Testing Engineers & Consultants, Inc. (TEC). TEC is under contract for the testing and inspection of numerous engineering related projects through the city. TEC is a highly regarded geotechnical engineering firm.

The award of the contracts will be subject to and contingent upon the successful sale of bonds by the city to finance the project.

If the city commission is in agreement, the following resolution is recommended for approval:

Be it resolved, the city commission is proceeding forward with the construction of a new parking structure and related streetscape the construction of which and the following awards of contracts related to such construction are subject to and contingent upon the successful sale of bonds to finance the project; and

Be it further resolved, the city commission hereby awards Contract CAP1709 for the construction of a new parking structure and related streetscape to Colasanti Construction Services, Inc. of Macomb Township, Michigan for a bid price of \$14,440,000 and directs staff to issue a purchase order in the amount of the bid price; and

Be it further resolved, the city commission hereby awards Rich and Associates, Inc. of Southfield, Michigan a contract for administration services related to the construction of the new parking structure for the proposal price of \$93,000 and directs staff to issue a purchase order in this amount; and

Be it further resolved, the city commission hereby awards Anderson, Eckstein and Westrick, Inc. of Shelby Township, Michigan a contract for administration and inspection services related to the installation of streetscape for the proposal price of \$29,780 and directs staff to issue a purchase order in this amount; and

Be it further resolved, the city commission hereby awards Testing Engineers & Consultants, Inc. of Troy, Michigan a contract for construction testing and observation services related to the construction of the new parking structure for the proposal price of \$51,835 and directs staff to issue a purchase order in this amount; and

Be it finally resolved, the mayor and city clerk are authorized to sign the agreements on behalf of the city.

Respectfully submitted, Timothy E. Thwing Director of Community Development

Approved,

City Manager

MEMORANDUM

Community Development Department City of Royal Oak, Michigan

DATE:

April 29, 2016

TO:

Planning Commission

FROM:

Planning Division

SUBJECT:

SP 16-05-13 - Site Plan to construct new seven-level municipal parking deck

Meeting Date: May 10, 2016

211 Williams St. / P.O. Box 64 Royal Oak, MI 48068-0064

Phone: (248) 246-3280 Fax: (248) 246-3005

www.romi.gov

(80-ft. height) on south side of W. Second St. between S. Washington Ave.

and S. Center St. (parcel no. 25-21-232-001)

City of Royal Oak, Petitioner & Owner Rich & Associates, Inc., Engineer & Architect

The above-referenced site plan is scheduled for consideration by the Planning Commission at the next regular meeting. According to the Michigan Planning Enabling Act (Public Act 33 of 2008, as amended), the Planning Commission is required to review and approve plans for the construction of new streets, parks, playgrounds, public buildings, and other public structures such as municipal parking decks. Section 61(1) of Act 33 reads as follows:

MICHIGAN PLANNING ENABLING ACT (EXCERPT) Act 33 of 2008

125.3861 Construction of certain projects in area covered by municipal master plan; approval; initiation of work on project; requirements; report and advice.

Sec. 61. (1) A street; square, park, playground, public way, ground, or other open space; or public building or other structure shall not be constructed or authorized for construction in an area covered by a municipal master plan unless the location, character, and extent of the street, public way, open space, structure, or utility have been submitted to the planning commission by the legislative body or other body having jurisdiction over the authorization or financing of the project and has been approved by the planning commission. The planning commission shall submit its reasons for approval or disapproval to the body having jurisdiction. If the planning commission disapproves, the body having jurisdiction may overrule the planning commission by a vote of not less than 2/3 of its entire membership for a township that on the enactment date of this act had a planning commission created under former 1931 PA 285, or for a city or village, or by a vote of not less than a majority of its membership for any other township. If the planning commission fails to act within 35 days after submission of the proposal to the planning commission, the project shall be considered to be approved by the planning commission.

Construction of a new seven-level parking deck is proposed on the south side of Second Street between Center Street and Washington Avenue. The deck will replace the existing surface parking lot across Second Street from the Post Office and provide 521 parking spaces.

The new deck will have seven levels and a height of approximately 80 feet to its top level. Stair and elevator towers will project another 17 feet at the northwest and northeast corners.

Entrance and exit lanes are provided to Center Street and Washington Avenue. The new structure will connect to the existing Center Street parking deck on the ground level. The entrance and exit lanes to Center Street from the existing deck will be closed. All access to the existing deck will then be provided from the new entrance and exit lanes.



SP 16-05-13 Second Street Parking Deck April 29, 2016 Page 2 of 2

The new parking deck is designed in such a manner that it can be connected to a new deck when the existing deck is replaced.

Another feature of the deck is space on the ground level that can be leased to a retailer or similar tenant. The leasable space would be located at the northeast corner of the deck's ground level and have approximately 5,000 square feet of floor area. Ground-level retail frontage is required for downtown parking decks according to § 770-30 (E)(6)(a) of the Zoning Ordinance, although the Planning Commission may except or modify that standard during site plan review.

The design and building materials of the new deck's façade elevations were selected to give it the appearance of a traditional building rather than that of a typical parking structure. The intent is to ensure the deck is compatible with the rest of the downtown. An architectural design that is compatible with adjacent buildings is required for downtown parking decks under § 770-30 (E)(6)(d).

Streetscape improvements will also be included as part of the new parking deck. The downtown's established streetscape pattern will be installed on all three sides of the new deck and also on the north side of Second Street in front of the Post Office. Second Street will also be reconfigured to have two lanes of one-way west-bound traffic and on-street parking on the north side next to the Post Office.

Should the Planning Commission wish to consider approval of the site plan, including all discretionary items, the Planning Division recommends the following contingencies:

- 1. All work within public rights-of-way shall be in accordance with the specifications and standards of the City Engineer.
- 2. The site plan shall meet all code and ordinance requirements, as determined by the Building Official, prior to issuance of any permits, including, but not limited to, the Michigan Building Code.



2nd STREET PARKING STRUCTURE FOR THE CITY OF ROYAL OAK



MICHIGAN

ROYAL OAK,

DRAWING INDEX



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LINCOURT SEEL
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C-0.0 SCOURTERS SOUTHER AND STREETSCAPE PLAN
SCHARCE AND STRENDE PLAN
C-0.0 SCUL REPOSE JOHN DE SOMEDITATION CONTROL PLAN
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C-0.0 SCUL REPOSE AND STRENDE PLAN
C-0.0 SCUL REPOSE AND SERMENTATION CONTROL PLAN

ARCHITECTURAL

SIGNAGE AND STRIPING

PS-1,1	GROUND LEVEL SIGNAGE AND STRIPING PLAN
PS-1.2	SECOND LEVEL SIGNACE AND STRIPING PLAN
PS-1.3	THIRD LEVEL SIGNAGE AND STRIPING PLAN
PS-1.4	FOURTH LEVEL SIGNAGE AND STRIPING PLAN
PS-1.5	FIFTH & SIXTH LEVEL SIGNAGE AND STRIPING PLAN
PS-1.6	SEVENTH LEVEL (ROOF) SIGNAGE AND STRIPING PLA



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M-1.2 SCOOL LEVEL INFORMATION FLAN

M-1.4 FOURTH LEVEL INFORMATION FLAN

M-1.4 FOURTH LEVEL INFORMATION FLAN

M-1.5 SEVENTH LEVEL (ROCOF) INFORMATION FLAN

M-1.6 M-1.6 SEVENTH LEVEL (ROCOF) INFORMATION FLAN

M-1.6 MECHANICAL PLAN

M-1.7 MECHANICAL

ELECTRICAL

E-0.0 ELECTRICAL CENTRAL INFORMATION

C-1.1 GROWNO LEVEL ELECTRICAL PLAN

C-1.2 SCOON LEVEL ELECTRICAL PLAN

C-1.3 THROU LEVEL ELECTRICAL PLAN

C-1.4 FOURTH LEVEL ELECTRICAL PLAN

C-1.5 PETH & SEXTH LEVEL ELECTRICAL PLAN

C-1.6 SEXTH LEVEL ELECTRICAL PLAN

C-2.5 ELECTRICAL SORDISTS AND DETAILS

C-2.5 ELECTRICAL SORDISTS AND DETAILS

ISSUE ACTION LEGEND

ISSUED
INOT ISSUED
REFERENCE ONLY
DELETED
DRAWNOS CHANGED BUT NOT ISSUED
SKETCH ISSUED FROM SHEET

OWNER

CITY OF ROYAL OAK

ROYAL OAK MICHIGA

PARKING CONSULTANT / ARCHITECT / STRUCTURAL ENGINEER

RICH & ASSOCIATES, INC.

SOUTHFIELD, MICHIGAN

MECHANICAL / ELECTRICAL / FIRE PROTECTION ENGINEER

STRATEGIC ENERGY SOLUTIONS

BERKLEY, MICHIGAN

CIVIL ENGINEER

ANDERSON, ECKSTEIN, and WESTRICK, INC.

SHELBY TWP, MICHIGAN

PROGRESS PRINT NOT FOR CONSTRUCTION

CAR COUNT SUMMARY			
LEVEL5	STANDARD	BARRIER FREE	TOTAL
SROUND LEVEL	23	1:	24
SECOND LEVEL	67	2	69
THIRD LEVEL	<i>8</i> 5	2	87
FOURTH LEVEL	<i>8</i> 5	2	87
FIFTH LEVEL	86	2	88
SIXTH LEVEL	86	2	88
SEVENTH LEVEL	78	0	78
TOTALS	510	П	52

CODE :	MICHIGAN BUILDING	CODE 2012
CLASSIFICATION:	OPEN PARKING S	
USE GROUP : LOW-H USE GROUP : BUSIN		8-2 B / M
TYPE OF CONSTRUC	TION:	IIB

* 2 HR. VERTICAL AND HOPIZONTAL FIRE

30% OWNER REVIEW DATE ISSUED: March 31, 2016

Tigers to add a parking garage next to Comerica Park

John Gallagher, Detroit Free Press

Published 10:36 a.m. ET Feb. 25, 2016 | Updated 4:07 p.m. ET Feb. 25, 2016



(Photo: Kirthmon F. Dozier, Detroit Free Press)

CONNECT TWEET LINKEDIN COMMENT EMAIL MORI

The Detroit Tigers plan to build a new 900-space parking garage just north of Comerica Park to enhance parking options in the vicinity of the ballpark and the nearby arena district now under construction.

*32,000/Space

Detroit's Downtown Development Authority approved the plan Wednesday for the \$28.8-million project.

Construction should begin in April and be finished

a year later, limiting inconvenience to the 2016 baseball season.

The garage will be built on what is now a 338-space surface parking lot just north of Comerica Park.

Video collection: Tigers in action in Lakeland!

The garage will be fully paid for by the Tigers organization or an affiliate that is part of the Ilitch family's pizza, sports and entertainment network.

Contact John Gallagher: 313-222-5173 or gallagher@freepress.com. Follow him on Twitter @jgallagherfreep.

Rochester hopes \$12 million plan eases parking squeeze

Mike Martindale, The Detroit News

Published 10:21 a.m. ET Jan. 18, 2015 | Updated 11:53 p.m. ET Jan. 18, 2015



(Photo: Brandy Baker / The Detroit News)

CONNECT TWEET LINKEDIN COMMENT EMAIL MOR

Rochester — The city boasts scores of restaurants, shops, festivals and holiday events that draw thousands to its popular downtown every year.

What it doesn't have is a place for them all to park.

Hoping to fix that, the city broke ground earlier this

month on a \$12 million project to build two tiered parking facilities in the business district that will provide 550 additional spots by next December.

\$21,818/ Space

East Platform = 235 Spaces West Platform = 297 Spaces

CITY OF BIRMINGHAM REGULAR MEETING OF THE PLANNING BOARD WEDNESDAY, OCTOBER 10, 2018

City Commission Room 151 Martin Street, Birmingham, Michigan

1. PAYMENT IN LIEU OF PARKING IN TRIANGLE DISTRICT

Chairman Clein opened the public hearing at 7:35 p.m.

Mr. Cowan explained that Birmingham's Triangle District allows an additional story for the height of a commercial building if the applicant meets two or more of the listed provisions under section 3.08E. One of those is that the applicant may provide payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location at the rate of \$15,000 per parking space. This ordinance was written in 2007 and since then the cost of parking spaces has gone up.

On August 8, the Planning Board wanted clarification of whether this was to incentivize payment in lieu of parking by keeping the amount per space lower than the actual construction costs for a parking space. The City Manager advised the goal of this ordinance amendment is to ensure that the payment in lieu of parking stays current based on actual construction costs from now and into the future.

On September 12 the Board discussed the cost of recently built parking structures in local communities and settled on \$27,500/space. That uses the Royal Oak recent costs as a basis for the current cost in the draft ordinance amendment. Starting July 1, 2010, the rate of payment will increase by 3% each year. The Board voted to set a public hearing on this topic for October 10, 2018.

Motion by Mr. Williams

Seconded by Mr. Boyle to RECOMMEND APPROVAL to the City Commission to amend Article 3, section 3.08 (E) (1) of the Zoning Ordinance to adjust the payment in lieu of parking amount over time in accordance with the comments made during the meeting.

Mr. Boyle received confirmation from Ms. Ecker that this is a one-time payment that must be paid at the time the Building Application Permit is submitted.

Motion carried, 7-0.

VOICE VOTE

Yeas: Williams, Boyle, Clein, Jeffares, Koseck, Share, Whipple-Boyce

Nays: None Absent: Ramin

The Chairman closed the public hearing at 7:38 p.m.

Planning Board Minutes September 12, 2018

1. Payment in Lieu of Parking in Triangle District

Mr. Cowan explained that the Triangle District has height limits and an extension on the height is allowed for one to two stories if two of the requirements in section 3.08 (E). One requirement is the applicant may provide payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location at the rate of \$15,000 per parking space. This was written in 2007 and since then the price/parking space has gone up.

After doing some research it was found that a study performed by Carl Walker, Inc. determined that the median cost per parking space in a parking deck in the Detroit Metropolitan Area in 2017 was \$20,250. The Royal Oak Parking Deck that was built in 2016 came out to be about \$29,750/space. The City of Rochester recently built two parking decks that came out to cost \$21,818/space (three levels each).

Some factors that lead to higher priced parking structures are retail first-floor space and enclosed stairways.

The Planning Board has been asked to look into increasing the required payment-in- lieu price in the Triangle District.

Chairman Clein recalled at the last meeting a question came up about the intent of this. Ms. Ecker replied she spoke to the City Manager regarding that question. The City Manager has advised that the intent is not to provide incentives. The goal of the proposed ordinance amendment is to ensure that the payment in lieu of parking amount stays current based on actual construction costs, inflation and material costs (etc.) now and into the future.

Mr. Koseck said his experience is the cost is not driven so much by enclosing an elevator or stair; it is more about the shape, the size, and the footprint. So, he would expect the Royal Oak number is about correct.

Everyone was comfortable with \$27,500/space and a 3% yearly increase.

Motion by Mr. Williams

Seconded by Mr. Koseck to set a public hearing date of October 10, 2018 to consider amending Article 3, section 3.08 (E) (1) of the Zoning Ordinance to adjust the payment-in-lieu of parking amount to \$27,500/space with a 3% yearly increase.

The Chairman called for comments on the motion from members of the public at 8:25 p.m.

Mr. Michael Schwartz, 411 S. Old Woodward Ave., Birmingham Place, noted the American Institute of Architects gives out annual awards for the best parking structure. He knows that the Z Garage in Downtown Detroit is a tourist attraction. He encouraged the Planning Board to consider those things in any new structure that is built in this great city.

Motion carried, 7-0.

VOICE VOTE

Yeas: Williams, Koseck, Boyle, Clein, Emerine, Jeffares, Whipple-Boyce

Nays: None Absent: Share

CITY OF BIRMINGHAM PLANNING BOARD ACTION ITEMS OF WEDNESDAY, AUGUST 8, 2018

08-144-18

3. Payment in Lieu of Parking in Triangle District

Ms. Ecker explained that In Birmingham's Triangle District, developers are required to maintain a maximum building height depending on the Zoning District being built upon. However, unique to the Triangle District, there are a series of provisions that allow for the addition of building height if completed.

Additional Building Height: Buildings or portions of buildings that are 100 ft. or more from a Single-Family Residential Zoning District may have the additional building height (in number of stories and/or feet of height) noted in Section 3.08B, Section 3.08C, and Section 3.08D where two or more of the following are provided as part of the development. Additional stories shall be stepped back at a 45-degree angle from the top story allowed by right without the height bonus.

- 1. The applicant may provide payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location at the rate of \$15,000 per parking space.
- 2. Dedication of an improved public plaza with an area that is at least equal to 25% of the additional floor area of building area allowed in the additional stories.
- 3. A mixed-use building that provides residential dwelling units above first-floor commercial where a minimum of 50% of the building's floor area is residential.
- 4. Leadership in Energy and Environmental Design ("LEED") building design, accredited based upon the rating system of the United States Green Building Council.
- 5. Transfer of development rights for additional floor area that zoning would permit on a site containing an historic building or resource designated under Section 127 of the Birmingham Code.

Ms. Ecker observed that pretty much everyone that comes in picks residential first and LEED certification is almost always their second option.

The City has recently discussed the dollar amount in the first requisite item option for a height bonus in the Triangle District shown in Section 3.08 (E) (1). The City understands that the price of constructing structured parking may increase as time goes on. In 2007, when this provision was added, the City deemed the amount of \$15,000 per space to be enough money to satisfy the first item in the additional height bonus section.

However, a study performed by Carl Walker, Inc. determined that the national median cost per parking space in the United States in 2017 was \$19,700 per space, and \$59.06 per square foot.

it can be estimated that the cost of a structured parking space might increase by at least 3.2 percent in 2018, bringing the national median cost per parking space to \$20,330. In an effort to stay current with the pricing trends in the parking structure construction market, the City of Birmingham would like to update its ordinance to reflect a yearly percentage increase in the figure

presented in the Ordinance. The proposed language of Section 3.08 (E)(1) may be amended to calculate parking rates as follows:

- a. The rate of \$20,330 per space to match the national median cost per above-ground structured parking space in 2018.
- b. Starting July 1 2019, the rate of payment per parking space shall be increased by 3 percent each year.

Mr. Koseck noted that a public parking deck at an offsite location may not serve or benefit the people paying into a parking fund.

Mr. Emerine suggested using Detroit values as opposed as the national average that Carl Walker used. Mr. Koseck said if the number is short it would benefit everybody because it will make for better development. Mr. Jeffares hoped that the money going into a parking fund will be earmarked expressly for parking. Ms. Ecker advised that generally a separate fund is set up that is required to be used only for the designated purpose.

Board members agreed that (1) should read: "The applicant may provide payment-in-lieu to the City for construction of parking in a public parking deck at an offsite location <u>within the Triangle District</u> . . . "

It was discussed that since the amount required is lower than the actual cost to construct a parking space, the intent of the amendment may be to encourage development and to encourage public parking in the Triangle District.

Ms. Ecker established that developers have to provide on-site parking for all of the as of right floors. Then if they pick option (1) the required spaces for the sq. ft. contained on the bonus floors have to be paid for.

The group agreed to defer this discussion to September when Ms. Ecker can ask the City Commission whether the intent is to tie the cost to some form of current market rate, or is the intention that the Commission wants a recommendation incentivizing this policy by taking market rate minus some factor that this group recommends.



<u>MEMORANDUM</u>

Clerk's Office

DATE: October 23, 2018

TO: Joseph A. Valentine, City Manager

FROM: J. Cherilynn Mynsberge, City Clerk

SUBJECT: 2019 Art Birmingham – May 11 & 12, 2019

INTRODUCTION:

The Birmingham Bloomfield Art Center submitted a Special Event application to hold the 2019 Art Birmingham event in Shain Park and surrounding streets on May 11th and 12th, 2019. Set-up for the event is scheduled for Friday, May 10th from 5 pm to 10 pm.

BACKGROUND:

The Police Department has reviewed the proposed event details prior to submission for street closures and the need for safety personnel and has approved the details. DPS, Planning, Building, Police, Fire, and Engineering have indicated their approval. SP+Parking has been notified of the event for planning purposes.

The following events occur in May in Birmingham, and do not pose a conflict for this event:

Farmers Market Celebrate Birmingham Sundays Lot 6
Hometown Parade May 19 Shain Park
Lungevity 5K Run/Walk TBD Booth Park area

LEGAL REVIEW:

No review required.

FISCAL IMPACT:

No fiscal impact.

SUMMARY

The City Commission is being asked to approve the 2019 Art Birmingham special event to be held May 11th and 12th, 2019, with set-up to begin Friday, May 10th between 5 pm and 10 pm. Tear-down will begin at the conclusion of the event on Sunday, May 12th at approximately 5 pm to 9 pm.

ATTACHMENTS:

- 1. Special Event application
- 2. Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area on October 9, 2018. Notification addresses are on file in the Clerk's Office
- 3. Hold Harmless Agreements signed by The Guild of Artists and Artisans, and Birmingham Bloomfield Art Center (Certificate of Insurance due on or before April 26, 2019)
- 4. Department Approval page with comments and estimated costs

SUGGESTED RESOLUTION:

To approve a request from the Birmingham Bloomfield Art Center to hold Art Birmingham in Shain Park and on the surrounding streets on May 10 - 12, 2019 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event.



151 Martin Street, P.O. Box 3001 Birmingham, MI 48012 248/530-1880 PHONE 248/530-1080 FAX

APPLICATION FOR SPECIAL EVENT PERMIT PARKS AND PUBLIC SPACES

I. EVENT DETAILS

II. EVENT INFORMATION

III. EVENT LAYOUT

IV. SAMPLE LETTER TO NOTIFY AFFECTED PROPERTY OWNERS/BUSINESSES WITHIN 300 FEET OF EVENT LOCATION

V. INSURANCE INFORMATION

• INSURANCE REQUIREMENTS

HOLD HARMLESS AGREEMENT

VI. POLICIES AND PROCEDURES

VII. CHECKLIST

VIII. SAMPLE MAPS

IX. DEPARTMENTAL APPROVAL PAGE

RECEIVED BY

SEP 2 6 2018

CITY CLERK'S OFFICE CITY OF BIRMINGHAM

BY COMMISSION ADOPTED POLICY
a secondaria de la compania del compania del compania de la compania del compania del compania de la compania del compania
 Events utilizing City sidewalks and/or streets must meet with the Police Department Special Events officer prior to submitting this application. Application and attachments must be submitted
 Letters mailed to affected property owners/businesses within 300 feet of event area Copy of letter and distribution list provided to Clerk
 Final additions/changes must be submitted for approval.
 All building, electrical, sign, and hydrant permits must be obtained All permit fees must be paid and insurance certificates must be submitted and approved All peddler/vendors applications must be submitted for approval

Special Event Application Revised - 072318

#19-0001346

CITY OF BIRMINGHAM APPLICATION FOR SPECIAL EVENT PERMIT PARKS AND PUBLIC SPACES

IMPORTANT: EVENTS UTLIZING CITY SIDEWALKS AND/OR STREETS MUST MEET WITH POLICE DEPARTMENT SPECIAL EVENT OFFICER TO REVIEW PROPOSED EVENT DETAILS PRIOR TO SUBMITTING APPLICATION.

Polic	e Department acknowledgement:
<i>I.</i>	EVENT DETAILS Incomplete applications will not be accepted. Changes in this information must be submitted to the City Clerk, in writing, at least three weeks prior to the event
FEES:	FIRST TIME EVENT: \$200.00 ANNUAL APPLICATION FEE: \$165.00
(Pleas	ee print clearly or type)
Date	of Application September 24, 2018
Name	of Event 38th Annual Art Birmingham
Detail	ed Description of Event (attach additional sheet if necessary) Fine Art Fair featuring approximately 160
profes	sional, jury selected artists, art demonstrations and art activities for all ages. The event is an annual
fundra	aiser for the Birmingham Bloomfield Art Center.
5	
Locati	on In Shain Park and on surrounding streets
Date(s) of Event May 11 & 12, 2019 Hours of Event Sat 10am-6pm Sun 10am-5pm
Date(s) of Set-up May 10, 2019 Hours of Set-up 5pm - 10pm
NOTE	: No set-up to begin before 7:00 AM, per City ordinance.
Date(s) of Tear-down May 12, 2019 Hours of Tear-down 5pm - 10pm
Orgar	ization Sponsoring Event Birmingham Bloomfield Art Center
Orgar	lization Address1516 Cranbrook Rd., Birmingham, MI 48009
Orgar	lization Phone 248-644-0866
	Contact Person Annie VanGelderen
	Contact Phone 248.644.0866 ext. 108
	Contact Fmail annievangelderen@bbartcenter.org

II. EVENT INFORMATION

1.	Organization Type Non-profit
-	(city, non-profit, community group, etc.)
2.	Additional Sponsors or Participants (Provide name, address, contact person, status, etc. for all additional organizations sponsoring your event.) The Guild of Artists & Artisans, 118 N. Fourth Ave, Ann Arbor, MI 48104
	Karen Delhey, Executive Director, 734.662.3382 ext 303 karen@theguild.org
3.	Is the event a fundraiser? YES X NO List beneficiary Birmingham Bloomfield Art Center
	List expected income \$30,000 Attach information about the beneficiary.
4.	First time event in Birmingham? YES NO X If no, describe This is the 38th Annual Art Birmingham
5.	Total number of people expected to attend per day 35,000+
6.	The event will be held on the following City property: (Please list) X Street(s) Martin, Bates, & Henrietta
	Sidewalk(s)
	X Park(s) Shain Park
7.	Will street closures be required? YES X NO (Police Department acknowledgement prior to submission of application is required) (initial here)
8.	What parking arrangements will be necessary to accommodate attendance? Exhibitors & Attendees will use city parking structures and lots

ase provide number		enance? YES	ON <u>k</u>
=	r of staff to be provided	and any specia	lized training
ained staff and tempor	ary workers are on site from t	move-in through m	nove-out to ensure
rovide maintenance. Pr	ofessional security is contrac	ted for overnight s	ecurity on Fri and Sat.
	onnel (police, fire, paramedio		
partment acknow	ledgement <u>prior to su</u>	bmission of a	application is
(initial here)	<u>u</u>		
olice and Paramedics			
(m)			
beverages be served	? YES 🗌 NO 🔯		5
ional approval by the	City Commission is required	l, as well as the I	Michigan Liquor
mission.	2		
e provided? YE	S X NO		
Amplificat	tionRecorded	Loudspe	eakers
sic will begin Noon	each Day		
sic will end5pm	each day		
of live band, DJ, louds	speakers, equipment must b	e shown on the l	ayout map.
	8		
	f the event? YES[× NO	
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signage in the area of signs/bannersA	oproximatory to portable the		
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signs/banners Ans/banners 21"x36" shoto/drawing of the swert and see the swert and see the event. The event approval	ign(s). A sign permit is be sold? YES X NO t be submitted to the Clerk from the Oakland Coun	required. The street of the s	rtment for all
Amplifications and sic will begin Noon sic will end 5pm of live band, DJ, louds	tionRecorded each Day each day speakers, equipment must b	e shown on the l	

daily fee, per location.

LIST OF VENDORS/PEDDLERS (attach additional sheet if necessary)

*** VENDOR NAME:	(C000 b) 221 (0.181 ± 5 = (0.16 b))	CV/Aveca elinike Nervasaelinik ae/ &	क्षां स्थापन स्थापन के किल्ला है। इस्ट्रेडिंग स्थापन के किल्ला स्थापन के किल
TBD			
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III. EVENT LAYOUT

- Include a map showing the park set up, street closures, and location of each item listed in this section.
- Include a map and written description of run/walk route and the start/finish area
- 1. Will the event require the use of any of the following municipal equipment? (show location of each on map)

EQUIPMENT	QUANTITY	COST	NOTES
Picnic Tables		6 for \$200.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles	33	\$4.00 each	Trash box placement and removal of trash is the responsibility of the event. Additional cost could occur if DPS is to perform this work.
Dumpsters	4	\$250.00 per day	Includes emptying the dumpster one time per day. The City may determine the need for additional dumpsters based on event requirements.
Utilities (electric)	# of vendors requiring utilities	Varies	Charges according to final requirements of event.
Water/Fire Hydrant		Contact the Fire Department.	Applicant must supply their own means of disposal for all sanitary waste water. Waste water is NOT allowed to be poured into the street or on the grass.
Audio System		\$200.00 per day	Must meet with City representative.
Meter Bags / Traffic Cones / Barricades	# to be determined by the Police Department.		

2. Will the following be constructed or located in the area of the event? YES NO (show location of each on map) NOTE: Stakes are not allowed.

TYPE	QUANTITY	SIZE
Tents/Canopies/Awnings		
(A permit is required for tents over 120 sq ft)	160	10'x10'
Portable Toilets	10	
Rides		
Displays		
Vendors	(40)	
Temporary Structure (must attach a photo)		
Other (describe)		

SIGNATURE OF APPLICANT REQUIRED

EVENT NAME	38th Annual Art Birmingham
EVENT DATE	May 11 & 12, 2019

The Birmingham City Commission shall have sole and complete discretion in deciding whether to issue a permit. Nothing contained in the City Code shall be construed to require the City Commission to issue a permit to an applicant and no applicant shall have any interest or right to receive a permit merely because the applicant has received a permit in the past.

As the authorized agent of the sponsoring organization, I hereby agree that this organization shall abide by all conditions and restrictions specific to this special event as determined by the City administration and will comply with all local, state and federal rules, regulations and laws.

Signature

Date

IV. SAMPLE LETTER TO NOTIFY ANY AFFECTED PROPERTY/BUSINESS OWNERS

- Organizer must notify all potentially affected residential property and business owners of the date and time this application will be considered by the City Commission. (Sample letter attached to this application.)
- Attach a copy of the proposed letter to this application. The letter will be reviewed and approved by the Clerk's Office. The letter must be distributed at least two weeks prior to the Commission meeting.
- A copy of the letter and the distribution list must be submitted to the Clerk's Office at least two weeks prior to the Commission meeting.
- If street closures are necessary, a map must be included with the letter to the affected property/business owners.



SPECIAL EVENT REQUEST NOTIFICATION LETTER

DATE:

October 8, 2018

TO:

Principal Shopping District Members, Downtown Birmingham Residents,

Interested Parties and Property Owners

The Birmingham City Code requires that we receive approval from the Birmingham City Commission to hold the following special event. The code further requires that we notify any property owners or business owners that may be affected by the special event of the date and time that the city commission will consider our request so that an opportunity exists for comments prior to this approval.

EVENT INFORMATION

DATES/TIMES OF EVENT:

NAME OF EVENT:

38th Annual Art Birmingham

LOCATION:

In and around Shain Park (layout enclosed) Saturday, May 11, 2019, 10am – 6pm and

Sunday, May 12, 2019, 10am - 5pm

BRIEF DESCRIPTION OF EVENT/ACTIVITY: A fine art fair featuring the handmade artwork of approximately 160 jury-selected artists. Now in its 38th year, the fair is a key annual fundraiser for the highly respected Birmingham Bloomfield Art Center (BBAC) whose "Art for All" vision delivers arts education and exhibitions to the community it serves. If you experience any issues during the event, please contact the Birmingham Police Department at 248.530.1889.

DATES/TIMES OF SET UP:

Friday, May 10, 2019, meters bagged at 3pm with street

closings at 5pm and move-in completed by 9pm

DATES/TIMES OF TEAR DOWN:

Sunday, May, 12, 2019, from 5pm to 9pm

DATE/TIME OF CITY COMMISSION MEETING: Monday, October 29, 2018 at 7:30PM

The city commission meets in room 205 of the Municipal Building at 151 Martin at 7:30PM. A complete copy of the application to hold this special event is available for your review at the city clerk's office (248.530.1880). To receive updates on special events held in the city log on to www.bhamgov.org/enotify.

EVENT ORGANIZER:

Birmingham Bloomfield Art Center

ADDRESS:

1516 S. Cranbrook, Birmingham, MI 48009

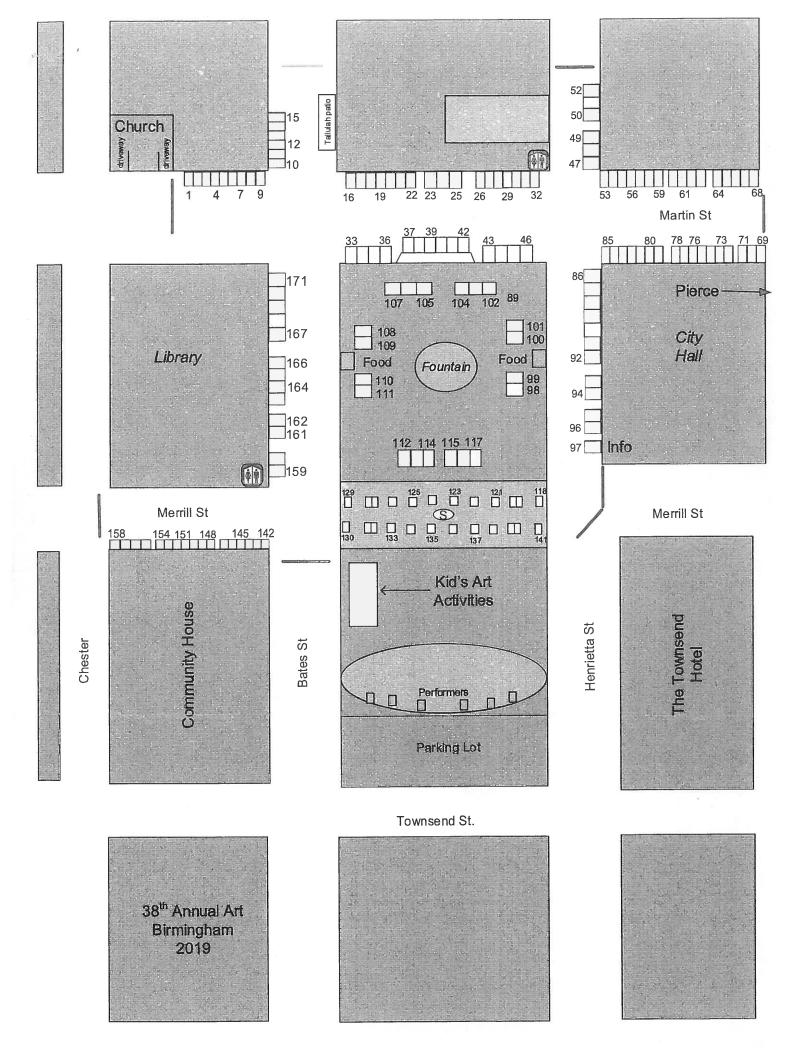
PHONE:

248.644.0866

For Questions on day of Event, Contact: Karen Delhey (734)646-8431

Attachment:

Art Birmingham layout/map





September 24, 2018

Hold Harmless Agreement

To the fullest extent permitted by law, **The Guild of Artists & Artisans** and any entity or person for whom **The Guild of Artists & Artisans** are legally liable, agree to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits or loss, including all costs connected therewith, and for any damages which may be asserted, claimed or recovered against or from the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this contract. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of the City of Birmingham, its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.

Karen Delhey

Executive Director

Date: September 24, 2018

Hold Harmless Agreement

To the fullest extent permitted by law, the Birmingham Bloomfield Art Center and any entity or person for whom the Birmingham Bloomfield Art Center are legally liable, agree to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits or loss, including all costs connected therewith, and for any damages which may be asserted, claimed or recovered against or from the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this contract. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of the City of Birmingham, its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.

Annie VanGelderen President and CEO

Date: 9-25-18

The Birmingham Bloomfield Art Center has been providing "art for all" since 1957 and is a regional non-profit art center committed to promoting the visual arts. The BBAC's mission is "to connect people of all ages and abilities with visual arts education, exhibitions, and other creative experiences." Each year more than 500 classes are offered for all skill levels and ages, preschool to senior citizens. Throughout the year, more than 9,000 individuals are served by classes, workshops, art camps, ArtAccess programs, special events and exhibitions (that are free and open to the public). The BBAC also supports hundreds of artists each year, with opportunities to teach, exhibit and sell their work.

EDUCATION

More than 500 classes and workshops are offered each year at the BBAC for adults and youth as young as three years old. Curriculum includes painting, drawing, ceramics, jewelry and metalsmithing, printmaking, sculpture, weaving, book arts, and more, and student artists range from the novice to the notable. There are always introductory or sampler classes for those with artistic desire who may not know exactly what they want to pursue.

EXHIBITIONS

• There are five distinct gallery spaces at the BBAC, each with a new exhibit about every eight weeks, and all are free and open to the public. Exhibiting artists range from "master" to emerging, and media includes painting, sculpture, fiber, and more. The BBAC is committed to providing its students with authentic exhibiting experience, and dedicates one gallery to adult student shows. The newest and fifth gallery is expressly dedicated to the work of ArtAccess participants and the youngest student artists.

OUTREACH

Since 2008, BBAC ArtAccess programs support the art center's vision of "art for all" by striving to provide the transformative power of art to those who may have limited access, bringing meaningful hands-on experiences to those otherwise lacking the means to create and connect to the world of visual arts.

- Meet Me @ the BBAC In 2013, the BBAC launched a new access program based on Meet Me at
 MoMA, created by The Museum of Modern Art (NYC), offering interactive gallery and art-making
 sessions for individuals with early- and mid-stage Alzheimer's or dementia along with their caregivers.
- Art of Caregiving New in 2016, the BBAC's latest community outreach program offers a series of art workshops for caregivers of the elderly and people with Alzheimer's/dementia all free.
- ArtBridge: Bridging High School to College to Careers in Visual Arts Aiming to help young people
 realize their educational and artistic career aspirations, ArtBridge is a comprehensive program that
 prepares motivated students by confirming and building their skills, making sure art fundamentals are
 well covered, providing college selection guidance and mentoring, and assisting with digital portfolio
 preparation. Thanks to funding from private foundations, each year dozens of motivated Detroit
 students considering art as a career participate in this program for no cost.
- ArtBridge in Detroit: MacDowell Preparatory Academy In 2016, the BBAC adopted a Detroit middle school which had to eliminate all arts from its curriculum in 2010. We provide weekly art classes for all grades, including professional instructor and materials, plus a weekly after-school gathering to create art
 – all at no cost to the school or students.
- **Studio 1** Addresses visual art education for special needs populations of all ages including historically underserved individuals and groups with unique physical, emotional, or developmental needs. By working with partner organizations, those who serve people with special needs of many kinds, the BBAC promotes multiple levels and cross-sectors of collaboration.
- Sundays @ the Center Focusing on multi-generational programming, we offer monthly drop-in workshops, with two options for authentic art-making, led by an artist instructor. The cost is nominal and all materials are provided.
- Seniors @ the Center Also offered monthly are drop-in visual art workshops that correspond to this age group, designed to teach a genuine art project each time. The cost per person is nominal, and participants range from individuals to groups from assisted living facilities.



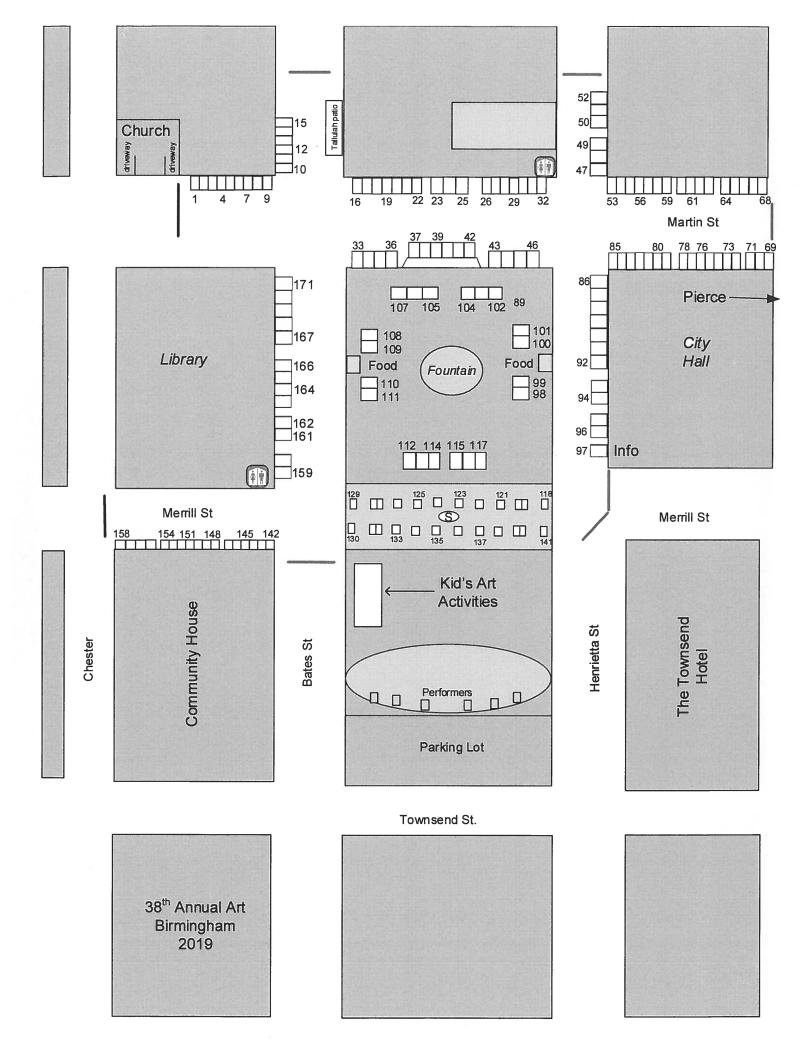
2019 Art Birmingham Participating Artist,

This letter is to inform you that artist parking is restricted to Parking Structures and Oversize Lots <u>ONLY</u>. Any artist vehicles that are found parked at street meters will be ticketed and towed. Those artists will also be unable to participate in future Birmingham Art Fairs.

Maps are included within your packet to indicate available parking structures and lots.

We thank you for your cooperation.

Sincerely,



DEPARTMENT APPROVALS

EVENT NAME 2019 Art Birmingham

LICENSE NUMBER #19-00011346

COMMISSION HEARING DATE: October 28, 2018

NOTE TO STAFF: Please submit approval by October 10/3/18

DATE OF EVENT: May 10 - 12, 2019

DEPARTMENT	APPROVED	COMMENTS	PERMITS REQUIRED (Must be obtained directly from individual departments)	COSTS (Must be paid two weeks prior to the event. License will not be issued if unpaid.)	ACTUAL COSTS (Event will be invoiced by the Clerk's office after the event)
PLANNING 101-000.000-634.0005 248.530.1855	TBC	No Cost/ No Comment			
BUILDING 101-000.000.634.0005 248.530.1850	MM	 Tents in excess of 200 square feet and canopies over 400 square feet require permits. All tents/canopies must be flame resistant with certification. No smoking inside any tent or canopy. Signs to be posted. Tents or canopies must be secured with sandbags, weights, or water ballast. Tents and canopies must be located per the approved layout. 		\$166.11	
FIRE 101-000.000-634.0004 248.530.1900	JMC	 No Smoking in any tents or canopy. Signs to be posted. All tents and Canopies must be flame resistant with certificate on site. No open flame or devices emitting flame, fire or heat in any tents. Cooking devices shall not be permitted within 20 feet of the tents. Tents and Canopies must be properly anchored for the 		\$84	

weather conditions, no stakes	
allowed.	
5. Clear Fire Department access of	
12 foot aisles must be	
maintained, no tents, canopies or	
other obstructions in the access	
aisle unless approved by the Fire	
Marshal.	
6. Pre-event site inspection	
required.	
7. A prescheduled inspection is	
required for food vendors	
through the Bldg. dept. prior to	
opening.	
8. All food vendors are required to	
have an approved 5lbs. multi-	
purpose (ABC) fire extinguisher	
on site and accessible.	
9. Cords, hoses, etc. shall be	
matted to prevent trip hazards.	
10. Exits must be clearly marked in	
tents/structures with an occupant	
load over 50 people.	
11. Paramedics will respond from the	
fire station as needed. Dial 911	
for fire/rescue/medical	
emergencies.	
12. A permit is required for Fire	
hydrant usage.	
13. Do Not obstruct fire hydrants or	
fire sprinkler connections on	
buildings.	
14. Provide protective barriers	
between hot surfaces and the	
public.	
15. All cooking hood systems that	
capture grease laden vapors	
must have an approved	
suppression system and a K fire	
extinguisher in addition to the	
ABC Extinguisher.	
16. Suppression systems shall be	

		inspected, tested, and properly tagged prior to the event. All Sprinkler heads shall be of the 155 degree Quick Response type unless serving an area of high heat and approved by the Fire Marshal. The suppression system shall have a continuous water supply as well as a secondary back up supply. Activation of the suppression system will shut down the ride and cause illumination of the exits.			
POLICE 101-000.000.634.0003 248.530.1870	SG	Personnel and barricades		\$1500	
PUBLIC SERVICES 101-000.000-634.0002 248.530.1642	CL	Trash boxes, set-up, barricade placement, dumpsters		\$2,300	
ENGINEERING 101-000.000.634.0002 248.530.1839	A.F.	Maintain 5' clearance on all sidewalks for pedestrian access route. No pavement damage allowed for tents or other structures.	None	\$0	\$0
SP+ PARKING	A.F.	Emailed Information to SP+ on 9/28/18			
INSURANCE 248.530.1807	CA	Hold Harmless agreement approved; Certificate of Insurance pending	None	\$0	\$0
CLERK 101-000.000-614.0000 248.530.1803		Notification letters mailed by applicant on 10/9/18. Notification addresses on file in the Clerk's Office. Evidence of required insurance must be on file with the Clerk's Office no later than 4/26/19.	Applications for vendors license must be submitted no later than 4/26/19.	\$165 pd	

		TOTAL DEPOSIT REQUIRED	ACTUAL COST
		\$4,050.11	

FOR CLERK'S OFFICE USE
Deposit paid
Actual Cost
Due/Refund

Rev. 10/22/18 h:\shared\special events\- general information\approval page.doc



MEMORANDUM

Clerk's Office

DATE: October 23, 2018

TO: Joseph A. Valentine, City Manager

FROM: J. Cherilynn Mynsberge, City Clerk

SUBJECT: 2018 Menorah Display in Shain Park – December 2 – 10, 2018

INTRODUCTION:

The Birmingham Jewish Connection submitted a Special Event application to display the Shain Park Menorah from December 2-10, 2018, with a special gathering at 7 pm on Tuesday December 4, 2018. Set-up for the display is scheduled for December 2^{nd} at approximately 11 am, with tear-down scheduled for December 10^{th} at approximately 1 pm.

BACKGROUND:

The Police Department has reviewed the proposed event details prior to submission for street closures and the need for safety personnel and has approved the details. DPS, Planning, Building, Police, Fire, and Engineering have indicated their approval. SP+Parking has been notified of the event for planning purposes.

The following events occur in December in Birmingham, and do not pose a conflict for this event:

Winter Markt/Carriage Rides 11/30 – 12/2 Shain Park Santa House/Carriage Rides 11/30 – 12/23 Shain Park Nativity Display 11/23 – 12/29 Shain Park

LEGAL REVIEW:

No review required.

FISCAL IMPACT:

No fiscal impact.

SUMMARY

The City Commission is being asked to approve the 2018 Shain Park Menorah special event to be displayed 12/2 – 12/10/18, with a special gathering at 7 pm on 12/4/18. Set-up is scheduled to begin 12/2/18 at approximately 11 am. Tear-down will begin on 12/10 at approximately 1 pm.

ATTACHMENTS:

- 1. Special Event application
- 2. Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area on October 8, 2018. Notification addresses are on file in the Clerk's Office
- 3. Hold Harmless Agreement signed by the Birmingham Jewish Connection. (Certificate of Insurance due to the Clerk's Office on or before 11/16/18)
- 4. Department Approval page with comments and estimated costs

SUGGESTED RESOLUTION:

To approve a request from the Birmingham Jewish Connection to display the Shain Park Menorah on December 2 – 10, 2018, with a special gathering to be held on December 4, 2018 at 7 pm in Shain Park, contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event.

18-00011337

CITY OF BIRMINGHAM APPLICATION FOR SPECIAL EVENT PERMIT PARKS AND PUBLIC SPACES

IMPORTANT: EVENTS UTLIZING CITY SIDEWALKS AND/OR STREETS MUST MEET WITH POLICE DEPARTMENT SPECIAL EVENT OFFICER TO REVIEW PROPOSED EVENT DETAILS PRIOR TO SUBMITTING APPLICATION.

Police Department acknowledgement:	The state of the s
 Incomplete applications will not be accepted. Changes in this information must be submitted to the City C least three weeks prior to the event 	RECEIVED BY lerk, in writing, at AUG 3 0 2018
FEES: FIRST TIME EVENT: \$200.00 ANNUAL APPLICATION FEE: \$165.00	CITY CLERK'S OFFICE
(Please print clearly or type)	CITY OF BIRMINGHAM
Date of Application 8/30/18	democratic hospire
Name of Event Shain Park Menorch	TOWN THE TOWN
Detailed Description of Event (attach additional sheet if necessary)	merorch
display with one night designated for spayal	acthering.
4 SECONDER VIEW OF THE SECOND ASM	0 9
	SANGER - STATE OF THE SANGER STATE OF
Location Shan Park	
Date(s) of Event $\frac{12/2/18 - 12/10/18}{12/10/18}$ Hours of Event $\frac{5perch}{12}$	gethering: 17 pm Tues. 12/4 morning (11 am ioh)
Date(s) of Set-up 12/2/18 Hours of Set-up Mid-	(Loi mall) frimon
NOTE: No set-up to begin before 7:00 AM, per City ordinance.	
Date(s) of Tear-down $\frac{ \mathcal{V} \mathcal{V} \mathcal{V} }{ \mathcal{V} \mathcal{V} }$ Hours of Tear-down	ewly asternoon (1 pm ish)
Organization Sponsoring Event Birninghum Jewis Canad	
Organization Address 1578 Lakeside & ham (Rebbis Lo	ne). 361 E. Maple (letter)
Organization Phone 248 225 0246 (Rubbi Cohers	(cell)
Contact Person Kubbi Cohen	/
Contact Phone 248 225 0246	
Contact Email birninghan (abbit grant	OM

11.	EVENTINFORMATION
1.	Organization Type Non-profit Community group
	(city, non-profit, community group, etc.)
2.	Additional Sponsors or Participants (Provide name, address, contact person, status, etc. for all additional organizations sponsoring your event.) $\frac{N}{N}$
	usalings to constitutes at value or warm presents treatments of application
2	Is the event a fundrairer? VES NO V
3.	Is the event a fundraiser? YES NO V List beneficiary List expected income
	Attach information about the beneficiary. /
4.	If no, describe transl shar Park Menorch display one
5.	Total number of people expected to attend per day ≈ 60 for special one-night gather
6.	The event will be held on the following City property: (Please list) Street(s)
	Sidewalk(s)
	Park(s) 5 h(1)
	e resonancy company of the first service of the company of the com
7.	Will street closures be required? YES NO V (Police Department acknowledgement prior to submission of application is required) (initial here)
8.	What parking arrangements will be necessary to accommodate attendance? NN

re	ceived.
De	scribe Volvateers from some
(Po	I the event require safety personnel (police, fire, paramedics)? YES NO volice Department acknowledgement prior to submission of application is quired.) (initial here)
	I alcoholic beverages be served? YES \(\square\) NO \(\square\)
	ves, additional approval by the City Commission is required, as well as the Michigan Liquo
	ntrol Commission.
\ <i>\/i</i> !	I myusic be provided? YES ☑ NO ☐
	Live AmplificationRecordedLoudspeakers
	Time music will begin \$ 630\\\ 20
	Time music will begin 8 630 7 P
	Location of live band, DJ, loudspeakers, equipment must be shown on the layout map.
	,
Wil	I there be signage in the area of the event? YES NO V
N	umber of signs/banners
	ize of signs/banners
S	ubmit a photo/drawing of the sign(s). A sign permit is required.
Wil	I food/beverages/merchandise be sold? YES NOV
•	Peddler/vendor permits must be submitted to the Clerk's Office, at least two weeks
	prior to the event.
•	You must obtain approval from the Oakland County Health Department for al
	food/beverage sales/donations. Contact ehclerk@oakgov.com or 248-535-9612 to
	obtain Health Department approval.
	There is a \$50.00 application fee for all vendors and peddlers, in addition to the \$10.00
	daily fee, per location.

LIST OF VENDORS/PEDDLERS

(attach additional sheet if necessary)

VENDOR NAME	GOODS TO BE SOLD	WATER HOOK- UP REQUIRED?	ELECTRIC REQUIRED?
C Cashuel		- 17 (7 (7 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4	
SHAN SHOULD BE SHOWN IN THE	General Transferred		te dia
	G = 361		
una si njira - wenedeki usa	Testing 1 (Labority)	8	edb _{io} fo, tree
mora elet	r-1834		
territus en ga aras c	piceril yaaraa Diya		
	2 4 4 4 4 4		

III. <u>EVENT LAYOUT</u>

- Include a map showing the park set up, street closures, and location of each item listed in this section.
- Include a map and written description of run/walk route and the start/finish area
- 1. Will the event require the use of any of the following municipal equipment? (show location of each on map)

EQUIPMENT	QUANTITY	COST	NOTES
Picnic Tables		6 for \$200.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles		\$4.00 each	Trash box placement and removal of trash is the responsibility of the event. Additional cost could occur if DPS is to perform this work.
Dumpsters		\$250.00 per day	Includes emptying the dumpster one time per day. The City may determine the need for additional dumpsters based on event requirements.
Utilities (electric)	# of vendors requiring utilities	Varies	Charges according to final requirements of event.
Water/Fire Hydrant		Contact the Fire Department.	Applicant must supply their own means of disposal for all sanitary waste water. Waste water is NOT allowed to be poured into the street or on the grass.
Audio System		\$200.00 per day	Must meet with City representative.
Meter Bags / Traffic Cones / Barricades	# to be determined by the Police Department.	-	-

2. Will the following be constructed or located in the area of the event? YES (NO (show location of each on map) NOTE: Stakes are not allowed.

ТҮРЕ	QUANTITY	SIZE
Tents/Canopies/Awnings		
(A permit is required for tents over 120 sq ft)		
Portable Toilets		
Rides		
Displays .		
Vendors		711.00
Temporary Structure (must attach a photo)		
Other (describe)		
Y	×	

SIGNATURE OF APPLICANT REQUIRED

EVENT NAME 5hin PWh Monorch
EVENT DATE 12/2/18 - 12/10/18 - throughout Churchel

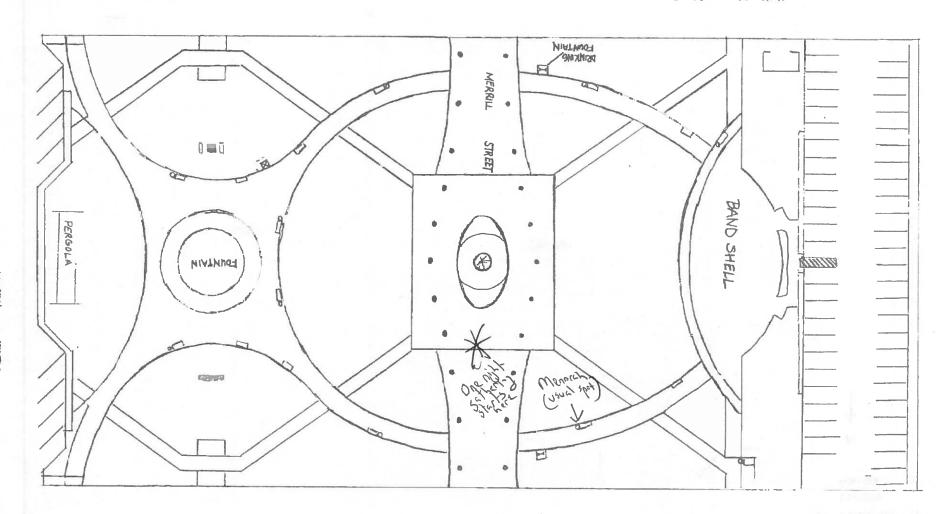
The Birmingham City Commission shall have sole and complete discretion in deciding whether to issue a permit. Nothing contained in the City Code shall be construed to require the City Commission to issue a permit to an applicant and no applicant shall have any interest or right to receive a permit merely because the applicant has received a permit in the past.

As the authorized agent of the sponsoring organization, I hereby agree that this organization shall abide by all conditions and restrictions specific to this special event as determined by the City administration and will comply with all local, state and federal rules, regulations and laws.

Signature Date

IV. SAMPLE LETTER TO NOTIFY ANY AFFECTED PROPERTY/BUSINESS OWNERS

- Organizer must notify all potentially affected residential property and business owners of the date and time this application will be considered by the City Commission. (Sample letter attached to this application.)
- Attach a copy of the proposed letter to this application. The letter will be reviewed and approved by the Clerk's Office. The letter must be distributed at least two weeks prior to the Commission meeting.
- A copy of the letter and the distribution list must be submitted to the Clerk's Office at least two weeks prior to the Commission meeting.
- If street closures are necessary, a map must be included with the letter to the affected property/business owners.



HEARIETTA STREET



October 8, 2018

To Whom It May Concern:

The Birmingham City Code requires that we receive approval from the Birmingham City Commission to hold the following SPECIAL EVENT. The code further requires that we notify any property owners or business owners that may be affected by the special event of the date and time that the City commission will consider our request so that an opportunity exists for comments prior to this approval.

NAME OF EVENT: Shain Park Menorah

LOCATION: Shain Park, west side, just south of S Bates/W Merrill intersection

DATE(S) OF EVENT: Menorah will be displayed 12/2/18 through 12/10/18; with special gathering 7 to 8 pm 12/4/18.

BRIEF DESCRIPTION OF EVENT/ACTIVITY: Standing menorah for 8 days of Hanukah; one-night gathering to celebrate holiday

DATE & HOUR OF SET-UP: Approximately 11 am on 12/2

DATE & HOUR OF TAKE-DOWN: Approximately 1 pm on 12/10

DATE OF CITY COMMISSION MEETING: 7:30 pm Monday, October 29 The City commission meets in room 205 of the Municipal Building at 151 Martin at 7:30PM. A complete copy of the application to hold this special event is available for your review at the City Clerk's Office (248/530-1880). Log on to www.bhamgov.org/ events for a complete list of special events.

EVENT ORGANIZER:

The Birmingham Jewish Connection, % 1578 Lakeside Dr, Birmingham, MI 48009 Contact Rabbi Cohen for more information or with any questions: 248-225-0246

Sincerely yours,

Rabbi Boruch Cohen

The Birmingham Jewish Connection, % 1578 Lakeside Dr, Birmingham 48009 Rabbi Boruch Cohen Cell: 248-225-0246 Email: birminghamrabbi@gmail.com



October 9, 2018

Re Shain Park Menorah Special Permit Application

HOLD-HARMLESS AGREEMENT

To the fullest extent permitted by law, the Birmingham Jewish Connection and any entity or person for whom the Birmingham Jewish Connection is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this activity/event. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of the City of Birmingham, its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.

10/4/18.

Rabbi Boruch Cohen, Birmingham Jewish Connection

and ho

DEPARTMENT APPROVALS

EVENT NAME 2018 MENORAH DISPLAY

DATE OF EVENT: 12/2 - 12/10/18

LICENSE NUMBER #18-00011337

COMMISSION HEARING DATE: OCT. 29, 2018

NOTE TO STAFF: Please submit approval by SEPT. 20, 2018

DEPARTMENT	APPROVED	COMMENTS	PERMITS REQUIRED (Must be obtained directly from individual departments)	COSTS (Must be paid two weeks prior to the event. License will not be issued if unpaid.)	ACTUAL COSTS (Event will be invoiced by the Clerk's office after the event)
PLANNING 101-000.000-634.0005 248.530.1855	ВС	No comments/costs		\$0	
BUILDING 101-000.000.634.0005 248.530.1850	MjM	No building department involvement		\$0	
FIRE 101-000.000-634.0004 248.530.1900	JMC	No comments/costs		\$0	
POLICE 101-000.000.634.0003 248.530.1870	SG	Extra patrol by on duty officers		\$0	
PUBLIC SERVICES 101-000.000-634.0002 248.530.1642	CL	A representative from the DPS department requests to meet with the representative for the proper installation of the Menorah Display.		\$0	
ENGINEERING 101-000.000.634.0002 248.530.1839	A.F.	Do not obstruct Public Sidewalk	None	\$0	
SP+ PARKING	A.F.	Emailed information to SP+ on 09/05/18	None	\$0	

INSURANCE 248.530.1807	CA	Approved	None	\$0	
CLERK 101-000.000-614.0000 248.530.1803		Notification letters mailed by applicant 10/8/18. Notification addresses on file in the Clerk's Office. Evidence of required insurance must be on file with the Clerk's Office no later than 10/13/18.	Applications for vendors license must be submitted no later than N/A	\$165 pd	
				TOTAL DEPOSIT REQUIRED \$0	ACTUAL COST

FOR CLERK'S OFFICE USE
Deposit paid
Actual Cost
Due/Refund

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MEMORANDUM

Museum

DATE: October 23, 2018

TO: Joseph A. Valentine, City Manager

FROM: Leslie Pielack, Museum Director

SUBJECT: Historic Landscape Design Services, Birmingham Museum

Heritage Zone

INTRODUCTION:

The site of the Birmingham Museum has a rich and important history, dating from the earliest land purchase in 1818 by founder Elijah Willits, and extending to 1928 when Harry Allen, the first mayor of Birmingham, built the Allen House and landscaped the surrounding grounds. The landscape is within the city's Mill Pond Historic District, and the Hunter House on the site is individually listed as a historic building on the National Register of Historic Places. The Museum Board, through its Birmingham Museum 2017-2020 Strategic Plan, has prioritized the preservation of the landscape as well as enhancing public access and understanding of Birmingham's history. Landscape design services from a qualified historic landscape architect are needed to develop appropriate approaches to achieving these objectives. By using a phased approach in planning and project execution, the landscape's natural and historic features can be addressed in manageable stages and in accordance with a Landscape Master Plan prepared earlier this year. These stages correspond with four distinct landscape zones with unique features and planned uses.

The Museum Board has identified that the Heritage Zone is the first priority for landscape design and construction. This zone includes the area along the Maple Road portion of the property, which has the highest visibility and use at present, and contains several historic assets. Preserving and enhancing the landscape according to historic guidelines and providing additional educational and interpretive programming is the central focus for this area. The final design will be used to seek partnerships, grants, and other funding support to complete the Heritage Zone project. Final landscape construction for this zone, per the Birmingham Museum Landscape Master Plan, is expected to be approximately \$30,000.

In September of 2018, proposals were sought from qualified firms through a posted Request for Proposals to complete landscape design services for the Heritage Zone. Because of the historic nature of the original landscape and the buildings, it is essential that the landscape design reflect preservation of the historic resources on site as well as improved public access and planned use, per the Landscape Master Plan. Three proposals were received. The Museum Board reviewed the received proposals at their October 18 meeting and unanimously recommends that the contract be awarded to Nagy Devlin Land Designs, LLC.

BACKGROUND:

On February 20, 2018, the Museum Board completed work on a conceptual Landscape Master Plan for the Birmingham Museum grounds, and the City Commission accepted the plan on March 12, 2018. The Landscape Master Plan divides the four-acre site into four distinct zones with separate preservation needs, use, and planned improvements for public access and education. The Heritage Zone encompasses the 1928 Allen House, the 1822 Hunter House, and the 1905 Hill School Bell's protective structure. This zone is highly visible and provides a gateway to the remainder of the grounds and park, which continue down a slope to a spring fed pond near Willits Street to the north and to the Rouge River and trails to the west.

The landscape design needed in the Heritage Zone centers on integrating the existing structures with appropriate historic landscape materials at each house; providing appropriate seating and improved access; enhancing public awareness of heirloom plants and themed gardens around the Hill School Bell structure; and providing for historic interpretive and educational programs for children and adults. Also needed is an invasive plants management plan and permanent signage design.

Because of the high concentration of historic resources in the Heritage Zone, potential opportunities for community support and private sponsorship are possible. This is especially the case as the Allen House and landscape is expected to be listed as an individual property on the National Register of Historic Places early in 2019, giving it greater eligibility for grant funding and collaborative partnerships to complete project work.

A Request for Proposals was issued and three proposals were received to create the design for the Heritage Zone in accordance with objectives identified in the Landscape Master Plan and the resulting RFP scope of work. On October 18, the Museum Board reviewed all proposals received and unanimously found that Nagy Devlin Land Designs, LLC met all the requirements for the project and was the best fit, as well as the lowest bid at \$2,960.00. Museum Director Pielack verified references regarding work on historic sites of similar scope and with the Michigan State Historic Preservation Office, as well as the ability for the firm to complete the project as outlined in the RFP.

FIRM	Johnson Hill Land Ethics	Nagy Devlin Land Designs	Spackman Mossop Michaels
COST	\$10,625.00	\$2,960.00	\$22,500.00

LEGAL REVIEW:

City Attorney Tim Currier has provided a legal review of the contract agreement for Museum Heritage Zone Historical Landscape Design Services with Nagy Devlin Land Designs, LLC.

FISCAL IMPACT:

Funding for this project was included in the approved budget for FY 2018-2019 and is available in the Allen House Contractual Services account, 101-804.002-811.0000.

SUMMARY

In light of the project specifications and review of the proposals received in response to the Request for Proposals for Historic Landscape Design Services for the Birmingham Museum Heritage Zone, firm experience with similar historic sites and projects, and reference

information, Nagy Devlin Land Designs, LLC has met the requirements and has presented the best and most qualified proposal. It is therefore recommended that the contract award for Historic Landscape Design Services for the Birmingham Museum Heritage Zone go to Nagy Devlin Land Designs, LLC, for \$2,960.00.

ATTACHMENTS:

- 1. Request for Proposals
- 2. Contract Agreement with insurance documents

SUGGESTED RESOLUTION:

To approve a service agreement with Nagy Devlin Land Design, LLC to provide Historic Landscape Design Services for the Birmingham Museum Heritage Zone, in the amount of \$ 2,960.00, to be charged to account 101-804.002-811.0000, and to direct the Mayor and City Clerk to sign the agreement on behalf of the City.



REQUEST FOR PROPOSALS For Historic Landscape Design Services, Birmingham Museum Heritage Zone

Sealed proposals endorsed "<u>Historic Landscape Design Services</u>, <u>Birmingham Museum Heritage Zone</u>", will be received at the Office of the City Clerk, 151 Martin Street, PO Box 3001, Birmingham, Michigan, 48012; until 2:00 PM Thursday, October 17, 2018 after which time bids will be publicly opened and read.

Bidders will be required to attend a mandatory pre-bid meeting on <u>Thursday</u>, <u>September 27 at 9:30 AM</u> at the Birmingham Museum, 556 W. Maple Road, Birmingham, MI 48009. Bidders must register for the pre-bid meeting by <u>4:00 PM Tuesday</u>, <u>September 25</u> by contacting Leslie Pielack at 248-530-1682; <u>Ipielack@bhamgov.org</u>.

The City of Birmingham, Michigan is accepting sealed bid proposals from qualified professional firms to provide historic landscape design services in accordance with the 2018 Birmingham Museum Conceptual Landscape Master Plan and the National Park Service/Secretary of the Interior Standards for the Treatment of Historic Properties. Qualifying firms must have the appropriate background and experience in historic landscape architectural design services. This work must be performed as specified accordance with the specifications contained in the Request for Proposals (RFP).

The RFP, including the Specifications, may be obtained online from the Michigan Intergovernmental Trade Network at http://www.mitn.info or at the Birmingham Museum, 556 W. Maple Road, Birmingham, Michigan, 48009, ATTENTION: Leslie Pielack.

The acceptance of any proposal made pursuant to this invitation shall not be binding upon the City until an agreement has been executed.

Submitted to MITN: September 7, 2018

Mandatory Pre-Bid Meeting: Thursday, September 27 at 9:30 AM at the Birmingham

Museum 556 W. Maple Road, Birmingham, MI 48009;

RSVP by 4:00 PM Tuesday, September 25.

Deadline for Submissions: 2:00 PM Thursday, October 17, 2018

Contact Person: Leslie Pielack, Museum Director

556 W. Maple, Birmingham, MI 48009

Phone: 248-530-1682

Email: lpielack@bhamgov.org



REQUEST FOR PROPOSALS For Historic Landscape Design Services, Birmingham Museum Heritage Zone

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INTRODUCTION

For purposes of this request for proposals the City of Birmingham will hereby be referred to as "City" and the private firm will hereby be referred to as "Contractor."

The City of Birmingham, Michigan is accepting sealed bid proposals from qualified professional firms to provide historic landscape design services in accordance with the 2018 Birmingham Museum Conceptual Landscape Master Plan and the National Park Service/Secretary of the Interior Standards for the Treatment of Historic Properties. Qualifying firms must have the appropriate background and experience in historic landscape architectural design services for projects of a similar size and scope (ATTACHMENT E). This work must be performed as specified accordance with the specifications outlined by the Scope of Work contained in this Request For Proposals (RFP).

During the evaluation process, the City reserves the right where it may serve the City's best interest to request additional information or clarification from proposers, or to allow corrections of errors or omissions. At the discretion of the City, firms submitting proposals may be requested to make oral presentations as part of the evaluation.

It is anticipated the selection of a firm will be completed by November 15, 2018. An Agreement for services will be required with the selected Contractor. A copy of the Agreement is contained herein for reference. Contract services will commence upon execution of the service agreement by the City.

REQUEST FOR PROPOSALS (RFP)

The purpose of this RFP is to request sealed bid proposals from qualified parties presenting their qualifications, capabilities and costs to provide to provide historic landscape design services in accordance with the 2018 Birmingham Museum Conceptual Landscape Master Plan and the National Park Service/Secretary of the Interior Standards for the Treatment of Historic Properties.

MANDATORY PRE-BID MEETING

Prior to submitting a bid, interested firms are required to attend a pre-bid meeting to conduct an on-site visit of the location and access to the project location to make inquiries about the RFP. The pre-bid meeting will be held on Thursday, September 27 at 9:30 AM at the Birmingham Museum 556 W. Maple Road, Birmingham, MI 48009. Bidders must register for the pre-bid meeting by 4:00 PM Tuesday, September 25 by contacting Leslie Pielack at 248-530-1682; lipielack@bhamgov.org...

INVITATION TO SUBMIT A PROPOSAL

Proposals shall be submitted no later than 2:00 PM Thursday, October 17, 2018 to:

City of Birmingham Attn: City Clerk

151 Martin Street Birmingham, Michigan 48009

One (1) original and one (1) copy of the proposal shall be submitted. The proposal should be firmly sealed in an envelope, which shall be clearly marked on the outside, "<u>Historic Landscape Design Services, Birmingham Museum Heritage Zone</u>". Any proposal received after the due date cannot be accepted and will be rejected and returned, unopened, to the proposer. Proposer may submit more than one proposal provided each proposal meets the functional requirements.

INSTRUCTIONS TO BIDDERS

- Any and all forms requesting information from the bidder must be completed on the attached forms contained herein (see Contractor's Responsibilities). If more than one bid is submitted, a separate bid proposal form must be used for each.
- Any request for clarification of this RFP shall be made in writing and delivered to: Leslie Pielack, Museum Director, 248-530-1682, lpielack@bhamgov.org, 556 W. Maple Road, Birmingham, MI, 48009. Such request for clarification shall be delivered, in writing, no later than 5 days prior to the deadline for submissions.
- 3. All proposals must be submitted following the RFP format as stated in this document and shall be subject to all requirements of this document including the instruction to respondents and general information sections. All proposals must be regular in every respect and no interlineations, excisions, or special conditions shall be made or included in the RFP format by the respondent.
- 4. The contract will be awarded by the City of Birmingham to the most responsive and responsible bidder with the lowest price and the contract will require the completion of the work pursuant to these documents.
- 5. Each respondent shall include in his or her proposal, in the format requested, the cost of performing the work. Municipalities are exempt from Michigan State Sales and Federal Excise taxes. Do not include such taxes in the proposal figure. The City will furnish the successful company with tax exemption information when requested.
- 6. Each respondent shall include in their proposal the following information: Firm name, address, city, state, zip code, telephone number, and fax number. The company shall also provide the name, address, telephone number and e-mail address of an individual in their organization to whom notices and inquiries by the City should be directed as part of their proposal.

EVALUATION PROCEDURE AND CRITERIA

The evaluation panel will consist of City staff and any other person(s) designated by the City who will evaluate the proposals based on, but not limited to, the following criteria:

- 1. Ability to provide services as outlined.
- 2. Experience of the Contractor with similar projects.
- 3. Professional background and qualifications of key employees assigned to the project.
- 4. Content of proposal.
- 5. How the Secretary of the Interior Standards for the Treatment of Historic Properties Guidelines will be applied to the project.
- 6. Cost of services.
- 7. References.

TERMS AND CONDITIONS

- The City reserves the right to reject any or all proposals received, waive informalities, or accept any proposal, in whole or in part, it deems best. The City reserves the right to award the contract to the next most qualified Contractor if the successful Contractor does not execute a contract within ten (10) days after the award of the proposal.
- 2. The City reserves the right to request clarification of information submitted and to request additional information of one or more Contractors.
- 3. The City reserves the right to terminate the contract at its discretion should it be determined that the services provided do not meet the specifications contained herein. The City may terminate this Agreement at any point in the process upon notice to Contractor sufficient to indicate the City's desire to do so. In the case of such a stoppage, the City agrees to pay Contractor for services rendered to the time of notice, subject to the contract maximum amount.
- 4. Any proposal may be withdrawn up until the date and time set above for the opening of the proposals. Any proposals not so withdrawn shall constitute an irrevocable offer, for a period of ninety (90) days, to provide the services set forth in the proposal.
- 5. The cost of preparing and submitting a proposal is the responsibility of the Contractor and shall not be chargeable in any manner to the City.
- 6. Payment will be made within thirty (30) days after invoice. Acceptance by the City is defined as authorization by the designated City representative to this project that all the criteria requested under the Scope of Work contained herein have been provided. Invoices are to be rendered each month following the date of execution of an Agreement with the City.

- The Contractor will not exceed the timelines established for the completion of this project.
- 8. The successful bidder shall enter into and will execute the contract as set forth and attached as Attachment A.

CONTRACTOR'S RESPONSIBILITIES

Each bidder shall provide the following as part of their proposal:

- 1. Complete and sign all forms requested for completion within this RFP.
 - a. Bidder's Agreement (Attachment B p. 16)
 - b. Cost Proposal (Attachment C p. 17)
 - c. Iran Sanctions Act Vendor Certification Form (Attachment D p. 18)
 - d. Agreement (p. 10 only if selected by the City).
- 2. Provide a description of completed projects that demonstrate the firm's ability to complete projects of similar scope, size, and purpose, and in a timely manner, and within budget.
- 3. Provide a written plan detailing the anticipated timeline for completion of the tasks set forth in the Scope of Work (p. 9).
- 4. The Contractor will be responsible for any changes necessary for the plans to be approved by the City of Birmingham.
- 5. Provide a description of the firm, including resumes and professional qualifications of the principals involved in administering the project.
- 6. Provide a list of sub-contractors and their qualifications, if applicable.
- 7. Provide three (3) client references from past projects, include current phone numbers. At least two (2) of the client references should be for similar projects.
- 8. Provide a project timeline addressing each section within the Scope of Work and a description of the overall project approach. Include a statement that the Contractor will be available according to the proposed timeline.

CITY RESPONSIBILITY

1. The City will provide a designated representative to work with the Contractor to coordinate both the City's and Contractor's efforts and to review and approve any work performed by the Contractor.

2. The City will provide access to the City of Birmingham during regular business hours or during nights and weekends as approved by the City's designated representative.

SETTLEMENT OF DISPUTES

The successful bidder agrees to certain dispute resolution avenues/limitations. Please refer to paragraph 17 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

INSURANCE

The successful bidder is required to procure and maintain certain types of insurances. Please refer to paragraph 12 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

CONTINUATION OF COVERAGE

The Contractor also agrees to provide all insurance coverages as specified. Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the agreement, the City may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the contract amount. In obtaining such coverage, Birmingham shall have no obligation to procure the most cost effective coverage but may contract with any insurer for such coverage.

EXECUTION OF CONTRACT

The bidder whose proposal is accepted shall be required to execute the contract and to furnish all insurance coverages as specified within ten (10) days after receiving notice of such acceptance. Any contract awarded pursuant to any bid shall not be binding upon the City until a written contract has been executed by both parties. Failure or refusal to execute the contract shall be considered an abandoned all rights and interest in the award and the contract may be awarded to another. The successful bidder agrees to enter into and will execute the contract as set forth and attached as Attachment A.

INDEMNIFICATION

The successful bidder agrees to indemnify the City and various associated persons. Please refer to paragraph 13 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

CONFLICT OF INTEREST

The successful bidder is subject to certain conflict of interest requirements/restrictions. Please refer to paragraph 14 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

EXAMINATION OF PROPOSAL MATERIALS

The submission of a proposal shall be deemed a representation and warranty by the Contractor that it has investigated all aspects of the RFP, that it is aware of the applicable facts pertaining to the RFP process and its procedures and requirements, and that it has read and understands the RFP. Statistical information which may be contained in the RFP or any addendum thereto is for informational purposes only.

PROJECT TIMELINE

It is expected that the work will begin in December, 2018 and be completed in February, 2019.

All proposals must include a proposed time schedule for completion of the project and a fixed price agreement with an associated fee schedule for extra meetings, should they be required.

The Contractor will not exceed the timelines established for the completion of this project in the project proposal.

SCOPE OF WORK

The selected Contractor will work with City staff, the Museum Board, the Historic District Commission, the City Commission and the public to create detailed design drawings for the <u>Heritage Zone</u>, which surrounds the Allen and Hunter Houses and incorporates the plaza between them. Each building has identified objectives in the Birmingham Museum Conceptual Landscape Master Plan (CLMP) **(ATTACHMENT F)**.

The Contractor shall perform the following services in accordance with the requirements as defined and noted herein:

- 1. <u>Hunter House Area</u>: Design/Architectural Drawings (plans, elevations, sketches)
 - A. Develop design for a historical children's garden as reflected in the CLMP and that is consistent with existing National Register of Historic Places designation of the Hunter House
 - 1) Assess existing site conditions, plant materials and irrigation
 - Develop design compatible with historic building and intended use per CLMP
 - Recommend substitute plant materials for existing plants on site as appropriate to restore historic landscape features, historic use, or sense of place
 - 4) Substitute plants and materials should be low demand/low-maintenance
 - B. Propose educational approach and interpretative materials for historic practices in gardening and horticulture of the pioneer period
 - 1) Recommend elementary grade level (ages 5 and up) interactive and educational activities that are appropriate for the Hunter House site
 - 2) Recommend heritage garden plants and practices for educational activities and to support site tours
 - 3) Recommend/propose educational support materials (print and electronic) as appropriate
 - 4) Propose interpretive materials for the site that utilize WiFi and interactive activities and minimize visual impact of physical signage
 - C. Utilize conservation-minded design to minimize use of water and chemical controls and maximize positive environmental impact, including historic practices that can be easily applied in our setting
- 2. **Bell Plaza Area**: Design/Architectural Drawings (plans, elevations, sketches)

- A. Develop design that provides for intensive public use while integrating the Hunter House landscape design with the Allen House landscape area and the Hill School Bell monument, as conceptualized in the CLMP
 - a. Propose design that enhances existing bell plaza and barrier-free walkways to attract and encourage public use, including
 - a. Softening concrete areas, e.g., with historically compatible materials, garden beds, and/or specimen plantings
 - b. Comfortable and appealing, low maintenance seating composed of simple materials compatible with the historic setting
 - Incorporation/recommendations for use of public Wi-Fi access for interpretive content and to minimize impact of physical signage
 - Museum-designed interpretive content
 - Physical signage and links to additional educational/online resources, for example, QR codes
 - 2) Propose flexible/thematic planting areas or small beds in the plaza area that can include emphasis on (can be incorporated in overall design):
 - a. Protecting and utilizing native plants
 - b. Birds/bees/bats/butterflies
 - c. Organic/herb/edibles garden
 - d. Other appropriate demonstration or themed gardens
- B. Develop design for Birmingham heirloom community perennial garden
 - 1) Provide for publicly accessible community garden area for future donation and exchange of Birmingham heirloom perennials
 - 2) Provide plant list and images of appropriate Allen House period plants to be used to educate the community about heirloom perennials and appeal for plant donations, including brief description, heirloom value, and basic care
 - Propose interpretive materials for the heirloom community perennial garden that utilize WiFi and interactive activities and minimize visual impact of physical signage
- C. Utilize conservation-minded design to minimize use of water and chemical controls and maximize positive environmental impact, including historic practices that can be easily applied in our setting
- 3. Allen House Area: Design/Architectural Drawings (plans, elevations, sketches)
 - A. Develop design that integrates historic data about the Allen period landscape and that supports planned designation of the house and landscape on the National Register of Historic Places, and that is in accordance with planned use, materials, and public access per the CLMP

- 1) Assess existing site conditions, plant materials and irrigation and recommend changes and substitutions to maximize water conservation
- 2) Propose design compatible with the historic Allen House and intended use of the area per CLMP and that preserves the house/s structures, walls, and other built features within or adjacent to the Heritage Zone
- 3) Design should provide enhancement of the site and encourage public use, including
 - i. Garden bed design
 - ii. Seating
 - iii. Pathway plantings & landscaping
 - iv. Fencing
 - v. Mulch
 - vi. Edging
- 4) Recommend removals and substitution of plant materials as appropriate to restore historic landscape features or sense of place, including disease-resistant elm cultivars, yews, boxwood, and other heritage plants and shrubs consistent with CLMP. Include plan to coordinate removals with re-planting program with other city parks and the Department of Public Services.
- 5) Plants, fencing, edging, and mulching materials should be low demand/low maintenance and compatible with site and intended use.
- B. Develop design for the high visibility Allen House front yard and driveway area that supports utilitarian use while restoring historic landscape features and plantings, as appropriate
 - 1) Assess existing site conditions, plant materials and irrigation
 - 2) Develop design compatible with historic landscape and building, and with planned National Register site nomination
 - 3) Recommend any substitute plant materials for existing plants as appropriate to restore historic landscape features, historic use, or sense of place
 - 4) Substitute plants and materials should be as low demand/low-maintenance as feasible, water conserving, and tolerant of public use and associated maintenance, e.g. salt exposure, winter maintenance
 - 5) Per CLMP, utilize landscape design and materials to enhance utilitarian, public access, and barrier-free parking, while integrating with streetscape, public sidewalks and right of way at Maple Road
 - 6) Disguise trash bin area with appropriate plants or other features
- C. Develop design for north side of Allen House consistent with CLMP
 - 1) Assess existing site conditions, plant materials and irrigation
 - 2) Develop design compatible with historic landscape and building, and with planned National Register site nomination

- Recommend substitute plant materials for existing plants as appropriate to restore historic landscape features, historic use, or sense of place
- 4) Utilize low maintenance, water conserving plant materials
- 5) Disguise utility and air conditioning areas with appropriate plants or other features
- 6) Enhancement of patio area to encourage public use and appeal, including appealing and low maintenance furnishings and seating
- D. Utilize conservation-minded design to minimize use of water and chemical controls and maximize positive environmental impact, including historic practices that can be easily applied in our setting

4. **Signage for Museum Site:** Design and specifications

- A. Design for permanent primary Birmingham Museum signage that incorporates new logo; one primary sign at Maple Road in the Heritage Zone and one secondary sign at Willits Street
 - 1) Incorporation of simple materials and methods where possible to minimize construction and maintenance costs
 - 2) Compatible with site's setting and history
 - 3) Non-intrusive and/or integrated with existing fencing or structures
 - 4) Meets city ordinance requirements
- B. Additional signage recommendations for general Heritage Zone
 - 1) Utilizing WiFi access for content with minimal footprint
 - 2) Non-intrusive way-finding or interpretive signage
 - 3) Consistent with city parks signage as appropriate

5. Invasive Plants Management:

- A. Assess threat from invasive plants for Heritage Zone
- B. Recommend phased management plan for invasive plants
- 5. The Contractor shall operate in a safe manner and will observe all MIOSHA guidelines.
- 6. The Contractor shall provide any and all manuals and/or warranty information related to this project to the City upon completion of the project.

This outline is not necessarily all-inclusive and the Contractor shall include in the proposal any other tasks and services deemed necessary to satisfactorily complete the project.

DELIVERABLES

The Contractor shall provide:

- 1. Photographic documentation and plant identification of existing significant landscape elements and features in the Heritage Zone.
- 2. Complete construction drawings and documents in .pdf and CAD.
- 3. Elevation drawings of significant site elements, including color renderings.
- 4. Complete design and specifications for proposed permanent signage and support signage.
- 5. Specific plant lists proposed for Hunter House and Allen House designs.
- 6. Alternative plants for consideration as substitutes.
- 7. Invasive plants management plan for Heritage Zone.

MEETINGS AND PRESENTATIONS

The Contractor shall expect to attend the following meetings and base their fees accordingly:

- 1. Two (2) meetings with the Museum Board to discuss design development and to review the final draft
- 2. One (1) meeting with the Historic District Commission to present proposed design
- 3. One (1) meeting with the City Commission to present proposed final design

All proposals must include a fixed price agreement with an associated fee schedule for extra meetings, should they be required.

RESOURCES PROVIDED BY THE CITY OF BIRMINGHAM

- 1. Topographic survey data and CAD file of site (2003); boundary data; utilities and electrical site plans
- 2. Existing conditions with topographical data (2016)
- 3. Historical timeline with context and narrative history of site/Statement of Significance
- 4. Historic area maps, plat maps, aerial photos
- 5. Period photographs of site, buildings, structures, plantings, etc. for both the Red Schoolhouse period (1850-1928) and the post-Allen period (1928-Present)
- 6. Overview of applicable city planning goals and initiatives that impact present and future site/landscape use
- 7. Conceptual Landscape Master Plan and Heritage Zone plans and drawings

ATTACHMENT A - AGREEMENT

For Historic Landscape Design Services, Birmingham Museum Heritage Zone

This AGREEMENT, made thisday of, 2018, by and between CITY OF BIRMINGHAM, having its principal municipal office at 151 Martin Street, Birmingham, MI (hereinafter sometimes called "City"), and, Inc., naving its principal office at (hereinafter called "Contractor"), provides as follows: WITNESSETH:
WHEREAS, the City of Birmingham is desirous of having work completed to
provide historic landscape design services for the Birmingham Museum in accordance with the 2018 Birmingham Museum Conceptual Landscape Master Plan and the National Park Service/Secretary of the Interior Standards for the Treatment of Historic Properties.
WHEREAS, the City has heretofore advertised for bids for the procurement and
performance of services required to provide historic landscape design services for the Birmingham Museum in accordance with the 2018 Birmingham Museum Conceptual andscape Master Plan and the National Park Service/Secretary of the Interior Standards for the Treatment of Historic Properties and in connection therewith has prepared a request for sealed proposals ("RFP"), which includes certain instructions to bidders, specifications, terms and conditions.
WHEREAS, the Contractor has professional qualifications that meet the project
requirements and has made a bid in accordance with such request for cost proposals to provide historic landscape design services for the Birmingham Museum in accordance with the 2018 Birmingham Museum Conceptual Landscape Master Plan and the National Park Service/Secretary of the Interior Standards for the Treatment of Historic Properties.
NOW, THEREFORE, for and in consideration of the respective agreements and undertakings herein contained, the parties agree as follows:
It is mutually agreed by and between the parties that the documents consisting of the Request for Proposal to provide historic landscape design services for the Birmingham Museum in accordance with the 2018 Birmingham Museum Conceptual andscape Master Plan and the National Park Service/Secretary of the Interior Standards for the Treatment of Historic Properties and the Contractor's cost proposal dated, 2018 shall be incorporated herein by reference and shall become a part of this Agreement, and shall be binding upon both parties hereto. If any of the documents are in conflict with one another, this Agreement shall take precedence, then the RFP.
2. The City shall pay the Contractor for the performance of this Agreement in an amount not to exceed, as set forth in the Contractor's, 2018 cost proposal.

- 3. This Agreement shall commence upon execution by both parties, unless the City exercises its option to terminate the Agreement in accordance with the Request for Proposals.
- 4. The Contractor shall employ personnel of good moral character and fitness in performing all services under this Agreement.
- 5. The Contractor and the City agree that the Contractor is acting as an independent Contractor with respect to the Contractor 's role in providing services to the City pursuant to this Agreement, and as such, shall be liable for its own actions and neither the Contractor nor its employees shall be construed as employees of the City. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the City nor the Contractor shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The Contractor shall not be entitled or eligible to participate in any benefits or privileges given or extended by the City, or be deemed an employee of the City for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the City.
- 6. The Contractor acknowledges that in performing services pursuant to this Agreement, certain confidential and/or proprietary information (including, but not limited to, internal organization, methodology, personnel and financial information, etc.) may become involved. The Contractor recognizes that unauthorized exposure of such confidential or proprietary information could irreparably damage the City. Therefore, the Contractor agrees to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Contractor shall inform its employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Contractor further agrees to use such confidential or proprietary information only for the purpose of performing services pursuant to this Agreement.
- 7. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan. The Contractor agrees to perform all services provided for in this Agreement in accordance with and in full compliance with all local, state and federal laws and regulations.
- 8. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.
- 9. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Contractor without the prior written

consent of the City. Any attempt at assignment without prior written consent shall be void and of no effect.

- 10. The Contractor agrees that neither it nor its subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Contractor shall inform the City of all claims or suits asserted against it by the Contractor's employees who work pursuant to this Agreement. The Contractor shall provide the City with periodic status reports concerning all such claims or suits, at intervals established by the City.
- 11. The Contractor shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with carriers acceptable to the City of Birmingham.
- 12. The Contractor shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:
 - A. <u>Commercial General Liability Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
 - B. <u>Additional Insured</u>: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following shall be *Additional Insureds*: The City of Birmingham, including all elected and appointed officials, all employee and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any other coverage that may be available to the additional insured, whether any other available coverage by primary, contributing or excess.
 - C. <u>Professional Liability</u>: Professional liability insurance with limits of not less than \$1,000,000 per claim if Contractor will provide service that are customarily subject to this type of coverage.
 - D. Owners Contractors Protective Liability: The Contractor shall procure and maintain during the life of this contract, an Owners Contractors Protective Liability Policy with limits of liability not less than \$3,000,000 per occurrence, combined single

- limit, Personal Injury, Bodily Injury and Property Damage. The City of Birmingham shall be "Name Insured" on said coverage. Thirty (30) days Notice of Cancellation shall apply to this policy.
- E. <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance (and Professional Liability Insurance, if applicable), as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal, shall be sent to: Finance Director, City of Birmingham, PO Box 3001, 151 Martin Street, Birmingham, MI 48012-3001.
- F. <u>Proof of Insurance Coverage</u>: Contractor shall provide the City of Birmingham at the time the Agreement is returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below.
 - 1) Two (2) copies of Certificate of Insurance for Workers' Compensation Insurance;
 - 2) Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance;
 - 3) Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
 - 4) Two (2) copies of Certificate of Insurance for Professional Liability Insurance:
 - 5) If so requested, Certified Copies of all policies mentioned above will be furnished.
- G. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this Agreement, Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least (10) days prior to the expiration date.
- H. <u>Maintaining Insurance</u>: Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the Agreement, the City of Birmingham may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the Agreement amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.
- 13. To the fullest extent permitted by law, the Contractor and any entity or person for whom the Contractor is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way

connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.

- 14. If, after the effective date of this Agreement, any official of the City, or spouse, child, parent or in-law of such official or employee shall become directly or indirectly interested in this Agreement or the affairs of the Contractor, the City shall have the right to terminate this Agreement without further liability to the Contractor if the disqualification has not been removed within thirty (30) days after the City has given the Contractor notice of the disqualifying interest. Ownership of less than one percent (1%) of the stock or other equity interest in a corporation or partnership shall not be a disqualifying interest. Employment shall be a disqualifying interest.
- 15. If Contractor fails to perform its obligations hereunder, the City may take any and all remedial actions provided by the general specifications or otherwise permitted by law.
- 16. All notices required to be sent pursuant to this Agreement shall be mailed to the following addresses:

City of Birmingham Attn: Leslie Pielack 151 Martin Street Birmingham, MI 48009 248-530-1682 **CONTRACTOR**

- 17. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.
- 18. <u>FAIR PROCUREMENT OPPORTUNITY:</u> Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This will be

accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham.

IN WITNESS WHEREOF, the said parties have caused this Agreement to be executed as of the date and year above written.

WITNESSES:	CONTRACTOR
Bugid Deulin	By: John Bring low
	CITY OF BIRMINGHAM
	Ву:
	Its: Mayor
	By:
	Cherilynn Mynsberge Its: City Clerk
Approved:	Mallalle
Leślie Pielack, Museum Director (Approved as to substance)	Mark Gerber, Director of Finance (Approved as to financial obligation)
Justa Kum	Just a Valt
Timothy J. Currier, City Attorney (Approved as to form)	Jee Valentine, City Manager (Approved as to substance)

ATTACHMENT B - BIDDER'S AGREEMENT For Historic Landscape Design Services, Birmingham Museum Heritage Zone

In submitting this proposal, as herein described, the Contractor agrees that:

- 1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- 2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

T D	_ i .	
J Brian Devlin	October 17, 2018	
PREPARED BY	DATE	
(Print Name)	a 1 .	
Prasidant	October 17,2018	
TITLE	DATE'	
John Brian Develin	jbdevlin-rla@gmail.co E-MAIL ADDRESS	רט
AUTHORIZED SIGNATURE		
Nogy Davin Land	Design, L.L.C. Cago Avanue 48150 734634920 PHONE	
COMPANY	1	
21/20 Mest Chi	cago Avenue	
Livonia, Michigan	48150 /34 634 9/0	18
ADDRESS	PHONE	
N.A.		
NAME OF PARENT COMPANY	PHONE	
ADDRESS		_
ADDRESS		

ATTACHMENT C - COST PROPOSAL

For Historic Landscape Design Services, Birmingham Museum Heritage Zone

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be a lump sum, as follows:

COST PROPOSAL				
TOTAL BID AMOUNT	\$ 2,960.00			
Additional Meeting Charge (per meeting)	\$ 160,00			
ADDITIONAL SERVICES RECO	MMENDED, IF ANY			
Recommended Service	Hourly rate \$80.00			
	\$			
	\$			
GRANDTOTAL AMOUNT	\$ 2,960.00			

Firm Name	Lagy I	Devlin	Land	Desig	<u>n</u>
Authorized signatu	re John	Brian	Dev	Date <u> </u>	<u>)- 17- 1</u> 8

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM

For Historic Landscape Design Services, Birmingham Museum Heritage Zone
Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior
to the City accepting any bid or proposal, or entering into any contract for goods or
services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked
Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

J. Brian Devlin	October 17,2018
PREPARED BY	DATE
(Print Name)	- 1 .
President	October 17,2018
TITLE	DATE
John Brian Des C	jbdevlin. rla eginsil.com JE-MAIL ADDRESS
AUTHORIZED SIGNATURE) E-MAIL ADDRESS
COMPANY) SI736 West Chica. ADDRESS ADDRESS	Design, L.L.C.
COMPANY	, J '
31736 West Chica	go Ave
LIVONIA, MICHIGEN	48150 734 634 9208
ADDRESS	PHONE
N.A.	_
NAME OF PARENT COMPANY	PHONE
ADDRESS	
TAXPAYER I.D.#	

ATTACHMENT E

1. National Park Service/National Register of Historic Places Guidelines for Historical Landscape Architect

A historical landscape architect is a specialist in the science and art of landscape architecture with advanced training in the principles, theories, concepts, methods, and techniques of preserving cultural landscapes. Cultural landscape preservation focuses on preserving a landscape's physical attributes, biotic systems, and use when that use contributes to its historical significance. Research, planning, and stewardship are the framework for the duties of a historical landscape architect. Research defines the features, values, and associations that make a landscape historically significant; planning identifies the issues and alternatives for long-term preservation; and stewardship involves activities such as condition assessment, maintenance, and training, and the historical landscape architect is the lead professional for these activities.

From "National Park Service, Cultural Landscapes: Essential Competencies." https://www.nps.gov/training/npsonly/RSC/CULTLAND.doc

2. National Park Service Guidelines for the Treatment of Cultural Landscapes, online descriptive materials and detail available at: https://www.nps.gov/tps/standards/four-treatments/landscape-guidelines/index.htm

2018

Landscape Master Plan



BIRMINGHAM MUSEUM

Brian Devlin, Nagy Devlin Land Design Leslie Pielack, Birmingham Museum Approved by the Museum Board, 2/20/2018 Accepted by the City Commission, 3/12/2018 This Landscape Master Plan for the Birmingham Museum and grounds, a City of Birmingham property, is the result of contributions from a wide range of stakeholders. These include members of the public; the City Commission and other advisory boards and commissions; the Friends of the Birmingham Museum; donors; and city administration and staff. In particular, we would like to acknowledge the following:

CITY COMMISSION

Andrew Harris, Mayor Patty Bordman, Mayor Pro Tem Pierre Boutros, Commissioner Carroll DeWeese, Commissioner Rackeline Hoff, Commissioner Mark Nickita, Commissioner Stuart Sherman, Commissioner

CITY ADMINISTRATION

Joseph A. Valentine, City Manager Leslie Pielack, Museum Director

MUSEUM BOARD

Tina Krizanic, Chair James Cunningham Russell Dixon

Lori Eaton

Judith Keefer

Marty Logue

0 111 0

Caitlin Rosso

Carson Claar, Student Representative Hanna Sandler, Student Representative

FRIENDS OF THE BIRMINGHAM MUSEUM BOARD

Daniel C. Patton, President

Fred Amrose

George Getschman

Marty Logue

Leslie Mio

Jennifer O'Hare

Caitlin Rosso

Mark Thomas

THE ROSSO FAMILY FOUNDATION

Acknowledgements



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I. Introduction





The site of the Birmingham Museum is one of the most historically and topographically complex in the city. It has distinctive natural landscape features on a steeply sloping lot with a rich history from pioneer times to the 20th century. Its location makes it accessible to both people and haven for a wide range of wildlife, yet it is centrally located in downtown Birmingham. In 2009, a preliminary landscape master plan by Michael Dul & Associates proposed a highly developed site with activity areas, a playground, paved terracing, extensive pathways and gardens, lighting, structures such as an arbor, decorative stone walls, and sculptures. Cost estimates exceeded 1 million dollars; at the time, it was hoped that park bond funds would be available to pay for the plan. However, sufficient park bond funding was not available, and it was not implemented. Dul's plan did provide guidelines for the final design and construction of Americans with Disability Act (ADA)/barrier-free access to the Allen and Hunter Houses in 2010 and 2012. These were completed largely with federal Community Development Block Grant (CDBG) funds, which support ADA projects.

The Dul plan was preliminary only, and is now incompatible with the direction of recent museum strategic planning. It also does not reflect changes in technology that have occurred since it was proposed. For example, providing public WiFi was not a consideration at that time, but now our digital needs have developed in new ways, making this a key focus of public programming and providing alternative access opportunities. Also, the Rouge Trail Corridor plan was not incorporated into the 2009 plan, although the museum site shares a long boundary with the consistently used area as part of its overall landscape. But most importantly, the Dul plan did not survey the significant historic nature of the site and its existing features, so that no provision could be made for their protection or preservation.

In 2016, the Museum Board considered the most appropriate approach for the landscape in the course of reviewing its general Museum Strategic Plan for 2017-2020. The Museum Board wished to identify general concepts for the park, determine how phased approaches (such as improvements at the pond) could be utilized, and make additional recommendations. As the park is part of Birmingham's Mill Pond Historic District, the first step was to survey existing historic and natural features of the landscape, to understand and make recommendations to preserve and protect those resources and factor in public education and access in planning. The Friends of the Birmingham Museum and the Rosso Family Foundation provided funding, and Brian Devlin, historic landscape architect of Nagy Devlin Land Designs was selected to study the landscape and make recommendations to the Museum Board before further master planning was undertaken.

The Museum Board worked with Mr. Devlin to review his findings and integrate them into a final Landscape Master Plan that is closely aligned with the museum's mission and 2017-2020 Birmingham Museum Strategic Plan. It protects and preserves the natural aspects of the landscape, while restoring its unique historic character that has been lost or obscured by invasive plants. Furthermore, the plan integrates a variety of public access options, enhancing the museum's community engagement and educational opportunities. Although flexible and conceptual, it is comprehensive and consistent with the city's other planning initiatives and parks, allowing for coordination of projects. The identified zones also lend themselves very well to project-based funding support through grants or private donations.

II. Goals and Objectives



PURPOSE of PLAN

The overall purpose of developing a Landscape Master Plan for the museum site is to provide long term guidance for improvement projects and other planning that incorporates the needs of the public with the existing natural features, the site's history and location in a local historic district, and city initiatives. The Birmingham Museum Landscape Master Plan is compatible with, but separate from, the 2017-2020 Birmingham Museum Strategic Plan. It is also aligned with the museum's mission, as stated below:

Museum Mission—The Birmingham Museum will explore meaningful connections with our past, in order to enrich our community and enhance its character and sustainability. Our mission is to promote understanding of Birmingham's historical and cultural legacy through preservation and interpretation of its ongoing story.

Goals and Objectives

The specific goals and objectives of the Birmingham Museum Landscape Master Plan are as follows:

- 1. To Improve public access, especially barrier-free access, to the museum site
- 2. To preserve the natural and historic landscape features
- 3. To provide opportunities for education and interpretation of the site, its natural environment and its cultural history
- 4. To coordinate with the City of Birmingham Parks and Recreation and Rouge River Corridor plans and projects, such as pathways, access priorities, materials, and signage.
- 5. To utilize phased planning to optimize private donations and grant funding opportunities

Planning Process

In order to approach the museum landscape planning comprehensively, input was gathered from a wide range of sources. These included:

- The Museum Board's extensive review of existing conditions, historical materials, site review and survey data through meetings with historical landscape consultant Brian Devlin. Other consultation included Hubble, Roth, and Clark regarding a pond and wetlands survey and associated state regulations and requirements.
- Input of the city staff from Parks, Engineering, Building, and Planning/Historic Preservation Departments regarding infrastructure, planning, alignment with local historic district ordinance and State Historic Preservation Office guidelines, ADA access and parking issues, and integration/coordination with policies and materials used by other city parks.
- A joint workshop between the Museum Board, the Parks and Recreation Board, and the Historic District Commission was held on January 17, 2018 to discuss the plan and gather input from board members as well as the public.
- Ongoing updates during 2016 and 2017 and formal presentation and discussion with the Friends of the Birmingham Museum Board on January 25, 2018.
- Public input was gathered through the joint workshop on January 17, 2018. Immediate neighbors were contacted

and invited to attend the workshop. Several were present at the meeting, including a neighbor who shares the east boundary with the Hunter House. Some public data was also gathered through the Parks and Recreation Master Plan's survey process in the fall of 2017.

- Meetings were held and the review process discussed with members of the Michigan Department of Environmental Quality, and DTE Energy planners regarding requirements of the site that involve wetlands regulation and utilities issues to aid in additional planning.
- The Historic District Commission Design Review Board reviewed and unanimously approved the plan on January 17, 2018.

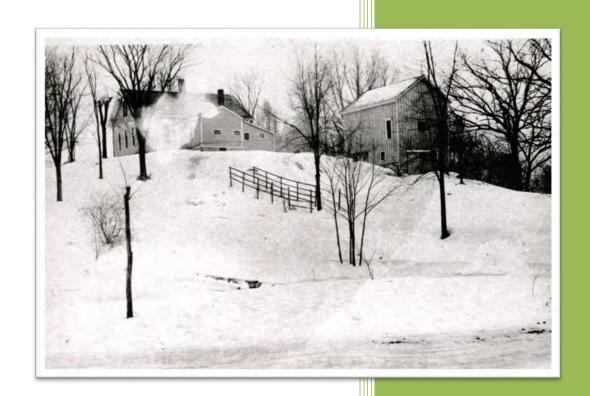
The resulting Birmingham Museum Landscape Master Plan is conceptual in nature. While it provides a broad approach to integrating diverse components, it is designed to give general guidance in more detailed future planning. Additional design work will be needed on a project-related or phased basis.

Its strength lies in its careful consideration of providing for public needs while maintaining a fundamental preservation focus to ensure that no irreversible changes are made that negatively impact the historic or natural character of the landscape.





III. Historic Background



EARLY SETTLEMENT PERIOD (1818-1856)

The landscape of the area that is now downtown Birmingham is characterized by its proximity to the Rouge River, which has formed valleys and has several branches and numerous tributaries as it works its way south through Oakland County to the Detroit River. The Saginaw Trail (now Woodward Avenue) followed the best route through swampy areas northwest out of Detroit. It was the only land route through the area when pioneer settlers came to Michigan in the early 19th century.

Settlers sought to purchase land at locations that had multiple resources, especially water and mill sites. Elijah Willits made claim to one of four parcels that intersected near where the Rouge River crossed the Saginaw Trail in what is now downtown Birmingham. This original purchase of 160 acres includes the site of the Birmingham Museum.

The original landscape wilderness was populated by a variety of native plants, trees and woodland wildlife, much of which is still present. Over time, non-native plants have begun to dominate. The museum site includes a portion of the floodplain of the Rouge River valley, as well as a spring-fed pond that drains to the river near Willits Street. Spring seeps also form a wetland environment on the southeast side of the pond.

RED SCHOOLHOUSE PERIOD (1856-1869)

In 1855-56, Willits sold a portion of his acreage to the local school district as a site for the first brick schoolhouse in Birmingham. Built of local brick, the 'red schoolhouse' as it is known, was in service until 1869, when the larger Hill School was built. The red

schoolhouse was converted to a residence, and by the end of the 19th century a small barn was built on the property behind the building and near the edge of the slope to the Rouge. Around this time, fieldstone walls were constructed on the property as well. The former schoolhouse continued to serve as a residence until Marion and Harry Allen purchased the property in the mid-1920s.

ALLEN HOUSE PERIOD (1928-1970)

The Allens attempted to incorporate the schoolhouse into their plans for their new home but were unable to use the entire building, as portions of it collapsed when excavating their basement. However, they re-used the brick and a portion of the school that remained, creating the current version of the Allen House in 1928. It is a Colonial Revival style house with prominent red brick and cedar shingle siding, featuring a large front porch and many dormers.

The Allens made some changes to the landscape that are documented in photos. These included enhancing the park-like appearance of much of the property with large elm trees and open areas of lawn. The area near the house was planted with perennials and shrubs characteristic of the period.

Two years before they built the house, 9 year old Jim Allen was struck with poliomyelitis—reportedly the only person in Birmingham to be afflicted. The spring fed pond was partially enclosed with concrete walls to create a swimming pool to help ease Jim's physical symptoms. Photos show the rectangular edges of the enclosure with a spillway to allow water to drain into the pond and on to the Rouge, and a platform and rail that may have led to a stair into the pool.

CITY OWNERSHIP-1969-PRESENT

In 1969 voters approved the purchase of the house and land by the city to create a historic park, and to move the Hunter House there to save it from demolition. The Clizbe-Allen family continued to occupy the Allen House until 1973 by agreement with the city. From 1973-1977, the Allen House was renovated through efforts of a bicentennial commission and members of the community, who raised funds in a combination of private donations and grants.

As part of the landscape renovation during this time, the pond and pool were a concern because of maintenance needs and crumbling concrete walls. Filling them in and plowing them over was one solution to make way for more extensive landscaping and development, which included a possible arboretum. This concept for the landscape did not materialize, however due to the high cost. Instead, volunteers planted and maintained flower gardens for a number of years at the Hunter and Allen Houses, which depended on volunteer resources and availability. Boy Scout troops helped with clearing old growth and placing wood chips in pathways. Basic maintenance only was provided for the site otherwise.

For a number of years, event rentals were used to help raise funds, but were insufficient to make the building self-sustaining. Even so, the Allen House and grounds was a popular site for parties and weddings. Toward the mid to late 1990s, a joint plan between the city and the Birmingham Historical Society emerged to establish an endowment and to turn the house into a professionally staffed museum. The program met its goals and the Allen House, Hunter House, and surrounding park grounds became a city operated public museum in 2001.

Since then, the museum has expanded its audience and embraced changes in the museum field to incorporate new technology to reach the next generation. At the same time, preserving the historical past as accurately as possible is also of utmost importance. After the recession of 2008/2009, the focus has been primarily on needed maintenance of the two buildings, on preserving and exhibiting the museum collection, and on public engagement.

The landscape has always been important, however. The Museum Board is now in a position to direct its resources and attention to responsible and comprehensive planning. This will ensure the essential history and uniqueness of the site are preserved and that future citizens of Birmingham will experience the benefits of this long term strategy.

IV. Survey andAnalysis ofExisting Conditions



SURVEY AND ANALYSIS OF EXISTING CONDITIONS

Natural Resources

Two (2) significant natural resources occur on the museum property that substantially contribute to the quality of the overall landscape and offer unique elements for an expanded museum experience. The first is the Riverine Woodland ecosystem which comprises the western portion of the property. This ecosystem includes the Rouge River along the western boundary with a sparse woodland on the steep slopes rising up to the Allen House which sits at the top of the ridge. Plant species comprising the woodland include black walnut, hickory, maple, elm, box elder, cottonwood, mulberry, and catalpa with honeysuckle, privet, barberry, and buckthorn in the understory and grapevine and daylily occurring in the ground layer. Dead trees and limbs occur throughout the ecosystem. Several invasive species also occur in this ecosystem and include common reed (Phragmites australis) near the river, garlic mustard (Allaria petiolata), oriental bittersweet (Celastrus orbiculatus), creeping Charlie (Glechoma hederacea), buckthorn (Rhamnus cathartica), barberry (Berberis thunbergii), and privet (*Ligustrum sp.*), all occurring on the steep slopes.

Two (2) paths meander through the woodland. The primary path enters the woodland near the westerly driveway of the Allen House and runs diagonally to the northwest to the bridge over the Rouge River at Willits Street. The second path enters the woodland at the base of the steep slope behind the Allen House and connects to the primary path at the base of the slope of the Riverine Woodland ecosystem. Both paths consist of wood chips and include timber steps at the steeper sections of the route. Many timber steps are rotting away and need replacement.

The second natural feature is the spring-fed pond on the north central property line immediately adjacent to Willits Street. The pond is fed from groundwater seeps on the east side of the pond. The pond is overgrown with common reed (*Phragmites australis*) and cattails, and has accumulated debris over the years. The outlet for the pond occurs at the northwest point with a small spillway that leads to a catch basin. A wetland ecosystem is associated with the pond as groundwater is near and at the surface creating wetland conditions that, ironically, occur significantly up the slope, particularly in the southeast corner of the pond. The museum property also includes many trees including catalpa, elm, Norway maple, callery pear, Norway spruce, mulberry, European linden, bald cypress, and arborvitae.

Historic Resources

The historic resources on the property include two (2) fieldstone walls. One wall occurs along the top of the ridge to the west of the Allen House and may have been part of a barn that was originally on the property. Unfortunately, a north section of this wall has been undermined and has fallen down the slope. The other fieldstone wall is located midway down the slope to the north of and between the Allen House and Hunter House. Both walls are made of fieldstone, both containing whole rounded stones and split face stones, characteristic of 19th c. farms in southeast Michigan.

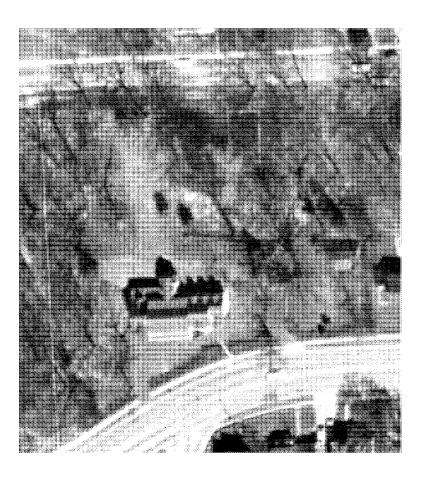
Probably the most unique historic feature on the property is the swimming or bathing pool with cement walls built into the easterly portion of the pond. The pool was used by the Allens' son Jim, who was afflicted with polio, for physical therapy. The swimming pool is evident in the 1963 aerial photograph from Oakland County and from early photographs as indicated below.



Early photograph showing the swimming pool in the pond

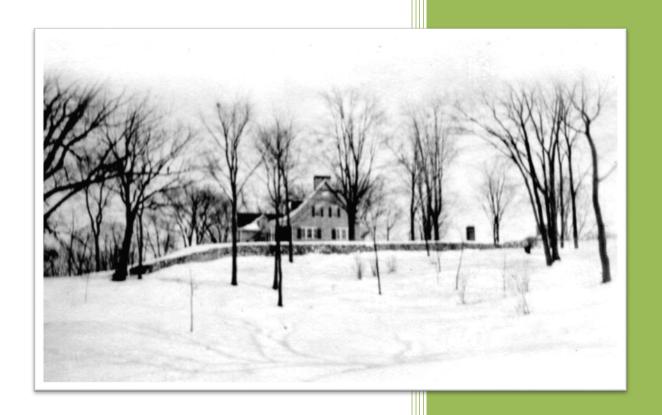
The pool is unique in concept and design as well as history. It originally incorporated the spring as a natural water source and utilized a flow gate at the surface of the western divider to permit natural drainage and continuous flow. A landing with rail provided access into the water, presumably for Jim Allen to use. These unique aspects of the landscape are especially important for preservation and interpretation, and are highly desirable elements that may be eligible for special funding opportunities.

The pond has been surveyed and only two (2) partial walls (the north and east corner) of the swimming pool remain. Concrete was discovered at the bottom of the pond which could be one or more collapsed sides of the pool.



Aerial photograph showing the swimming pool in the pond (from Oakland County, 1963)

V. Proposed
Landscape Master
Plan



GENERAL INFORMATION

A conceptual Landscape Master Plan has been prepared and is the result of a collaborative effort of the museum staff, Museum Board, and landscape architectural consultant over a period of about one (1) year. Early on, the museum property was divided into several zones with distinct elements and characteristics associated with each. These distinct areas include:

- 1. <u>The Heritage Zone</u> along Maple Road with the Allen House, the Bell Plaza, and the Hunter House
- 2. <u>The Transition Zone</u> immediately north of the houses and plaza
- 3. <u>The Riverine/ Woodland Zone</u> on the west side of the Allen House to the Rouge River, the westerly boundary of the property; and
- 4. <u>The Pond Zone</u> which includes the north edge of the property along Willits Street. Each zone and the resulting master plan components are described below.

Zone 1: Heritage Zone

The Heritage Zone is along Maple Road with the Allen House on the west, the Bell Plaza in the center, and the Hunter House on the east. This section of the museum property has had recent improvements to eliminate the circle drive and provide handicap parking as well as short term parallel parking in front of the Bell Monument. Pedestrian circulation has also been added with a sidewalk along the front and rear of the Allen House, a handicap accessible ramp to the Hunter House, and a plaza and garden area

at the Hill School Bell monument. Wi-Fi provides public access opportunities for visitors to the park and the museum.

The design objective for this zone was to provide features which could unite these three (3) distinct subzones with minimal impact to historical features while providing opportunities for the community to participate in museum activities.

Plan for the Heritage Zone

The Master Plan includes restoration of early elm plantings, a children's garden in front of the Hunter House, and a garden of Birmingham heirloom plants at the Hill School Bell Plaza. The early photograph below of the Allen House shows a simple foundation planting with specimen elm trees planted in front of and behind the house.



Early photograph showing elm trees in the foreground and background of the Allen House

The Master Plan shows removal of undesirable trees and replacement with modern elm cultivars able to withstand Dutch elm disease. Original planting locations are indicated from recent surveys and a couple of elm stumps are preserved to show the impressive size of these trees. Two (2) new elm cultivars have been planted on either side of the bell monument to replace the diseased elms removed in 2016.

A children's garden is proposed for the space directly in front of the Hunter House. This location was chosen because the area provides level ground for gardening activity and the southern exposure is ideal for plants. Impacts from Maple Road are mediated with the existing picket fence and proposed yew hedge and gate for the front sidewalk. Other improvements include removal of undesirable species along the east property line and replacement of the picket fence. The Master Plan proposes a garden with heirloom plants from Birmingham with a boxwood shrub border in front of the bell monument. Residents of the city will be encouraged to bring their heirloom plants to the museum to create this specialty garden.

I'm proud to be a part of the development of this landscape master plan. Each zone preserves and enhances the Birmingham Museum's scenic natural historic site while seamlessly integrating unique interpretive/educational opportunities for community members of all ages.

-Tina Krizanic, Museum Board Chair

Signage for the museum will respect the historic setting by complementing the Heritage Zone surroundings while clearly

identifying the museum site in a manner that is consistent with historic district requirements. An effective approach is to utilize existing elements and compatible materials; a section of the existing fence can feature signage in a highly visible manner without overwhelming the historic character of the Allen House. Other signage on the grounds will coordinate with that used in other parks to provide a unified experience for visitors.

Heritage Zone Programming and Community Engagement Opportunities: Public Access, Visibility, and Gathering

- Historical children's garden with heritage plants for educational/demonstration activities and tours
- Community perennial gardens showcasing Birmingham heirloom plants with interpretive information and tours
- Low maintenance organic herb garden with interpretive information and programming
- Family events and activities in the plaza area
- Musical performances and other programs on the back porch of the Allen House
- Outdoor exhibits utilizing app development and Wi-Fi
 to provide interpretive history of Allen House, Hunter
 House, Hill School Bell/school history and plantings in
 Heritage Zone with unobtrusive signage
- Improvements and programs at the plaza that promote public gathering, Wi-Fi connectivity and electronic access to museum collection and online exhibits

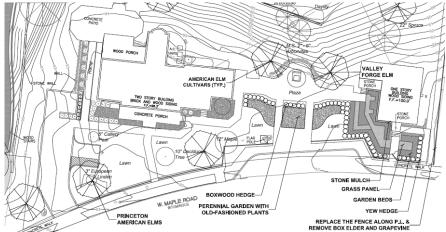
The images below show the characteristics of the Heritage Zone and the concept for the Landscape Master Plan. (See Attachments for additional views).



Existing conditions and analysis of the Heritage Zone

I am the most excited for the educational/interpretive parts of the pond area. My personal connections and understanding of our Birmingham community comes from my experiences with the museum as a child. Some of my most invaluable memories involve the "Birmingham, Long, Long, Ago" movie and school tours. They helped me become passionate about this wonderful community. This landscape design and pond interpretation will only add value to those museum programs to provide more access to our historic landscape.

-Caitlin Rosso, Museum Board member



Conceptual Master Plan for the Heritage Zone

Zone 2: Transition Zone

The Transition Zone begins at the top of the slope immediately behind the houses and plaza and extends down to the base of the slope. This zone provides access from the house to the pool and includes the original fieldstone wall and remnants of early plantings including elm and Norway spruce. Other trees include arborvitae, Norway maple, and mulberry. A wood staircase behind the Allen House provides pedestrian access down the slope to the open space on the west side of the pond. It appears that the stairs are placed over cement steps with fieldstone edges that were built just after the city purchased the property. The slopes of the area consist of maintained lawn.

Plan for Transition Zone

The Master Plan for the Transition Zone shows removal of undesirable trees and replacement with modern elm cultivars. From early photographs of this area it appears that elm plantings formed a glade with maintained lawn and minimal plantings.

The Museum's Landscape Master Plan restores and enhances, in both a timeless and contemporary setting, the natural beauty of a historically significant part of our community.

-James Cunningham, Museum Board member

A significant new feature proposed for the Transition Zone is the concrete steps and fieldstone wall to replace the wood staircase. The proposed stairs with walls and handrails provide a safe route for pedestrians to move from the patio behind the Allen House to the woodland trail and pond at the bottom of the slope. The relatively large landing areas of the steps can allow people to congregate for small venues on an intimate scale.

<u>Transition Zone Programming and Community Engagement</u> Opportunities: Education and Intimate Gatherings

- Stair design provides for multi-use as small amphitheater-like performance area on lower lawn
- Open lawn provides area for traditional lawn activities such as picnics
- Wi-Fi based interpretive education about overall site history from pioneer period to present
- Small garden area for daylilies to feature historic varieties and interpretation of Allen House landscape
- Outdoor photography and art programs and display at stone wall

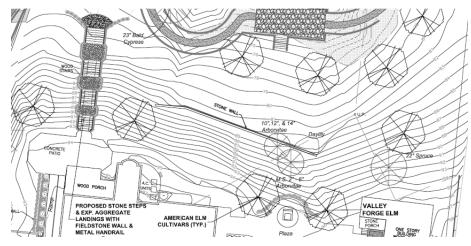
The images below show the characteristics of the Transition Zone and the concept for the Landscape Master Plan. (See Attachments for additional views).



Existing conditions and analysis of the Transition Zone

I'm very excited, as a member of the Museum Board and the Friends Board, regarding the Landscape Master Plan for the museum grounds. These plans will help the community learn more about the grounds and its history.

-Marty Logue, Museum Board member



Conceptual Master Plan for the Transition Zone

Zone 3: Riverine/Woodland Zone

The Riverine/Woodland Zone begins at the top of the slope immediately west of the Allen House and extends to the Rouge River. This space offers an opportunity for residents to enjoy a secluded natural area within the city with trails and the potential to experience the river in close proximity.

Plan for Riverine/Woodland Zone

The Master Plan for the riverine/woodland zone proposes the creation of a climax woodland with the removal of invasive species and planting of sugar maples and associated sub-canopy and ground layer plants. A decision was made to keep the existing trails with the replacement of the timber steps with stone steps and a handrail. To conform to the existing Rouge River Trails Corridor Master Plan, a new path is proposed which runs parallel to the existing stone wall from the entry of the existing trail, where an overlook is proposed, and exiting at Maple Road. The steep slopes in this area will necessitate the use of boulder retaining walls to allow the layout of the path.

What distinguishes Birmingham from our neighbors is the diversity of our topography—the same that Birmingham's founders (Hamilton, Hunter, Pierce, and Willits) observed 200 years ago. The Museum's grounds are part of this landscape, and making them more accessible to the public gives a starting point to tell Birmingham's history and educate future generations about the environment.

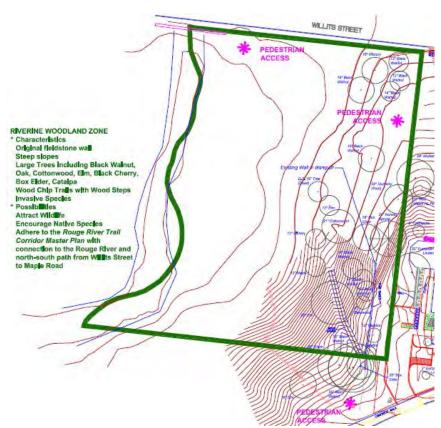
-Russ Dixon, Museum Board member

The original fieldstone wall is proposed to be stabilized and the sections that have fallen will be rebuilt following the original line of the wall. The boulder retaining walls will stabilize the slope and prevent further undermining of the original wall. Also to conform to the Rouge River Trails Corridor Master Plan, a boardwalk is proposed at the intersection of the existing trails which provides access to the Rouge River with a wood deck overlook. Large boulders as sculpture are proposed in the woodland zone.

Riverine/Woodland Zone Programming and Community
Engagement Opportunities: Natural Habitat, Native American
and Cultural History, and Education

- River Rouge natural history and landscape
- Native American presence in the area and land use
- Settlement and pioneer period of Birmingham and importance of Rouge River
- Wildlife and natural habitat information and interpretive materials (Wi-Fi/electronic)
- Invasive species vs. native plants-tours and interpretive materials
- Bird watching programs
- Other nature programs and tours

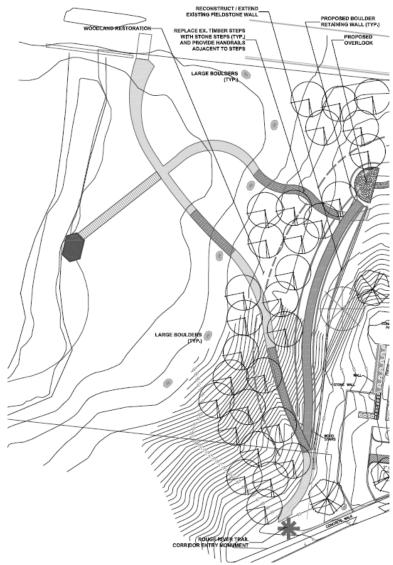
The images below show the characteristics of the Transition Zone and the concept for the Landscape Master Plan. (See Attachments for additional views).



Existing conditions and analysis of the Riverine/Woodland Zone

I'm so inspired by our board's dedication to making our museum a cultural highlight of the community. I will always take pride in this opportunity to help with planning for our exceptional landscape and give back to our very unique and special city!

—Judith Keefer, Museum Board member



Conceptual Master Plan for the Riverine/Woodland Zone

Zone 4: Pond Zone

The Pond Zone comprises the north portion of the museum property and includes the gentler slopes at the base of the transition zone and extends to Willits Street. A main goal of the Master Plan is to provide handicap parking along Willits Street with access to the museum property and especially to the pool and pond area. The preservation and interpretation of the swimming pool within the pond is an equally important goal, as this is an extremely unique use of the spring-fed pond.

Plan for Pond Zone

The Master Plan for the Pond Zone proposes a handicap accessible path from a new sidewalk along Willits Street around the pond to a staging area at the historic swimming pool location, then to a seating area on the west side of the pond, and finally to the new overlook at the woodland trail. The construction of this path will necessitate the use of boulder retaining walls to create the level surface for the path. This path is proposed to consist of crushed limestone and will include plantings along the pond side to act as a barrier to the pond below.

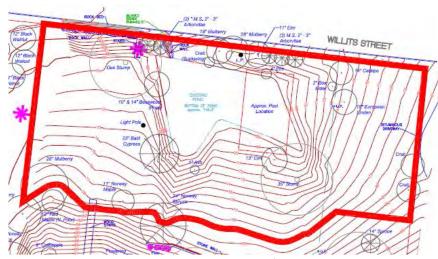
The interpretation of the swimming pool will be accomplished by the construction of a boardwalk along the east edge to complete that side. This boardwalk will also provide an opportunity to experience the pool right in the middle of the pond. A wood fence with cable railing is proposed for the west side of the boardwalk and a curb is proposed for the east side of the boardwalk. A water garden is proposed to the east of the boardwalk, giving an opportunity for visitors to learn about native water plants. A stone surface area is proposed for the south side and the existing

concrete wall defines the north edge of the pool. This stone surface and associated new stone wall allows a relatively large space where groups of people could congregate. To complete the rectangular shape of the swimming pool, a divider is proposed that runs from the south side of the pond to the north side. Care should be taken to preserve existing historical fabric so the remaining walls of the pool should be stabilized and maintained. The boulder walls and new fieldstone wall should be constructed with a different pattern to distinguish these new walls from original walls.

<u>Pond Zone Programming and Community Engagement</u> Opportunities: Barrier-Free Public Access and Polio History

- Wi-Fi/online interpretive materials about poliomyelitis and the unique Allen House pool for Jim Allen's physical therapy
- Acknowledgment of importance of ADA and barrierfree access in signage and surroundings
- Barrier-free outdoor programming for all ages
- Interpretive programs for natural wetlands, native water plants, and wildlife
- Educational activities and programs on environmental value of birds, bees, bats, and butterflies and associated wild plants and flowers for habitat
- Barrier-free tours throughout grounds, including Pool area, Rouge overlook and Allen and Hunter Houses

The images below show the characteristics of the Transition Zone and the concept for the Landscape Master Plan.



Existing conditions and analysis of the Pond Zone

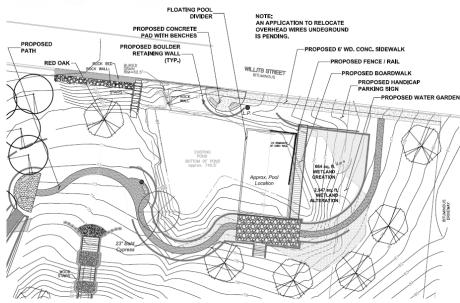
It is especially fitting that the Landscape Master Plan pays special attention to accessibility as it echoes the physical challenges young James Allen faced as he struggled to overcome the effects of polio.

-Lori Eaton, Museum Board member

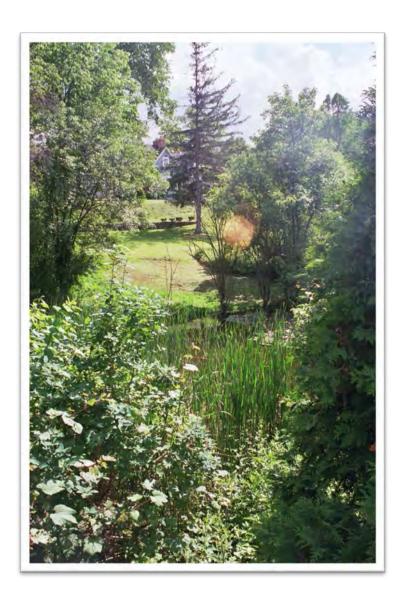
POND ZONE

* Characteristics:
Moderate Slopes, Pond with Historic Pool,
Pedestrian Access from Willits Street,
Light Pole with Internet Access, Overhead
Lines

* Possibilities
Automobile Parking
Pond Improvements
Possible Handlcap Accessible Path
Seating Area near Existing Light Pole
Tree Planting
Water Garden
Relocate Overhead Wires Underground



Conceptual Master Plan for the Pond Zone



VI. Capital
Improvements and
Funding

This conceptual Landscape Master Plan is intended to provide a guideline for long-term planning and project development. Each zone can be approached as a separate project for planning and funding purposes; however available grants, changing conditions, or other needs may make it more efficient to combine certain elements from different zones. Whenever possible, work will be coordinated with other city Parks and Recreation projects for purposes of timing, to avoid duplication, or to enhance progress.

Establishing priorities by zone or project component will assist with planning, especially as regards targeted fundraising and grants. The Landscape Master Plan assumes that funding will be project-specific, but as part of a "big picture" that can be communicated to particular granting organizations and potential sponsors. Special interest grants and private donors are expected to figure prominently in all funding, and some likely sources are noted in the table that follows. Fund-raising initiatives will be held at the museum as well, which will also help connect the community physically to the landscape, promoting the museum's mission.

PRIORITY LEVELS

Four levels of priority with their expected timelines are used in the table on the following page:

Priority 1-2018-2019

Priority 2-2019-2021

Priority 3-2021-2022

Priority 4—2023-2025

(Components of each zone area are sequentially identified with decimals, e.g., 2.1, 2.2 as first and second steps in Priority 2)



Photo by Carroll Deweese, 2016

TABLE-MASTER LANDSCAPE CAPITAL IMPROVEMENT AND FUNDING

Project Component	Priority	Cost	Comments	Potential Funding Sources
		Estimates		
Heritage Zone				
			The visibility and impact of improvements in the Heritage	
			Zone have the highest priority because they lend themselves	
			well to enhanced programming and continued funding for	
	1.0		other parts of the plan	
Design	1.1	\$ 3,000.00		Friends of Museum/City
Construction	1.2			Anticipated funding sources for construction includes a
tree removal		\$ 4,000.00	Tree removal coordinated with Parks to be re-planted	combination of grants, donations, funds from Friends of the
new plant material			elsewhere when possible	Museum, and fundraising. Volunteers may assist with
deciduous trees		\$ 1,950.00		garden bed preparation. Plant material may be available
densiformis yew		\$ 3,600.00		through sponsorships or partnerships
winter gem boxwood		\$ 3,000.00		
garden bed preparation		\$ 6,000.00	Coordinate work with existing DPS maintenance plan	
wood fence		\$ 2,400.00		
metal edging		\$ 480.00		
stone mulch		\$ 225.00		
Subtotal		\$ 24,655.00		

Relocate utilities			DTE estimates represent the majority of the cost, but do not	
	1.0-2.0	\$ 3,500.0	include relocation of other shared line users	Donations combined with grants

Priority 1—2018-2019

Priority 2—2019-2021

Priority 3—2021-2022

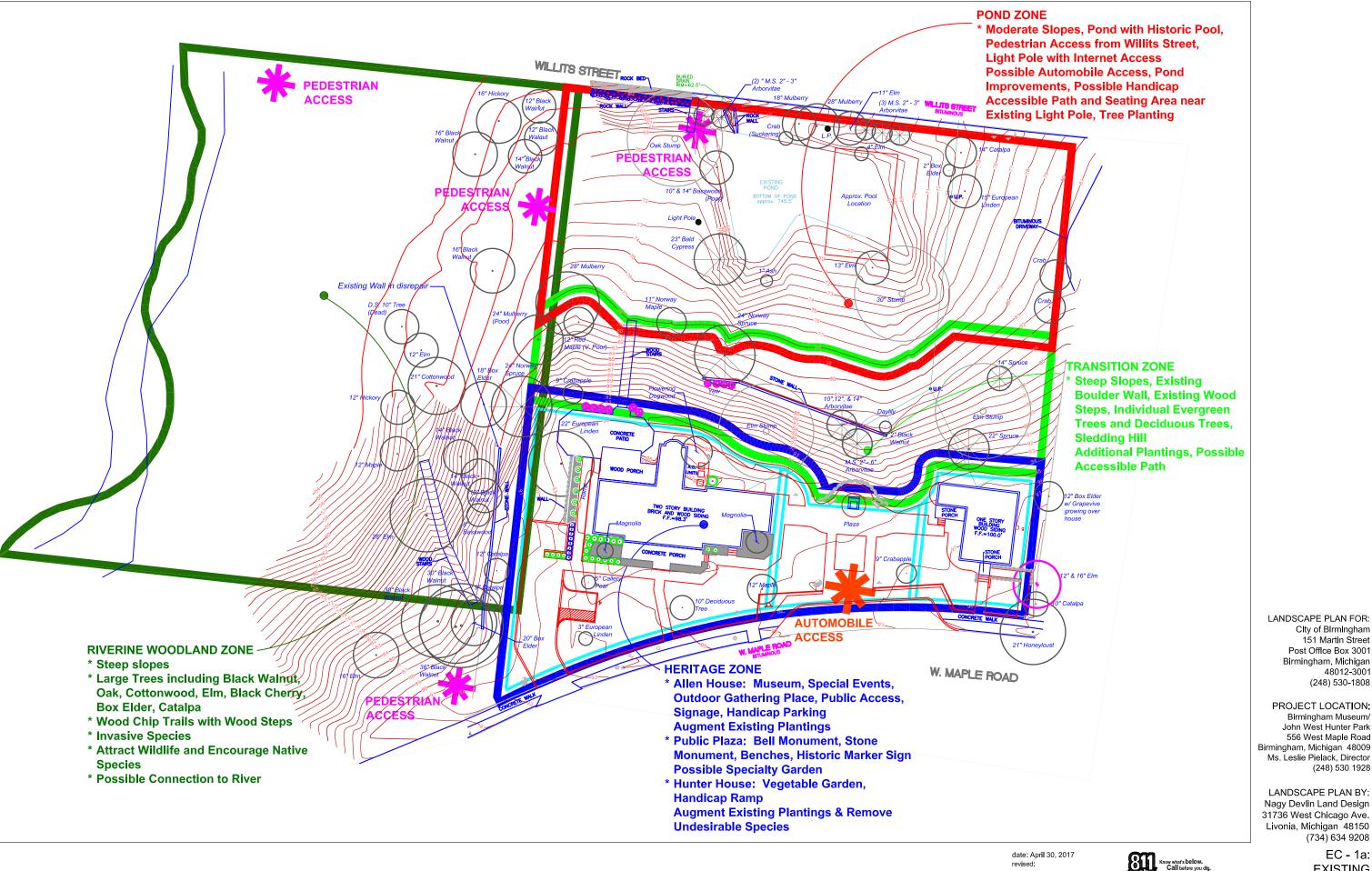
Priority 4—2023-2025

Project Component	Priority	Cost	Comments	Potential Funding Sources
		Estimates		
Pond Zone	2.0			
Additional Survey			Survey will determine detail for construction at pond and	
	2.1	\$ 7,900.00	will complete needed topography	Grants, fundraising + Friends
Engineering Plan	2.2	\$ 15,000.00	Grading plan for ADA paths around pond	Grants, fundraising + partnerships
Design (Pond & Transition				
Zones)	2.3	\$ 5,000.00	Transition Zone & Pond Zone to be designed together	Friends and donations
Construction	2.4			
tree removal		\$ 6,000.00		Anticipated funding sources for construction includes a
shrub removal		\$ 4,000.00		combination of grants, donations, funds from Friends of the
pond digging		\$ 10,200.00		Museum, and fundraising. Plant material may be available
boulder retaining walls		\$ 39,200.00		through sponsorships or partnerships
stone walls		\$ 31,200.00		
crushed limestone path		\$ 7,320.00		
boardwalk		\$ 23,400.00		
wood and cable rail fence				
		\$ 2,400.00		
concrete sidewalk & pad				
		\$ 8,320.00		
benches		\$ 700.00		
stone patio		\$ 14,740.00		
new plant material		\$ 25,000.00		
Subtotal		\$ 200,380.00		

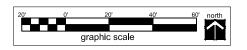
Transition Zone	3.0			
Design (see Pond Zone)	2.3		Transition Zone & Pond Zone to be designed together	
Construction	3.1			Anticipated funding sources for construction includes a
tree removal		\$ 15,000.00		combination of grants, donations, funds from Friends of the
stone walls		\$ 62,400.00		Museum, and fundraising. Plant material may be available
stone steps		\$ 27,200.00		through sponsorships or partnerships
exposed aggregate concrete				
		\$ 7,200.00		
new plant material-				
deciduous trees		\$ 3,250.00		
Subtotal		\$ 115,050.00		

Project Component	Priority	Cost	Comments	Potential Funding Sources
		Estimates		
Woodland/Riverine Zone	4.0			
Design	4.1	\$ 5,000.00		
Construction	4.2			
tree removal		\$ 7,500.00	Cost estimates for construction items are likely to change	
boulder retaining walls		\$ 86,800.00	over the projected time period but are presented here in	The Woodland/Riverine Zone has a higher level of cost but
large boulders		\$ 9,000.00	current dollars.	also may be eligible for grants because of multi-community
stone wall		\$ 38,400.00		involvement and importance in Michigan watershed
stone steps		\$ 26,160.00		management. Anticipated funding sources for construction
crushed limestone path		\$ 6,300.00		includes a combination of grants, donations, funds from
crushed limestone pad		\$ 1,740.00		Friends of the Museum, and fundraising. Sponsorships or
boardwalk				partnerships will be important for this zone, but the
wood and metal hand rail		\$ 4,750.00		possibility of large scale corporate volunteer assistance is
river overlook		\$ 14,000.00		also greater for some components.
new plant material		\$ 25,000.00		
benches		\$ 700.00		
invasive species eradication				
		\$ 12,000.00		
Subtotal		\$ 232,350.00		

Grand Total	\$ 572,935.00	







Birmingham, Michigan 48009 Ms. Leslie Pielack, Director (248) 530 1928 LANDSCAPE PLAN BY:

PROJECT LOCATION:

Birmingham Museum/

John West Hunter Park

556 West Maple Road

Clty of Blrmlngham

Post Office Box 3001 Birmingham, Michigan

151 Martin Street

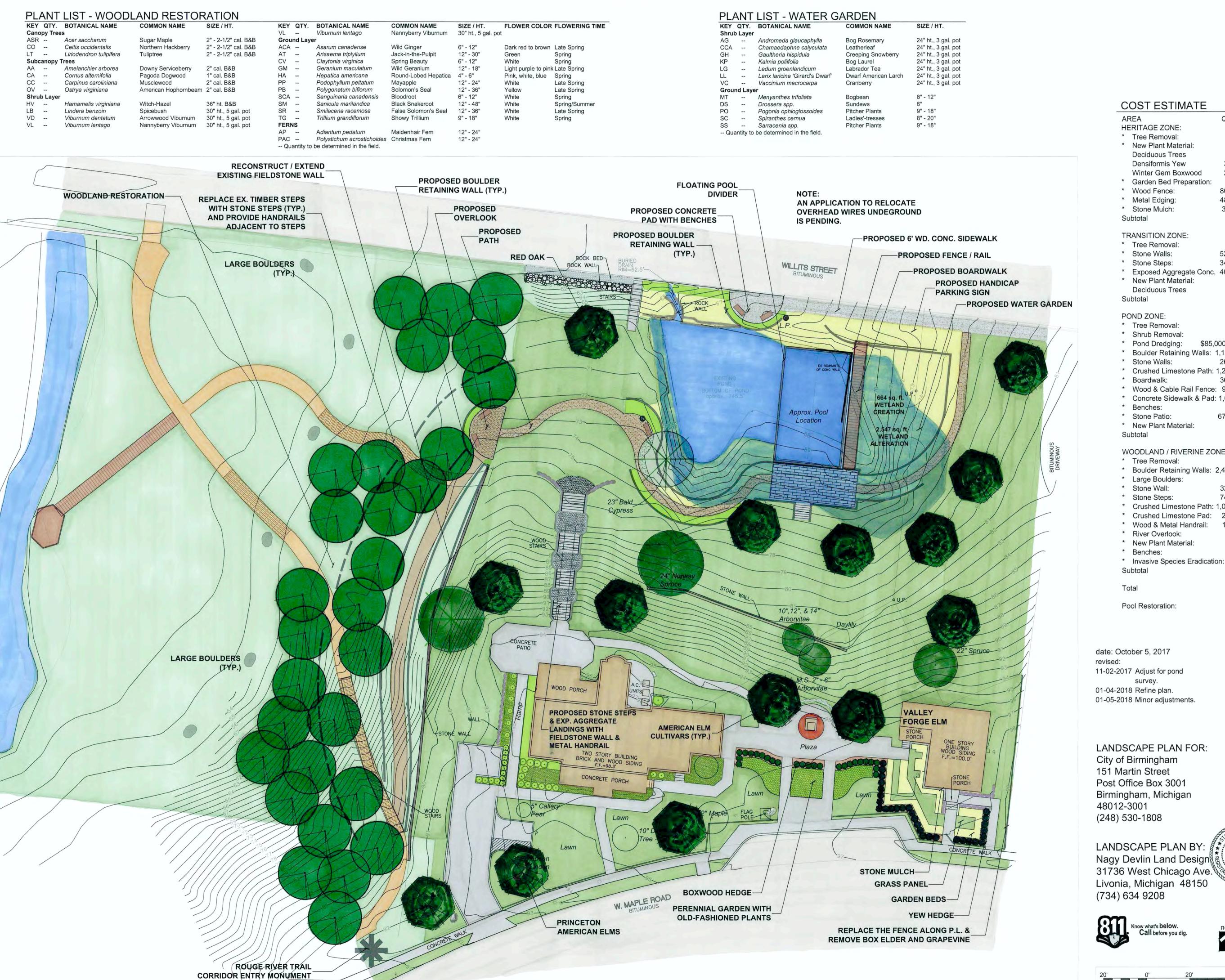
48012-3001

(248) 530-1808

Nagy Devlin Land Design 31736 West Chicago Ave. Livonia, Michigan 48150 (734) 634 9208

> EC - 1a: **EXISTING** CONDITIONS PLAN w/ ZONES

* Base data provided by Client from Atwell Hicks.



LANDSCAPE DEVELOPMENT PLAN

COST ESTIMATE QTY. COST TOTAL HERITAGE ZONE: * Tree Removal: \$4,000.00 4 \$500 * New Plant Material: \$650 \$1,950.00 Deciduous Trees \$3,600.00 Densiformis Yew 30 \$120 \$3,000.00 25 \$120 Winter Gem Boxwood \$6,000.00 * Garden Bed Preparation: * Wood Fence: 80 l.f. \$30 l.f. \$2,400.00 \$480.00 * Metal Edging: 48 l.f. \$10 l.f. 3 c.y. \$75 c.y. \$225.00 * Stone Mulch: \$21,655.00 Subtotal TRANSITION ZONE: 3 \$500 ea. \$1,500.00 * Tree Removal: 520 f.f. \$120 f.f. \$62,400.00 * Stone Walls: 340 s.f. \$80 s.f. \$27,200.00 * Stone Steps: * Exposed Aggregate Conc. 400 s.f. \$18 s.f. \$7,200.00 * New Plant Material: \$3,250.00 5 \$650 Deciduous Trees \$101,550.00 Subtotal POND ZONE: * Tree Removal: \$6,000.00 * Shrub Removal: \$4,000.00 * Pond Dredging: \$85,000 / ac. 0.12 ac. \$10,200.00 * Boulder Retaining Walls: 1,120 f.f. \$35 f.f. \$39,200.00 260 f.f. \$120 f.f. \$31,200.00 * Stone Walls: \$7,320.00 * Crushed Limestone Path: 1,220 s.f. \$6 s.f. * Boardwalk: 360 s.f. \$65 l.f. \$23,400.00 \$2,400.00 * Wood & Cable Rail Fence: 96 l.f. \$25 l.f. \$8,320.00 Concrete Sidewalk & Pad: 1,040 s.f. \$8 s.f. * Benches: 2 \$350 \$700.00 670 s.f. \$22 s.f. \$14,740.00 * Stone Patio: \$25,000.00 * New Plant Material: \$172,480.00 Subtotal WOODLAND / RIVERINE ZONE \$7,500.00 * Tree Removal: 15 \$500 * Boulder Retaining Walls: 2,480 f.f. \$35 f.f. \$86,800.00 6 \$1,500 \$9,000.00 * Large Boulders: 320 f.f. \$120 f.f. \$38,400.00 * Stone Wall: 744 s.f. \$60 s.f. \$26,160.00 * Stone Steps: * Crushed Limestone Path: 1,050 s.f. \$6 s.f. \$6,300.00 \$1,740.00 * Crushed Limestone Pad: 290 s.f. \$6 s.f. Wood & Metal Handrail: 190 l.f. \$25 l.f. \$4,750.00

date: October 5, 2017 11-02-2017 Adjust for pond 01-04-2018 Refine plan.

LANDSCAPE PLAN FOR: City of Birmingham 151 Martin Street Post Office Box 3001 Birmingham, Michigan 48012-3001 (248) 530-1808

LANDSCAPE PLAN BY: Nagy Devlin Land Design 31736 West Chicago Ave. V Livonia, Michigan 48150 (734) 634 9208

Ms. Leslie Pielack, Director (248) 530 1928

\$25,000.00

\$12,000.00

\$232,350.00

\$528,035.00

\$180,000.00

2 \$350

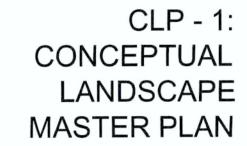
\$700.00



scale: 1" = 20'

scale: 1" = 20'





PROJECT LOCATION:

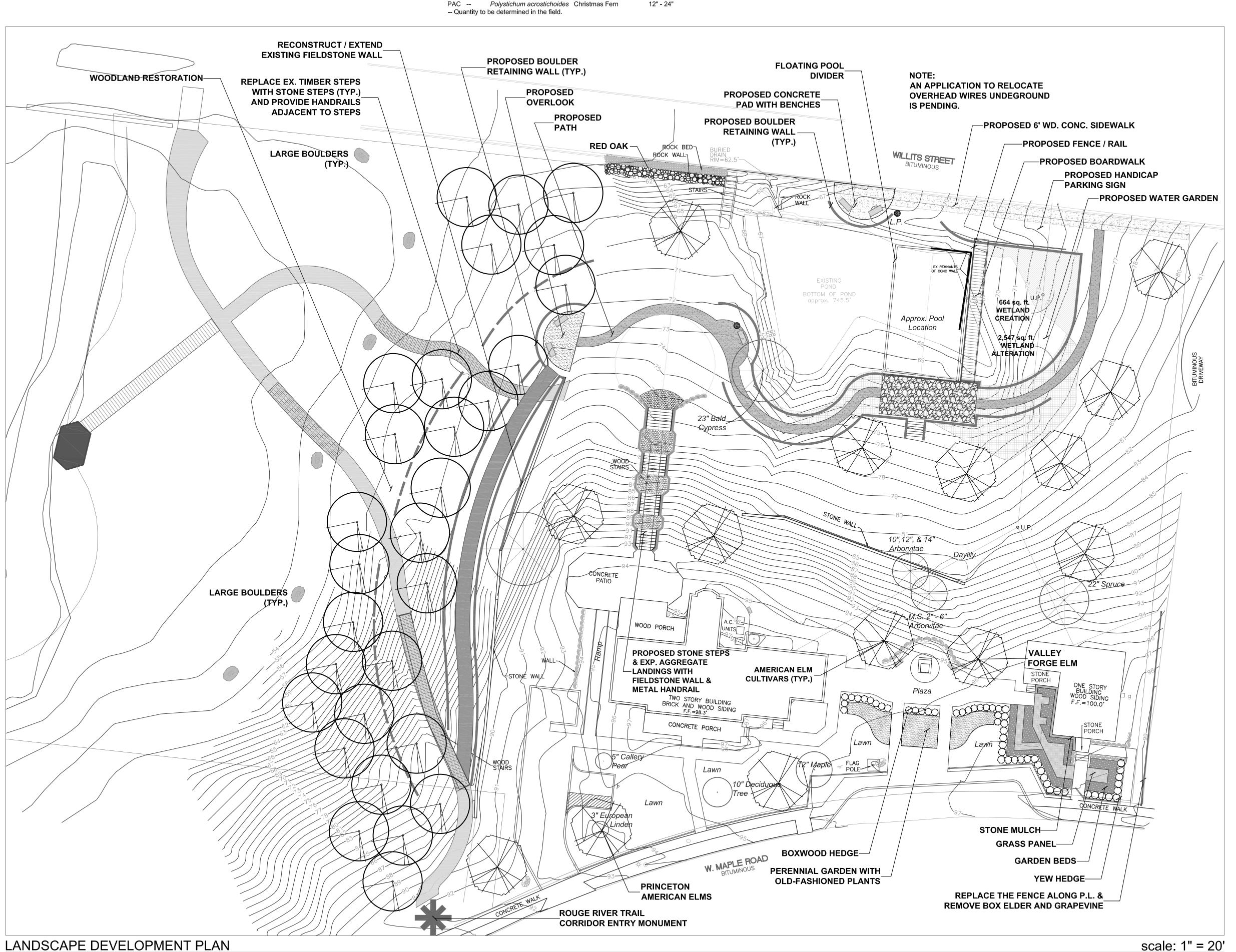
Birmingham Museum/

556 West Maple Road Birmingham, Michigan

John West Hunter Park

* Base data provided by Client from Atwell Hicks & HRC.

KEY QTY. BO	OTANICAL NAME	COMMON NAME	SIZE / HT.	KEY QTY.	BOTANICAL NAME	COMMON NAME	SIZE / HT.	FLOWER COLO	R FLOWERING TIME	KEY QTY. BOTANICAL NAME	COMMON NAME	SIZE / HT.
Canopy Trees				VL	Viburnum lentago	Nannyberry Viburnum	30" ht., 5 gal.	pot		Shrub Layer		
ASR - Ac	cer saccharum	Sugar Maple	2" - 2-1/2" cal. B&B	Ground Lay	/er					AG Andromeda glaucaphylla	Bog Rosemary	24" ht., 3 gal. pot
CO – Ce	eltis occidentalis	Northern Hackberry	2" - 2-1/2" cal. B&B	ACA	Asarum canadense	Wild Ginger	6" - 12"	Dark red to brown	n Late Spring	CCA Chamaedaphne calyculata	Leatherleaf	24" ht., 3 gal. pot
LT – Lin	riodendron tulipifera	Tuliptree	2" - 2-1/2" cal. B&B	AT	Arisaema triplyllum	Jack-in-the-Pulpit	12" - 30"	Green	Spring	GH Gaultheria hispidula	Creeping Snowberry	24" ht., 3 gal. pot
Subcanopy Tree	es			CV	Claytonia virginica	Spring Beauty	6" - 12"	White	Spring	KP Kalmia poliifolia	Bog Laurel	24" ht., 3 gal. pot
AA – An	melanchier arborea	Downy Serviceberry	2" cal. B&B	GM	Geranium maculatum	Wild Geranium	12" - 18"	Light purple to pir	nk Late Spring	LG Ledum groenlandicum	Labrador Tea	24" ht., 3 gal. pot
CA – Co	ornus alternifolia	Pagoda Dogwood	1" cal. B&B	HA	Hepatica americana	Round-Lobed Hepatica	4" - 6"	Pink, white, blue	Spring	LL Larix Iaricina 'Girard's Dwarf'	Dwarf American Larch	24" ht., 3 gal. pot
CC – Ca	arpinus caroliniana	Musclewood	2" cal. B&B	PP 	Podophyllum peltatum	Mayapple	12" - 24"	White	Late Spring	VC Vaccinium macrocarpa	Cranberry	24" ht., 3 gal. pot
OV – Os	strya virginiana	American Hophornbean	n 2" cal. B&B	PB 	Polygonatum biflorum	Solomon's Seal	12" - 36"	Yellow	Late Spring	Ground Layer	-	
Shrub Layer	-	·		SCA	Sanguinaria canadensis	Bloodroot	6" - 12"	White	Spring	MT – Menyanthes trifoliata	Bogbean	8" - 12"
HV – Ha	amamelis virginiana	Witch-Hazel	36" ht. B&B	SM	Sanicula marilandica	Black Snakeroot	12" - 48"	White	Spring/Summer	DS - Drossera spp.	Sundews	6"
LB – <i>Lin</i>	indera benzoin	Spicebush	30" ht., 5 gal. pot	SR	Smilacena racemosa	False Solomon's Seal	12" - 36"	White	Late Spring	PO – Pogonia ophioglossoides	Pitcher Plants	9" - 18"
	iburnum dentatum	Arrowwood Viburnum	30" ht., 5 gal. pot	TG	Trillium grandiflorum	Showy Trillium	9" - 18"	White	Spring	SC – Spiranthes cernua	Ladies'-tresses	8" - 20"
VL – Vik	iburnum lentago	Nannyberry Viburnum	30" ht., 5 gal. pot	FERNS	•	•				SS – Sarracenia spp.	Pitcher Plants	9" - 18"
	G	, ,		AP	Adiantum pedatum	Maidenhair Fern	12" - 24"			 Quantity to be determined in the field. 		
				PAC	Polystichum acrostichoides	Christmas Fern	12" - 24"			•		
					o be determined in the field.							



COST ESTIMATE QTY. COST TOTAL HERITAGE ZONE: * Tree Removal: \$4,000.00 New Plant Material: Deciduous Trees \$650 \$1,950.00 Densiformis Yew \$120 \$3,600.00 Winter Gem Boxwood \$120 \$3,000.00 25 * Garden Bed Preparation: \$6,000.00 80 l.f. \$30 l.f. \$2,400.00 * Wood Fence: * Metal Edging: 48 l.f. \$10 l.f. \$480.00 * Stone Mulch: 3 c.y. \$75 c.y. <u>\$225.00</u> \$21,655.00 Subtotal TRANSITION ZONE: * Tree Removal: 3 \$500 ea. \$1,500.00 * Stone Walls: 520 f.f. \$120 f.f. \$62,400.00 340 s.f. \$80 s.f. \$27,200.00 * Stone Steps: * Exposed Aggregate Conc. 400 s.f. \$18 s.f. \$7,200.00 New Plant Material: \$3,250.00 Deciduous Trees \$101,550.00 Subtotal POND ZONE: \$6,000.00 * Tree Removal: 12 \$500 \$4,000.00 * Shrub Removal: * Pond Dredging: \$85,000 / ac. 0.12 ac. \$10,200.00 * Boulder Retaining Walls: 1,120 f.f. \$35 f.f. \$39,200.00 260 f.f. \$120 f.f. \$31,200.00 * Stone Walls: * Crushed Limestone Path: 1,220 s.f. \$6 s.f. \$7,320.00 * Boardwalk: 360 s.f. \$65 l.f. \$23,400.00 * Wood & Cable Rail Fence: 96 l.f. \$25 l.f. \$2,400.00 * Concrete Sidewalk & Pad: 1,040 s.f. \$8 s.f. \$8,320.00 * Benches: \$700.00 2 \$350 * Stone Patio: 670 s.f. \$22 s.f. \$14,740.00 \$25,000.00 * New Plant Material: \$172,480.00 Subtotal WOODLAND / RIVERINE ZONE * Tree Removal: 15 \$500 \$7,500.00 * Boulder Retaining Walls: 2,480 f.f. \$35 f.f. \$86,800.00 * Large Boulders. 6 \$1,500 * Stone Wall: 320 f.f. \$120 f.f. \$38,400.00 * Stone Steps: 744 s.f. \$60 s.f. \$26,160.00 * Crushed Limestone Path: 1,050 s.f. \$6 s.f. \$6,300.00 * Crushed Limestone Pad: 290 s.f. \$6 s.f. \$1,740.00 * Wood & Metal Handrail: 190 l.f. \$25 l.f. \$4,750.00 * River Overlook: \$14,000.00 * New Plant Material: \$25,000.00 * Benches: 2 \$350 \$700.00 * Invasive Species Eradication: \$12,000.00 \$232,350.00 Subtotal \$528,035.00

LANDSCAPE PLAN FOR: City of Birmingham 151 Martin Street Post Office Box 3001 Birmingham, Michigan 48012-3001 (248) 530-1808

Pool Restoration:

Ms. Leslie Pielack, Director

LANDSCAPE PLAN BY: Nagy Devlin Land Design 31736 West Chicago Ave. Livonia, Michigan 48150 (734) 634 9208



PROJECT LOCATION:

Birmingham Museum/

John West Hunter Park

556 West Maple Road

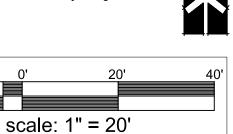
Birmingham, Michigan

(248) 530 1928

48009

\$180,000.00





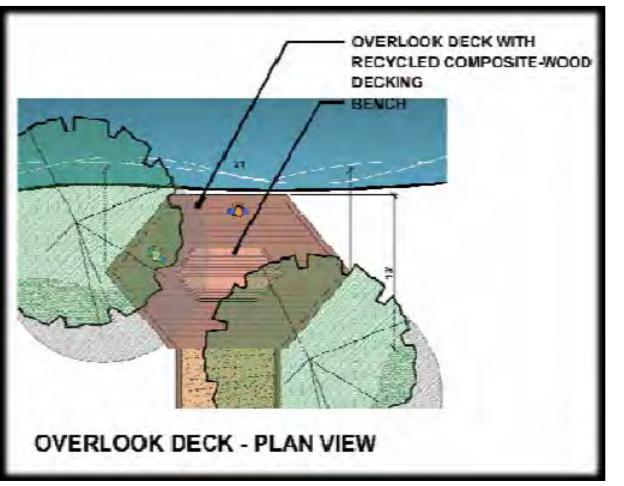
CLP - 1: CONCEPTUAL LANDSCAPE MASTER PLAN

Client from Atwell Hicks & HRC.

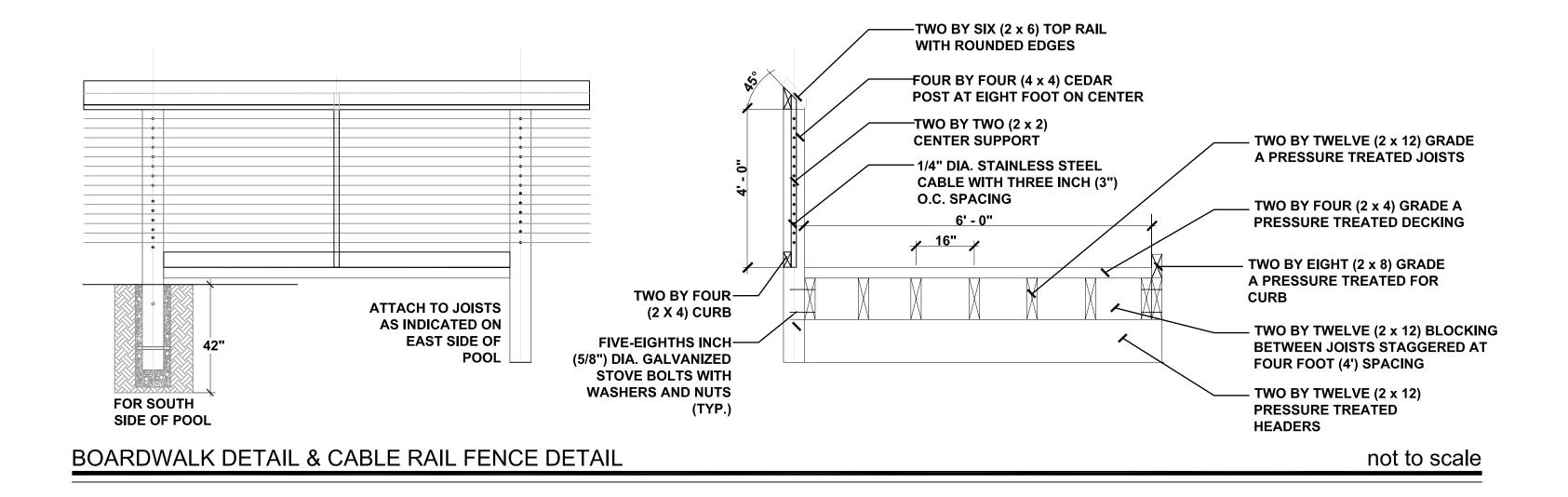
* Base data provided by

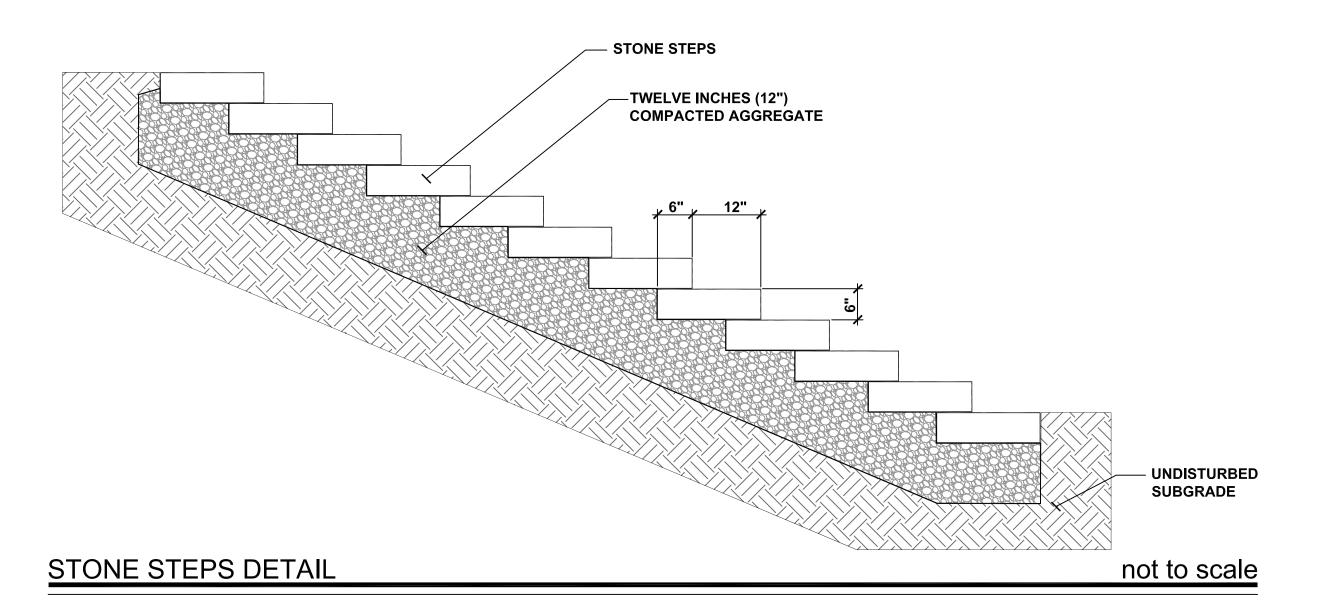
date: October 5, 2017 11-02-2017 Adjust for pond 01-04-2018 Refine plan.

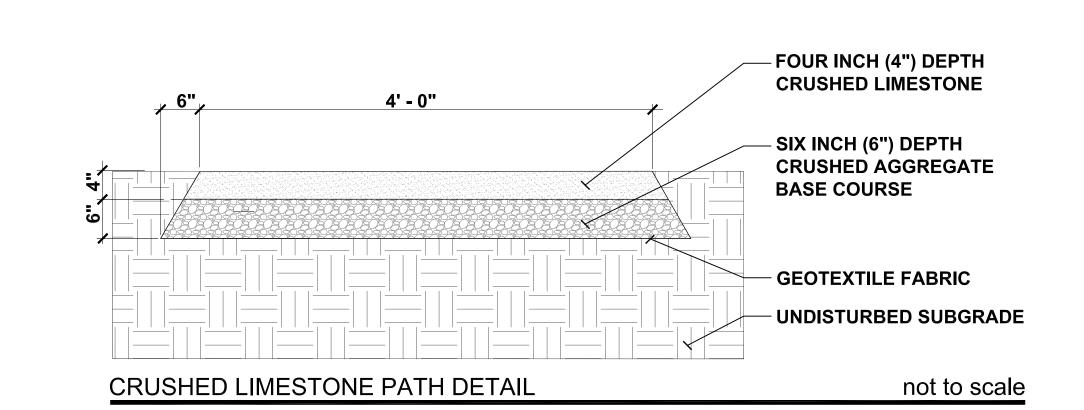
01-05-2018 Minor adjustments.

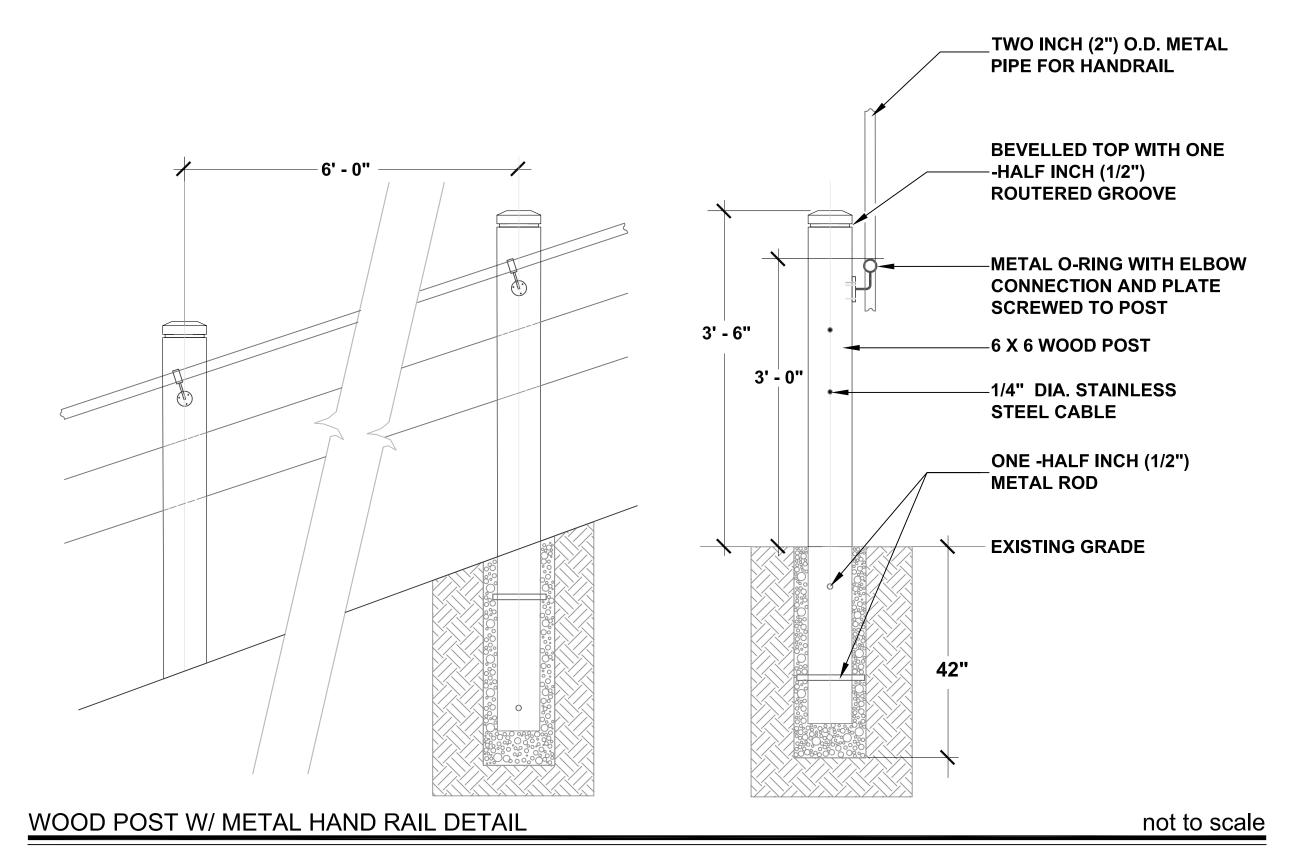


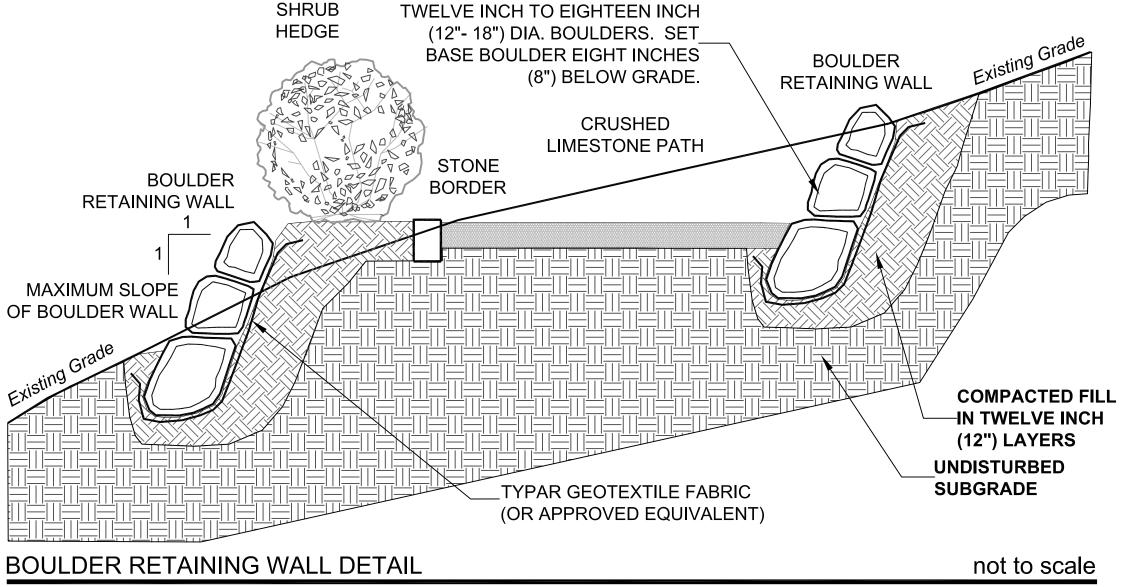
From the Rouge River Trail Corridor Master Plan for the City of Birmingham.











NOTES FOR CONTROL OF *Phragmites* WITH HERBICIDES:

PLANT DESCRIPTION

Common Reed, *Phragmites ausralis* subsp. *australis*, is a warm-season perennial grass with a rigid, hollow stem that grows between six feet and thirteen feet (6' - 13') in height. The leaves are flat, smooth, and green to grayish-green and the flowers grow as dense branched clusters on the end of each stem that are open and feathery at maturity. It is often found in ditches, swales, wetlands, and on stream banks and pond banks. Common Reed has become an invasive species as it outcompetes native vegetation lowering local plant

Common Reed can be eradicated with a long-term management strategy that may include burning, mechanical methods (mowing or hand pulling), and / or herbicides. The following guidelines utilize a management program to control *Phragmites* with the application of herbicides. (Information from the State of Michigan and Wikipedia.)

- 1. The first step in the control of *Phragmites* is the application of herbicides. Glyphosate and imazapyr are two (2) herbicides effective in controlling *Phyragmites*. Imazapyr can be used in combination with glysophate to provide control over *Phragmites* for a longer period of time but can also be used alone for effective control. *Phragmites* should be treated in early to late summer (June through September) when using imazapyr or late summer (August through September) when using glyphosate or a imazapyr/glyphosate mixture to achieve the best results. These herbicides are non-selective and will affect any plant which is contacted by the solution. The applicator should strictly adhere to the chemical manufacturer's specifications for the correct method of application and rate of application.
- Methods of application depend on the size of the *Phragmites* stand and existing site conditions. Scattered plants or isolated plant stands may be treated by injecting stems, hand swiping, or selective hand spraying. Large stands may require the use of commercial equipment. The application of herbicides should be conducted by a licensed or certified applicator to provide the best method for eradication of the *Phragmites* while minimizing damage to native plants and following best management practices for required safety procedures.
- Either herbicide should be used in a formulation that is specifically approved for use in wet areas.
 The next step in the eradication of *Phragmites* is to mow or cut the dead plant material after the herbicide treatment. This process should not occur until at least two (2) weeks after the herbicide treatment to allow maximum exposure to the herbicide. Mowing or cutting of the treated plants is recommended during late summer to fall (August to first hard frost) or in the winter when the ground is frozen. Hand cutting is effective for removing individual plant stems or very small stands but a brush cutter is more effective for large dense stands. The cutting blade should be set to a mowing height of greater than four inches (4") to help minimize any impact to small mammals and native plants. Any equipment used to manage *Phragmites* should be cleaned of all debris before removing it from the treatment site to prevent the spread of seeds or rhizomes to other sites. If the plants are mowed or cut, the plant material should be immediately collected and bagged to prevent the spread of seeds and disposed of properly.
- 3. Reseeding of the treated area:
- Since Glyphosate does not persist in the soil for an extended period of time, reseeding of the desired seed mix can occur after the mowing or cutting process has been completed.

 Imazapyr remains in the soil for a much longer period of time, therefore, reseeding of the desired seed mix
- 4. Annual monitoring shall be conducted in mid to late summer. Any individual plants should be treated and removed by hand techniques as described above to insure that *Phragmites* does not become reestablished.

NOTES FOR CONTROL OF GARLIC MUSTARD:

should not occur for a year after the application treatment.

PLANT DESCRIPTION

Garlic Mustard, *Alliara petiolata*, is an herbaceous biennial flowering plant that smells like garlic when crushed. The plant produces heart-shaped basal rosettes (leaves) that appear in year one at ground level. In the second year, stems shootup to one foot to four feet (1' - 4') in height and develop flowers and seeds while the leaves become more toothed and triangular in shape. In early Spring, clusters of tiny, white, four-petaled flowers bloom before the overstory trees leaf out. The seed pods aree green, long, and narrow and look like stems, turning brown in the Fall. Garlic Mustard thrives in woodlands because it can tolerate deep shade.

Garlic Mustard has become an invasive that spreads quickly through woods outcompeting understory plants including tree saplings.

(Information from the State of Michigan.)

Garlic Mustard can be eradicated with a long-term management strategy that may include prescribed burning, manual and mechanical methods (mowing or hand pulling), and / or herbicides. The following guidelines utilize a management program to control *Phragmites* with the application of manual and mechanical methods.

- 1. The manual method includes the removal of the plants by pulling the entire root mass with the leaves. Care should be taken to disturb the soil as little as possible since the disturbance can encourage seeds sprouting from the existing seed bank. Hand pulling of Garlic Mustad plants may be limited to year one plants. In conjunction with hand pulling, the management progran can include the removal of just the flowers and seedheads. With this method it is important repeat the procedure multiple times during the growing season. The goal is to eliminate the individual plants while reducing the potential seed bank and minimizing soil disturbance and desirable plant damage or elimination.
- 2. Another manual technique is cutting the stem at ground level with a weed whip or other cutting device. This method is best employed in the second year of plant growth especially during a period of drought when the plant is already stressed. The resulting vegetative debris should be entirely removed from the site and discarded in a manner that does not allow seeds to escape and colonize other areas. Care should be taken to clean all tools used thoroughly including clothing and footwear to minimize any accidental seed dispersion.

The successful elimination of Garlic Mustard is a process that will take several years and must be attempted with a sustained, long-term management approach.

(Informatiom from the Natural Resources Conservation Service.)

LANDSCAPE PLAN FOR: City of Birmingham 151 Martin Street Post Office Box 3001 Birmingham, Michigan 48012-3001 (248) 530-1808

LANDSCAPE PLAN BY:
Nagy Devlin Land Design
31736 West Chicago Ave.
Livonia, Michigan 48150
(734) 634 9208

date: January 4, 2018 revised: 01-05-2018 Minor adjustments.

Know what's below.
Call before you dig.

PROJECT LOCATION:
Birmingham Museum/
John West Hunter Park
556 West Maple Road
Birmingham, Michigan
48009
Ms. Leslie Pielack, Director
(248) 530 1928

Drian Devlin AUTOCAD SIGNATURE ORIGINAL IN BLUE

CLP - 2: CONCEPTUAL LANDSCAPE MASTER PLAN DETAILS

Appendix B

Comments from January 16, 2018 Museum Board Special Meeting/Joint Workshop with Parks and Recreation Board, Historic District Commission, and Public

(Heritage Zone): Parks and Recreation Board questions related to

1. Tree restoration and replacement; distinction of volunteer trees vs. intentional/original landscape design, transplanting procedure and costs, use of proposed elm cultivars

Historic District Commission questions related to

- 2. The impact of volunteer tree removal and replacement with smaller, younger trees
- 3. Handicap/barrier free access; current accessibility near museum for parking and access and proposed additional access at Willits Street

Public questions related to

4. Planned designated handicapped parking on Willits Street as part of existing street parking

(Transition Zone): Parks and Recreation Board questions related to

1. Construction details of proposed stairs and adjacent fieldstone walls

Historic District Commission questions related to

- 2. Lighting design opportunities
- 3. Benefits of using concrete for safety, cost, and historical accuracy

There were no public questions

(Riverine/Woodland Zone): Parks and Recreation Board questions related to

1. Locating a children's play area along the Rouge River

- 2. Clarification that the Rouge River Master Plan is conceptual only
- 3. Use of crushed limestone in the zone for barrier free access; barrier free paths from Willits to Maple
- 4. Proposed replacement of rotting timber steps with stone
- 5. Prevalence of invasive species and maintenance costs There were no questions from the Historic District Commission or

(Pond Zone): Parks and Recreation Board questions related to

- 1. Historic use of pool for polio physical therapy by Jim Allen; no public use of pool will be permitted
- 2. Provisions for water flow in proposed pond and pool design
- 3. Possibility of future water garden in pond

the public

- 4. Use of vegetative barriers to maintain safety at edge of pond and depth estimates
- 5. Proposed relocation of utilities underground
- Uncertain nature of original pool divider; goal is to educate about the history and its association with disabilities and to emulate the original pool barrier edge, as complete restoration would be costly

Historic District Commission questions related to

- 1. Ability to lower water to expose concrete structures for study
- 2. Cost of reconstruction of pool's divider wall; possibilities of partial reconstruction as an educational approach
- Cost and difficulty of dredging; permitting issues with Michigan Department of Environmental Quality (MDEQ)
- Reconstruction of MDEQ-required wetlands is a small amount of square footage as an offset of spring seeps

There were no questions from the public

Appendix C

Comments from Parks and Recreation Board Master Plan Process, September and October, 2017

- A. October 3, 2017 Open House Recommendations (Parks-Rec Master Plan draft p. 134)
 - 1. historical games/playground at museum (1 comment)
 - 2. outdoor museum area at museum (1 comment)
- B. <u>Public Engagement Resource Mapping</u> (Parks-Rec Master Plan draft p. 137)
 - 3. no recommendations
- C. <u>Survey Responses-Park Use</u> (Parks-Rec Master Plan draft p. 155)
 - 4. 18 respondents of 441, or 4.4% (includes Allen/Hunter House facilities)
- D. <u>Survey Comments</u>-(Parks –Rec Master Plan draft p. 197)
 - 5. #70- Partnering with the schools, library, BBAC, museum, NEXT, Community House, etc is vital.
 - 6. #74-The Museum Park has been forgotten. It should be developed as an outdoor historic museum including walking exhibits and a game/play area.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/23/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

certificate holder in lieu of such endorsement(o).	CONTACT					
PRODUCER MIKE MARIHUGH	ļ	NAME: TRISHA SE		FAX			
31707 PLYMOUTH ROAD	Ì	(A/C, No. Ext): 734-261-6122 (A/C, No): 734-421-8105					
StateFarm LIVONIA, MI 48150		è-MAIL ADDRESS: trisha.spini	ner.qyvr@sta	tefarm.com	T		
734-261-6122		INS	URER(S) AFFOR	DING COVERAGE	NAIC#		
		INSURER A : State Farm Fire and Casualty Company 2514					
NAGY DEVLIN LAND DESIGN	ILLC.	INSURER B :					
31736 W CHICAGO ST		INSURER C:			- -		
LIVONIA, MI 48150		INSURER D :			-		
		INSURER E :					
ACUEDIA OF A CONTROL OF A CONTR	TC NUMBER	INSURER F:		REVISION NUMBER:			
THIS IS TO CERTIFY THAT THE POLICIES OF INS	TE NUMBER:	VE REEN ISSUED TO			HE POLICY PERIO		
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INSR TYPE OF INSURANCE INSR WA	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LMIT			
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X COMMERCIAL GENERAL LIABILITY	_			DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000		
CLAIMS-MADE OCCUR	92-CS-C518-9	10/06/2018	10/06/2019	MED EXP (Any one person)	\$ 5,00		
				PERSONAL & ADV INJURY	\$		
				GENERAL AGGREGATE	\$ 2,000,00		
GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	\$		
POLICY PRO- JECT LOC				COMBINED SINGLE LIMIT	\$		
AUTOMOBILE LIABILITY				(Ea accident)	\$		
ANY AUTO	318 2447-F12-22B	06/12/2018	12/12/2018	BODILY INJURY (Per person)	\$ 100,00		
ALL OWNED SCHEDULED AUTOS				PROPERTY DAMAGE	\$ 300,00		
HIRED AUTOS NON-OWNED AUTOS				(Per accident)	\$ 1,000,00		
					\$		
UMBRELLA LIAB OCCUR				EACH OCCURRENCE	\$		
EXCESS LIAB CLAIMS-MADE				AGGREGATE	\$		
DED RETENTION\$			 	WC STATU- OTH-	\$		
WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	1			TORY LIMITS ER			
ANY PROPRIETOR/PARTNER/EXECUTIVE N/A				E.L. EACH ACCIDENT	\$		
(Mandatory in NH)				E.L. DISEASE - EA EMPLOYEE			
If yes, describe under DESCRIPTION OF OPERATIONS below				E.L. DISEASE - POLICY LIMIT	\$		
			<u> </u>	<u> </u>			
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attachment) Commercial General Liability and Motor Vehicle Liability and Motor Vehicles (Attachment) Individuals and Motor Vehicles (Attachment) Description of Operations / Locations / / Lo	ability Insurance, as described cted and appointed officials, a ers thereof. This coverage sha	d above, shall include all employee and volu all be primary to any	e an endorser unteers, all bo	ards, commissions and/o	r authorities and		
insured, whether any other available coverage by p	orimary, contributing or exces	s.					
CERTIFICATE HOLDER		CANCELLATION					
CITY OF BIRMINGHAM 151 MARTIN ST		SHOULD ANY OF	THE ABOVE	DESCRIBED POLICIES BE HEREOF, NOTICE WILL CY PROVISIONS.	CANCELLED BEFOR BE DELIVERED		
BIRMINGHAM, MI 48012		AUTHORIZED REPRESENTATIVE Mike Marulual					

State Farm Mutual Automobile Insurance Company

2550 Northwestern Avenue West Lafayette, IN 47906-1332

AT2 DEVLIN, JOHN BRIAN 31736 W CHICAGO ST

LIVONIA MI 48150-2830

A-3901

Α



AUTO RENEWAL

AMOUNT DUE:



Payment is due by June 12, 2018

Your State Farm Agent

MIKE MARIHUGH Office: 734-261-6122

Address: 31707 PLYMOUTH RD LIVONIA, MI 48150-1905

If you have a new or different car, have added any drivers, or have moved, please contact your agent.

proase cornect your agent.

Thank you for choosing State Farm.

Policy Number: 318 2447-F12-22B

Policy Period: June 12, 2018 to December 12, 2018

Vehicle:

2008 CHEVROLET AVEO

Principal Driver:
JOHN DEVLIN

CONVENIENT PAYMENT OPTION: We offer a 50-50 payment plan which divides your premium into two separate payments for a \$2.00 handling charge. To use the plan, submit one half of your premium plus the \$2.00. The balance will be due 60 days after your renewal date. We'll send you a reminder notice.

We also have available a plan to let you pay your premium in monthly installments. For details on this plan and to

determine if you qualify, please contact your State Farm agent.

This policy is being renewed at rates in effect on the date of renewal.

This policy expires on the date due if premium is not paid. Based on your driving record, you have our Accident-Free Discount for preferred customers.

When you provide a check as payment, you authorize us either to use information from your check to make a (continued on next page)

Page number 1 of 6

Policy Number: 318 2447-F12-22B Prepared May 4, 2018

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♦ Please fold and tear here ♦

143602 201 06-01-2015

Power To Pay Your Way



Online statefarm.com/pay



Mobile Use the State Farm mobile app



Call Automated Line: 1-800-440-0998 Your agent: 734-261-6122



Mail Send us a check



Key code: 2273467748



Insured: DEVLIN, JOHN BRIAN Policy Number: 318 2447-F12-22B

Amount Due:

Please pay by June 12, 2018

Make payment to State Farm

0409807048

Insurance Support Center P.O. Box 680001 Dallas, TX 75368-0001

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For Office Use Only

2-A2 A APP DT 07-22-2018 3901-FBEE MUTL VOL **AUTO REN**

\$849.08

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one-time electronic fund transfer from your account or to process the payment as a check transaction. When we use information from your check to make an electronic fund transfer, funds may be withdrawn from your account as soon as the same day we receive your payment, and you will not receive your check back from your financial institution.

VEHICLE INFORMATION

Review your policy information carefully. If anything is incorrect, or if there are any changes to your vehicle information, please let us know right away.

Vehicle Description	Vehicle Identification Number (VIN)	Who principally drives this vehicle?	How is this vehicle normally used? National average: 12,000 miles driven annually per vehicle
2008 CHEVROLET AVEO	KL1TD66608B186680	JOHN DEVLIN, who will be age 61 as of June 12, 2018.	To Work, School or Pleasure. Driven over 7,500 miles annually.

Other Household Vehicle(s)

Your premium may be influenced by other State Farm policies that currently insure the following vehicle(s) in your household:

1993 CHEVROLET C1500 1915 FORD MODEL T

Premium Adjustment

Each year, we review our medical payments and personal injury protection coverages claim experience to determine the vehicle safety discount that is applied to each make and model. In addition, we review the comprehensive, collision, bodily injury and property damage claim experience

annually to determine which makes and models have earned decreases or increases from State Farm's standard rates. If any changes result from our reviews, adjustments are reflected in the rates shown on this renewal notice.

Policy Number: 318 2447-F12-22B Prepared May 4, 2018 Page number 2 of 6



DRIVER INFORMATION

Assigned Driver(s)

The following driver(s) are assigned to the vehicle(s) on this policy.

Name	Age as of June 12, 2018		
JOHN DEVLIN	61		

Other Household Driver(s)

In addition to the Principal Driver(s) and Assigned Driver(s), your premium may be influenced by the drivers shown below and other individuals permitted to drive your vehicle. This list does not extend or expand coverage beyond that contained in this automobile policy. The drivers listed below are the drivers reported to us that most frequently drive other vehicles in your household.

JANE OCONNELL-DEVLIN

Principal Driver & Assigned Drivers

For each automobile, the **Principal Driver** is the individual who most frequently drives it.

Each driver is designated as an **Assigned Driver** on the household automobile that he or she most frequently drives.

Your premium may be influenced by the information shown for these drivers.

IMPORTANT NOTICE REGARDING YOUR PREMIUM

Customer Rating Index: 1582

State Farm works hard to offer you the best combination of price, service, and protection. The amount you pay for automobile insurance is determined by many factors such as the coverages you have, where you live, the kind of car

you drive, how your car is used, who drives the car, and information from consumer reports.

You have the right to request, no more than once during a 12-month period, that your policy be re-rated using a current credit-based insurance score. Re-rating could result in a lower rate, no change in rate, or a higher rate.

COVERAGE AND LIMITS See your policy for an explanation of these coverages.

Α	Liability		
	Bodily Injury 100,000/300,000		
	Property Damage 100,000		
P4	Personal Injury Protection		
	Coordinated Medical Expenses		
	& Primary Work Loss		
N	Property Protection		\$ 646.74
D	1000 Ded Comprehensive		\$22.18
G	1000 Deductible Collision		\$136.27
Н	Emergency Road Service		\$6.60
U	Uninsured Motor Vehicle		
	Bodily Injury 100,000/300,000		\$21.64
		•	(continued on next page)

(continued on next page)

Policy Number: 318 2447-F12-22B Prepared May 4, 2018



COVERAGE AND LIMITS continued

<u>s</u>	Death Indemnity	\$2.20
W	Underinsured Motor Vehicle	
	Bodily Injury 100,000/300,000	\$8.16
Υ	Limited Property Damage	\$5.29
Amount Due		\$849.08

You have chosen a Personal Injury Protection coverage option on the basis that you have available primary insurance for medical and/or work loss resulting from automobile accident related injuries. If you do not have this other insurance at the time of a car accident, a per accident \$500 penalty may apply separately to allowable expenses and to work loss benefits. Please contact your agent immediately to change your Personal Injury Protection

coverage option if you do not have available other primary insurance.

If any coverage you carry is changed to give broader protection with no additional premium charge, we will give you the broader protection without issuing a new policy, starting on the date we adopt the broader protection.

DISCOUNTS These adjustments have already been applied to your premium.

Multicar	
Antitheft	
Vehicle Safety	
Safety Belt Usage	
Accident/Violation Free	
Total Discounts	\$560.

Catastrophic Claims Premium	\$96.92
Statutory Assessments	\$1.17
Total Charges	\$98.09

ADDITIONAL INFORMATION

The penalty for insurance fraud in Michigan can be a fine up to \$50,000, restitution and a felony punishable by not more than 4 years in prison.

If any information on this renewal notice is incomplete or inaccurate, or if you want to confirm the information we have

in our records, please contact your agent. For additional information regarding discounts or coverages, see your State Farm agent or visit statefarm.com®.

Catastrophic Claims Premium Change

The Catastrophic Claims Premium shown on your enclosed renewal notice has changed effective with July 1, 2017, renewals as follows:

	Old Premium	New Premium
Policies that renew semiannually	\$91.22	\$96.92
Policies that renew annually	\$182.44	\$193.84

The Catastrophic Claims Premium is based upon the annual review completed by the Michigan Catastrophic Claims Association (MCCA). The premium you pay includes the assessment from the MCCA board and administrative costs. The MCCA fund is used to pay for Personal Injury Protection Coverage losses in excess of \$555,000. Michigan is the only state that offers unlimited

(continued on next page)

Policy Number: 318 2447-F12-22B Page number 4 of 6
Prepared May 4, 2018



Personal Injury Protection benefits, and every Michigan automobile insurance policy is charged for this coverage. The funds are intended to cover reasonable and necessary medical and related expenses resulting from a covered automobile accident.

If you have any questions about the Catastrophic Claims Premium or Personal Injury Protection Coverage, please contact your State Farm agent or visit the State of Michigan Web site at: www.michigancatastrophic.com

Drive Safe & Save[™] - it's that simple

Our Drive Safe & Save discount is one more way we help you save money on your auto insurance. How much you drive determines the size of your discount, and good drivers can save even more. There are multiple ways you can participate depending on the vehicle you drive. You'll receive an initial participation discount just for enrolling, which will be replaced, after an introductory period, by a discount adjusted at the policy renewal based on information collected.

Contact your State Farm agent or visit drivesafeandsave.com for details.

Personal injury protection coverage changes

The following changes apply to accidents occurring October 1, 2017, and after.

Work loss benefits limit adjusted

The coverage limit has been adjusted from "up to \$5,452 per month" to "up to \$5,541 per month."

Added work loss benefits limits adjusted

The limit for coverage Q1, if carried, has been adjusted from "up to \$6,452 per month" to "up to \$6,541 per month." The limit for coverage Q2, if carried, has been adjusted from "up to \$10,452 per month" to "up to \$10,541 per month." If you do not carry coverage Q1 or Q2 and wish to add one of these coverages to your policy, please contact your agent.

Survivors' loss benefits limit adjusted

The coverage limit has been adjusted from "up to \$5,452 per month" to "up to \$5,541 per month."

The above limits are reviewed and adjusted annually by the Michigan Department of Insurance and Financial Services.

If your employment situation or other benefit plans available to you have changed or if you are age 65 or older, please contact your State Farm agent to determine the proper coverage options to meet your current needs. Your agent will be happy to answer any questions you may have and to make any needed coverage changes.

Important notice regarding our rating classifications and eligibility rules

Upon request, State Farm will provide you with the following information in either written or electronic format:

- 1. A description of State Farm's specific rating classifications by which our rates and premiums are determined.
- 2. A description of State Farm's underwriting rules based on insurance eligibility points.
- 3. Information regarding your rights as a policyholder to:
 - a. Appeal the application of State Farm's rating plan to determine your premium.
 - b. Obtain documentation from State Farm regarding how your rates are determined.
 - c. Appeal the application of State Farm's underwriting rules.
 - d. Request an informal conference with State Farm.
 - e. File with the insurance commissioner a complaint as an aggrieved person.

To request this information, call toll-free 1-855-277-5379 or send an e-mail to: ncen.auto-mi-class-plan-insert.174o18@statefarm.com

Personal injury protection and additional work loss coverages information.

Your car insurance policy includes allowable expenses and work loss benefits under personal injury protection, coverage P. This coverage pays for allowable medical expenses resulting from a car accident and loss of earnings from work an insured would have performed had he or she not been injured in a car accident. You may also have additional work loss, coverage Q1, which provides increased work loss benefits for persons listed on your declarations page as having this coverage.

(continued on next page)

Policy Number: 318 2447-F12-22B Prepared May 4, 2018



If you are 60 years of age or older and not eligible to receive work loss benefits, you are entitled to waive coverage for work loss benefits and receive a reduced premium rate.

If you are unemployed, working part-time, or if your benefits have changed, the coverage options you may have selected while working may not be appropriate.

If your employment situation or other benefit plans available to you have changed, please contact your State Farm agent to determine the proper coverage options to meet your current needs. Your agent will be happy to answer any questions you may have and to make any needed coverage changes.

Buying a new car? Remember to contact your agent!

When you buy an additional car or one that replaces a car already on your policy, you need to report the change to your agent **promptly.** Even though the dealership you purchased the car from may offer to notify your agent or insurance company, you, as the named insured, are responsible for reporting all changes to your auto policy. By contacting your agent, you can help:

- avoid any complications or lack of coverage in the event of an accident or loss,
- · avoid insurance verification problems with a lienholder, the police, or the department of motor vehicles, and
- ensure that you receive any new discounts you may be entitled to.

Your current State Farm policy automatically provides certain coverages for a new or replacement car for up to a specified, limited number of days after you take possession of the car. Please refer to your policy for the number of days that applies in your state. If you have any questions about coverage for a newly acquired car, please contact your State Farm agent.

Disclaimer: This message is provided for informational purposes only and does not grant any insurance coverage. The terms and conditions of coverage are set forth in your State Farm Car Policy booklet, the most recently issued Declarations Page, and any applicable endorsements.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/22/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW, THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED

REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER. IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s) Karen Bronson CorRisk Solutions PHONE (AC, No, Eq 312-637-8755 PAX IAG, No. Ents 225 W. Washington St. Suite 1560 kbronson@corrisksolutions.com Chicago, IL 60606 INSURER(S) AFFORDING COVERAGE NAIC # New Hampshire Insurance Company 23841 INSURER A: NSURED INSURER B Nagy Devlin Land Design, L.L.C. INSURER C: 31736 West Chicago Avenue INSURER D: Livonia, MI 48150 INSURER E: INSURER F: **CERTIFICATE NUMBER:** REVISION NUMBER: COVERAGES THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ADD'L INSRD SUBR WVD POLICY EFF (MM/DD/YYYY) POLICY EXP (MM/DD/YYYY) NSR POLICY NUMBER TYPE OF INSURANCE GENERAL LIABILITY EACH OCCURANCE DAMAGE TO RENTED COMMERCIAL GENERAL LIABILITY PREMISES (Ea occurance) CLAIMS MADE LOCCUR MED EXP (Any one person) **DOES NOT APPLY** PERSONAL & AND INJURY GENERAL AGGREGATE GEN'L AGGREGATE LIMIT APPLIES PER: PRODUCTS - COMP/OP AGG PROJECT POLICY COMBINED SINGLE LIMIT (Es AUTOMOBILE LIABILITY ANY AUTO BODILY INJURY (Per person) ALL OWNED SCHEDULED DOES NOT APPLY BODILY INJURY (Per accident) **AUTOS** AUTOS NON-OWNED PROPERTY DAMAGE (Per HIRED AUTOS ALITOS UMBRELLA LIAB OCCUR EACH OCCURANCE EXCESS LIAB **CLAIMS MADE AGGREGATE** DOES NOT APPLY DED RETENTION \$ WC STATU-TORY LIMITS WORKERS COMPENSATION OTHER AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE E.L. EACH ACCIDENT OFFICE/MEMBER EXCLUDED? N/A Y/N DOES NOT APPLY E.L. DISESAL - EA (Mandatory in NH) **EMPLOYER** if yes, describe under DESCRIPTION OF E.L. DISEASE - POLICY LIMIT OPERATIONS below Per Occurrence: 064991986-\$1,000,000 07/05/18 07/05/19 Professional Liability Annual Aggregate: 02 \$1,000,000 DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACCORD 101, Additional Remarks Schedule, if more space is required) Cancellation, per policy terms and conditions, is 60 days. **CERTIFICATE HOLDER** CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. City of Birmingham **AUTHORIZED REPRESENTATIVE** PO Box 3001 151 Martin Street Fith Birmingham, MI 48012

Nagy Devlin Land Design 31736 West Chicago Avenue Livonia, Michigan 48150 (734) 634-9208

October 22, 2018

Mr. Timothy J. Currier Birmingham City Attorney Beier Howlett, P.C. 3001 West Big Beaver Road Suite 200 Troy, Michigan 48084

Re: Nagy Devlin Land Design Verification of No Employees.

Dear Mr. Currier:

This letter is offered as verification that Nagy Devlin Land Design, L.L.C. is classified as a single-member LLC and does not have any employees at this time.

If you have questions or need any additional information, please do not hesitate to call our office at the above telephone number.

Sincerely.

Brian Devlin, R.L.A.

President



MEMORANDUM

Birmingham Shopping District

DATE: October 8, 2018

TO: Joseph A. Valentine, City Manager

FROM: Ingrid Tighe, Executive Director, Birmingham Shopping District

SUBJECT: Holiday Light Display on Merrill Street

INTRODUCTION:

For several years, the Birmingham Shopping District has hung a beautiful light display over Merrill Street in downtown Birmingham. The Birmingham Shopping District would like to continue this tradition and display the lights on Merrill Street for the 2018 holiday season.

BACKGROUND:

The display will be the same as in years past with strings of lights spanning from the Merrillwood Building across Merrill Street to the Birmingham Plaza Building. The Building Official and the Fire Marshall approved this light configuration as it meets code and safety requirements. Representatives from the Merrillwood Investment, LLC and Essco of Birmingham, LLC (building owners) have both signed an agreement, stating their approval for the use of their building for the holiday display.

The Birmingham Shopping District is also requesting to close Merrill Street for one day for approximately 8-10 hours for the installation of the lights. During installation, the contractor will maintain the pedestrian and vehicle entrance for Merrillwood residents. Due to safety concerns for the vendor, pedestrians on the street, and automobiles, it is best to close the street for a one-day installation vs. installing the lights over a period of four weekends with pedestrians and vehicles moving under the lighting installation while it is being put up (as has been done in years past.) The BSD proposes to schedule the installation on a Sunday as this is the least busy day of the week in downtown and the installation will have minimal impact on businesses, shoppers and vehicular traffic.

The Merrillwood Building is replacing all the windows in their building in October and November 2018. Installation of the windows requires the use of a 90-foot articulated lift and therefore, the contractor must install the holiday lighting upon completion of the Merrillwood Building's window installation.

Therefore, based on this information and consultation with the Merrillwood Building staff, the proposed installation dates are Sunday, November 18, 2018 as the primary date and Sunday, November 25, 2018 as a back-up date in case of inclement weather. Given the circumstances with the Merrillwood Building capital improvement project, should installation take longer than anticipated the BSD will schedule an alternate date for installation and inform the Commission of this change.

The Merrill Street holiday lighting is displayed December through the end of February. Despite the possible delay in putting up the lighting this year, the BSD board agreed they still would like to proceed with the project given its popularity among residents and visitors and for the fact that the display is up for three months.

In order for the City to approve this plan, we are seeking the city's approval of these agreements along with the Mayor's signature on the two agreements.

LEGAL REVIEW:

Legal counsel reviewed and approved the contracts.

FISCAL IMPACT:

The holiday lighting is part of the BSD's approved budget.

SUMMARY:

The BSD is requesting that the Commission approve the two contracts with Merrillwood Investment, LLC and Essco of Birmingham, LLC. Further, the BSD is requesting the Commission grant permission to close Merrill St. for one Sunday to install the lights.

ATTACHMENTS:

Lighting Agreement with Essco of Birmingham, LLC Lighting Agreement with Merrillwood Investment, LLC

SUGGESTED RESOLUTION:

To approve the Lighting Agreements with Essco of Birmingham, LLC and Merrillwood Investment, LLC, granting permission for the City to install holiday lighting over Merrill Street during the 2018 holiday season, to direct the Mayor to sign the agreements on behalf of the City, and further to approve the closure of Merrill Street on Sunday, November 18, 2018 or November 25, 2018 to install the lighting.

LIGHTING AGREEMENT

THIS AGREEMENT made this ___ day of September, 2018 by and between the CITY OF BIRMINGHAM, A Michigan Municipal Corporation, whose address is 151 Martin Street, Birmingham, MI 48009 (hereinafter referred to as "City") and Merrillwood Investment, LLC d/b/a Merrillwood Collection whose address is 251 East Merrill Street, Suite 212, (hereinafter referred to as "Owner").

WITNESSETH:

WHEREAS, the City desires to place certain lighting on the owners' building from beginning of November 2018 to the end of February 2019.

WHEREAS, the City is the owner of Merrill Street over which this lighting is temporarily installed; and,

NOW, THEREFORE, THE PARTIES DO HEREBY AGREE AS FOLLOWS:

- 1. The OWNER shall grant permission to the CITY for said lighting to be placed over Merrill Street from approximately mid-November 2018 (this date is subject to change depending on completion of Merrillwood Collection capital improvement project) until **end of February 2019**. Lighting is comprised of individual strings of lightbulbs spanning from Merrillwood Building on the South side of building across Merrill St. to the Plaza of Birmingham Building.
- 2. The CITY shall be responsible for the connection to the buildings on which the lighting is attached, to include maintenance and repair of lighting.
- 3. The CITY shall be responsible for the payment of any and all electrical charges in connection with said lighting display over Merrill Street.
- 4. The CITY shall be responsible to remove said lighting from over Merrill Street on or before **end of February 2019**.
- 5. The CITY agrees to be responsible for any liability, defend, pay on behalf of, OWNERS, any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from Owner and/or the CITY OF BIRMINGHAM, its elected and appointed officials, employees, volunteers or others working on behalf of the CITY OF BIRMINGHAM, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of the OWNERS.
 - 6. The CITY has the following insurance coverage:

- A. <u>Workers' Compensation Insurance</u>: CITY shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- B. Commercial General Liability Insurance: CITY shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
- C. Motor Vehicle Liability: CITY shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- 7. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.
- 8. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership with the CITY, and neither party by virtue of this Agreement, shall have any right, power or authority to act or create any obligation expressed or implied on behalf of the CITY, except as specifically outlined herein. Neither CITY nor OWNER shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever except as specifically provided in this Agreement. This Agreement shall not be construed as a contract of agency.
 - 9. This Agreement shall not be assignable by either party.

- 10. This Agreement constitutes the entire Agreement between the parties hereto pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, negotiations and discussions, whether oral or written, of the parties, except as specifically set forth herein. No supplement, modification, addition, deletion or waiver of this Agreement or any provision of this Agreement shall be binding unless executed in writing by both parties to be bound thereby.
- 11. This Agreement shall commence immediately after both parties have signed in the place and manner indicated below and shall terminate upon completion of the performances.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date and year above written.

WITNESSES:	CITY OF BIRMINGHAM A Michigan Municipal Corporation
	By: Andrew Harris Its: Mayor OWNERS By: Zuchardwerger Its: Building Manager
APPROVED: Joseph A. Valentine, City Manager (Approved as to substance)	Timothy Currier, City Attorney (Approved as to form)
Mark Gerber, Director of Finance (Approved as to financial obligation) (Approval is required in accordance with Sec. 2-289)	Ingrid Tighe, BSD Executive Director (Approved as to form)

LIGHTING AGREEMENT

THIS AGREEMENT made this ____ day of <u>September, 2018</u> by and between the CITY OF BIRMINGHAM, A Michigan Municipal Corporation, whose address is 151 Martin Street, Birmingham, MI 48009 (hereinafter referred to as "City") and <u>Essco of Birmingham, LLC</u> whose address is <u>210 S. Old Woodward, Suite 230</u>, (hereinafter referred to as "Owner").

WITNESSETH:

WHEREAS, the City desires to place certain lighting on the owners' building from beginning of November 2018 to the end of February 2019.

WHEREAS, the City is the owner of Merrill Street over which this lighting is temporarily installed; and,

NOW, THEREFORE, THE PARTIES DO HEREBY AGREE AS FOLLOWS:

- 1. The OWNER shall grant permission to the CITY for said lighting to be placed over Merrill Street where it is currently installed from mid-November until **end of February 2019**.
- 2. The CITY shall be responsible for the connection to the buildings on which the lighting is attached.
- 3. The CITY shall be responsible for the payment of any and all electrical charges in connection with said lighting display over Merrill Street.
- 4. The CITY shall be responsible to remove said lighting from over Merrill Street end of February 2019.
- 5. The CITY agrees to be responsible for any liability, defend, pay on behalf of, OWNERS, any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the CITY OF BIRMINGHAM, its elected and appointed officials, employees, volunteers or others working on behalf of the CITY OF BIRMINGHAM, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of the OWNERS.
 - 6. The CITY has the following insurance coverage:
 - A. <u>Workers' Compensation Insurance</u>: CITY shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

- B. Commercial General Liability Insurance: CITY shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
- C. Motor Vehicle Liability: CITY shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- Any controversy or claim arising out of or relating to this Agreement, or the 7. breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative Such arbitration shall qualify as statutory arbitration pursuant to fees of arbitration. MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.
- 8. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership with the CITY, and neither party by virtue of this Agreement, shall have any right, power or authority to act or create any obligation expressed or implied on behalf of the CITY, except as specifically outlined herein. Neither CITY nor OWNER shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever except as specifically provided in this Agreement. This Agreement shall not be construed as a contract of agency.
 - 9. This Agreement shall not be assignable by either party.
- 10. This Agreement constitutes the entire Agreement between the parties hereto pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, negotiations and discussions, whether oral or written, of the

parties, except as specifically set forth herein. No supplement, modification, addition, deletion or waiver of this Agreement or any provision of this Agreement shall be binding unless executed in writing by both parties to be bound thereby.

This Agreement shall commence immediately after both parties have signed in the place and manner indicated below and shall terminate upon completion of the performances.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed

WITNESSES:	CITY OF BIRMINGHAM A Michigan Municipal Corporation
1 Jaduny	By:Andrew Harris
Y U	OWNERS By: Mayor OWNERS All to be a second of the seco
APPROVED: Sorph A Vallet Igseph A. Valentine, City Manager	Timothy J. Currier, City Attorney
(Approved as to substance)	(Approved as to form)

(Approval is required in accordance with Sec. 2-289)

Mark Gerber, Director of Finance

(Approved as to financial obligation)

Ingrid Tighe, BSD Executive Director

(Approved as to form)



MEMORANDUM

Office of the City Manager

DATE: October 29, 2018

TO: Joseph A. Valentine, City Manager

FROM: Tiffany J. Gunter, Assistant City Manager

SUBJECT: Data Analytics Program Recommendation

INTRODUCTION:

Recently, the Parking Recommendations report was accepted by the City. The Advisory Parking Committee is eager to begin implementation of many of the recommendations and recognize the importance of have performance indicators in place to determine the effect of future decision making. The introduction of a parking management and data analytics program is the first recommendation that the APC has selected to move forward. Further, over the past three months additional components of the Parking Utilization Report were developed to accommodate a request made by the City Commission to update the traditional reporting documents with more comprehensive information regarding parking system utilization. There are two additional components that were included in the Parking Utilization Report, which are the 1) Parking Utilization Dashboard and 2) the 10 am - 2 pm Occupancy Tables and Charts.

The Parking Utilization Dashboard provides an illustration of a minimum six month rolling comparison of metrics using current and prior year usage data addressing monthly permit parkers, transient parkers, roof-top valet assist program adoption, on-street meter payment type distribution, visitors staying for more or less than two hours, and average occupancy levels in the parking garages during peak periods. Staff is working to collect additional information that will eventually be added to the dashboard, such as number of hits on the parking widget and more information regarding on street metered parking as sensors are brought online and become fully operational.

BACKGROUND:

In order to obtain the occupancy data, the Parking Management staff is required to take a manual count every hour between 10 am and 2 pm daily. The Parking Management staff is limited and this process is labor intensive. As such, staff is engaging data analytics firms that offer programs that would provide the same and improved data in real time automatically.

The information that has been obtaining manually is useful, but does prove to be a challenge for the parking operations team that is not specifically staffed for this purpose and does not possess the sophistication that a data analytics software would provide. Using an analytics program would provide a platform that aggregates multiple data

points, provide key performance indicators and analysis create a complete picture of how both on street and off street parking are performing and would ultimately assist us in reaching our goal of having a unified on street and off street parking meter application for our users to enjoy.

Having an analytics platform for parking will provide key benefits, such as:

- Quick access to occupancy, revenue, payment information and better operational insight and analysis,
- With PARCS equipment or third-party data sources, the City can transform operational decisions by understanding parker movement, parker duration, pricing segmentation, revenue per space, and space utilization,
- Ability to leverage transaction data supports staff ability to make better recommendations
 on rate mix, staffing cycles or enforcement route planning. It provides another set of
 warning indicators enabling corrective actions to take place sooner.

Staff has engaged directly with representatives from NuPark and Smarking, two of the leaders in the industry with respect to data analytics and parking platform management. Staff did further exploration via phone calls and website reviews of other companies, such as Parking Logix and T2 Systems. Of the companies reviewed, Smarking was the only provider with a web based open architecture that is able to integrate with just over 80% of parking applications in the market today. They are able to sync Park Mobile, SkiData, and Civic Smart data into one tool that we may then use for business intelligence, enhanced digital infrastructure, mobile applications, mapping, and connecting autonomous vehicles with real time parking information. Smarking also provides support staff to assist in evaluating and distilling the information being reported so the City can more readily use data to support policy decisions. The staff support is included in the annual subscription fee.

LEGAL REVIEW:

 Legal has reviewed and requested modifications to the proposed terms and conditions that Smarking has accepted.

FISCAL IMPACT:

The cost for a monthly subscription fee to engage with Smarking is \$3,294.54 per month (\$39,534 per year) with a one-time installation fee of \$7,906. The total cost this fiscal year, assuming a November 2018 start date, would be \$30,967 utilizing the General and Administrative budget of the Parking Enterprise Fund.

SUMMARY

The City is asked to consider approval of an agreement between the City of Birmingham and Smarking for a period of one year to provide parking platform management and data integration for all municipal parking structures and parking meters in the Automated Parking System for a monthly subscription cost of \$3,294.54 per month and a one-time installation fee of \$7,906.

ATTACHMENTS:

Proposed agreement with Smarking, Inc.

SUGGESTED RESOLUTION:

To authorize an agreement between the City of Birmingham and Smarking for a period of one year to provide parking platform management and data integration for all municipal parking structures and parking meters in the Automated Parking System for a monthly subscription cost of \$3,294.54 per month and a one-time installation fee of \$7,906 using account #585-538-001-811.0000



Smarking Order Form # CH-102-8318 Company: # CH-102-8318 City of Birmingham, MI

Contact Name: Tiffany Gunter
Address: 151 Martin Street

Birmingham, MI 48009

Phone: (248) 530-1827 Email: tgunter@bhamgov.org

A/P Contact: A/P Email:

Billing address if different from above:

Chris Hayes chris@smarking.net Smarking, Inc.

251 Rhode Island Street, Ste. 203

San Francisco, CA 94103

(512) 567-0179 chris@smarking.net

This quote expires 11/09/2018

Subscription and Services

Location Name	Location Address	Stall Count	Term Start Date	Annual Subscription	One-time Implementation Fee	Total
Peabody Parking Structure	222 Peabody St. Birmingham, MI 48009	437				
Pierce Parking Structure	333 Pierce Street Birmingham, MI 48009	706				
Chester Parking Structure	180 Chester Street Birmingham, MI 48009	880				
N. Old Woodward Parking Structure	333 North Old Woodward Birmingham, MI 48009	745				
Park Street Parking Structure	333 Park Street Birmingham, MI 48009	811				
City Metered On-Street Parking		1,262				
Total		4,841	11/01/18	\$39,534	\$7,906	\$47,440

Additional Terms

- 1. Initial Subscription Term starts on November 1, 2018 and ends on October 31, 2019.
- 2. The Effective Date of this Order Form and the attached Smarking Subscription Services Agreement ("Agreement") is the date of latest signature below
- 3. Additional Locations may be added at a later date. Locations added during an active Subscription Term shall be pro-rated based on the remaining months of the then-current Subscription Term and shall thereafter renew and be invoiced annually in full, in advance, and concurrently with annual renewals for all other then-existing Locations. Each added Location requires payment of an associated Implementation Fee for each such added Location.
- 4. All the above fees will be invoiced at Order Form execution, and are due net 30 upon receipt of invoice.
- 5. Provider may include the Customer company logo and profile on Provider's website to identify Customer as a subscriber to the Provider Applications. Within thirty days (30) from Provider's request, Customer agrees to provide a quote from an executive to support a Provider press release and Customer will support a success story case study during the Initial Subscription Term. Except as set forth in this Agreement, all marketing activities are subject to approval by both Customer and Provider.
- 6. This Order Form incorporates the terms and conditions of the Smarking Master Subscription Agreement attached to this Order Form. No change or modification to this Order Form shall be effective or binding except as expressly set forth in a written agreement signed by both parties.

Intending to be legally bound, the parties have had this Order Form executed by their duly authorized representatives.

Smarking, Inc.

Name: Kurt Wedel

Title: Chief Operating Officer and VP of Sales

Date:

Date:

Signature:

Signature:

This Subscription Services Agreement ("Agreement") is effective as of the date of execution of the Order Form referencing the terms hereof ("Effective Date") by and between Smarking, Inc. ("Provider") and the party identified as a Customer in the Order Form to which this Agreement is attached ("Customer"). By executing an Order Form that references this Agreement, Customer agrees to be bound by all terms hereof.

DEFINITIONS 1.

- "Customer Data" means the electronic data, content, files, or information that is supplied by Customer or third parties acting on Customer's behalf, but excluding any Provider Data.
- "Documentation" means the online user instructions and help files as made available by Provider as part of the user interface for the Provider Application, as updated from time to time.
- "Implementation Services" means fee-based account set-up and configuration, User set-up, data integration, and introductory training on how to use the Provider Applications.
- "Location" means each individual parking facility under management or operation by Customer, identified by a unique location ID or physical address.
- "Order Form" means the ordering documents issued pursuant to this Agreement that are executed by Provider and Customer from time to time.
- "Provider Applications" means the parking management business intelligence 1.6. analytics and reporting platform and applications made available to Customer hereunder, and any modifications, derivative works, optional modules, custom or standard enhancements, updates and upgrades thereof.
- "Provider Data" means all of Provider's and its licensors' data used by Provider to deliver the Provider Applications to Customer or to generate Analytics as set forth in the applicable Order Form, and Derived Data.
- "Analytics" means the reporting output generated by Users or displayed to Users via the reporting features and functions of the Provider Applications.
- "Subscription Term" means the subscription period set forth in the Order Form during which Provider agrees to provide the Provider Applications to Customer.
- 'Support" means the services described in Section 3.1 of this Agreement.
- "Support" means the services described in Section 3.1 or this ...g. start and that interoperate with the systems, metering systems, or payment systems that interoperate with the Provider Application.
- "User" means individuals who are authorized to access and use the Provider Applications for Customer's benefit, and who have been supplied user identifications and passwords for the purpose of accessing the Provider Application. Users may include but are not limited to Customer's employees, consultants, contractors, and agents, but do not include consumers or the general public.

PURCHASED SERVICES

- 2.1. Provision of Provider Applications. In accordance with this Agreement and the relevant Order Forms, Provider agrees to make the Provider Application available to Customer for Customer's internal business use during the applicable Subscription Term. Customer's request to expand the scope of use of the Provider Applications (other than the purchase of additional Locations) or the scope of Implementation Services will require that the parties issue a separate Order Form with mutually agreed-upon applicable fees for expanded scope. All Order Forms that are issued between the parties are deemed incorporated into this Agreement. Customer agrees that Customer's purchases under this Agreement and each Order Form are neither contingent on the delivery of any future functionality or features nor dependent on any oral or written public comments made by Provider regarding future functionality or features. Provider may update the functionality and/or user interface of the Provider Applications from time to time in its sole discretion as part of its ongoing mission to improve the Provider Application. Unless otherwise set forth in an Order Form, this Agreement will apply to new purchases or renewals subsequently made by Customer.
- Implementation Services. Provider will perform Implementation Services referenced in an applicable Order Form mutually executed by Provider and Customer.
- 2.3. <u>Customer Cooperation</u>. Customer acknowledges that Provider's ability to timely implement, configure and deliver the Provider Applications and perform Implementation Services is dependent in part upon Customer's ongoing cooperation and assistance. Accordingly, Customer will supply to Provider, on a timely basis, all information, material and assistance reasonably necessary for Provider to provide the Provider Applications and Implementation Services, including but not limited to, (i) the Customer Data, or (ii) current User lists, (iii) business rules or other parameters required for configuration of the Provider Application, (iv) review of sample Analytics or other materials submitted by

Provider during initial implementation and configuration, and (v) such additional information, material and assistance as Provider may reasonably request.

TERMS OF USE

- Provision of Services. Provider will: (i) provide basic technical support for the Provider Applications during weekdays (excluding national holidays) 9 a.m. to 5 p.m. PST; (ii) make the purchased Provider Applications available seven days a week excluding: (1) planned downtime; and (2) unscheduled downtime caused by: (a) circumstances beyond Provider's or its contractors' reasonable control (including, but not limited to: acts of God, acts of government, flood, fire, earthquake, civil unrest, acts of terror, strike or other labor problem, hosting provider failure or delay, issues related to Third Party Services, or denial of service attacks); (b) circumstances entitling Provider to suspend access to the Provider Applications under Section 3.7 and Section 8.1; and (c) failure to use the Provider Applications in accordance with the Documentation or this Agreement.
- 3.2. Data Safeguards. At all times during a Subscription Term, Provider will implement and maintain, and require that its third party providers implement and maintain appropriate administrative, physical, and technical safeguards for the protection, security, and confidentiality of Customer Data processed via the Provider Applications ("Data Safeguards"). Provider agrees that the Data Safeguards shall not materially diminish during the Subscription Term.
- 3.3. Customer Data. Customer hereby grants to Provider a limited, non-exclusive, royalty-free, license to access and use the Customer Data to: (i) provide the Provider Applications and perform Implementation Services for Customer during a Subscription Term, including without limitation to prevent or address Support service or technical problems, or as otherwise instructed by Customer to Provider; (ii) improve Provider's offerings, including development, testing and operation by Provider of new or improved data processing algorithms used as part of the Provider Applications, creation of Derived Data (as defined in Section 5.4 below) and other automatic or machine learning, and for other development, diagnostic or corrective purposes in connection with the Provider Applications or performance of Implementation Services. As between Provider and Customer, Customer has sole responsibility for the accuracy, quality, integrity, legality, reliability, and appropriateness of all Customer Data supplied to Provider. Customer understands and agrees that the Provider Application relies on Customer Data as supplied by Customer, and Provider is not liable to Customer for any errors, omissions or inaccuracies that are caused by errors, omissions or inaccuracies in the Customer Data provided by Customer.
- Provider Data. To the extent that Provider Data is licensed to Customer with the subscription as noted on the Order Form, Provider grants Customer a limited, non-exclusive license to use Provider Data as Provider makes available to Customer through the Provider Application solely as necessary to view Analytics displayed through the Provider Application during the applicable Subscription Term and solely for the Customer internal business purposes. Customer acknowledges and agrees that: (i) Customer may not directly access Provider's or its data licensors' databases that host or maintain Provider Data or to extract any Provider Data from such databases; (ii) Provider Data may be combined with Customer Data for purposes of creating Analytics and/or displaying results based on the applicable features, functions and/or configurations of the Provider Application; (iii) Provider Data may not be reproduced, distributed, resold, sublicensed to third parties in whole or in part by Customer or Users, provided that the foregoing shall not limit Customer's right to display Provider Data to the extent set forth in the applicable Order Form as agreed to with Provider; (iv) Provider Data may not be used independently of the Provider Applications, and any Analytics that display the Provider Data may only be used for Customer's lawful business purpose; (v) Provider may change data suppliers for any Provider Data during the Subscription Term,; (vi) Customer shall only use Provider Data in compliance with all applicable federal, state and local laws and regulations applicable to Customer Additional restrictions regarding the use of Provider Data, if any, will be set forth in the pertinent Order Form in which the Provider Data is ordered.
- Third Party Services. Provider does not warrant or support any Third Party Services or other non-Provider products or services. If Customer authorized a Third Party Service to be integrated with Customer's account within the Provider Application, Customer grants Provider permission to access Customer Data as

Smarking, Inc. Confidential 3 of 7 Subscription Services Agreement

required to provide the interoperation with that Third Party Service. Provider is not responsible for the processing, storage, disclosure, use, modification or deletion (authorized or otherwise) of Customer Data residing in a Third Party Service. Unless otherwise stipulated in an Order Form, Customer shall be responsible for all costs and expenses charged by the provider of the Third Party Service in connection with facilitating the initial and ongoing interoperability or integration between the Provider Applications and the Third Party System, including the ongoing supply of Customer Data to Provider as contemplated by this Agreement. Further, if Customer provides login credentials, or other such information to Provider in order to enable Provider to establish an integration with Customer's accounts on a Third Party Service, any such login or other information made available to Provider will constitute Customer's Confidential Information hereunder and will be used by Provider solely as necessary to provide the Provider Applications to Customer subject to this Agreement and solely during the Subscription Term. Any data exchange between Customer and the Third Party Service provider is solely between Customer and the applicable third party provider. If the provider of a Third Party Service suspends or ceases to make the Third Party Service available, in whole or in part, Provider may cease providing those Provider Application features to Customer without entitling Customer to any refund, credit, or other compensation from Provider.

- 3.6. <u>Customer's Responsibilities</u>. Customer is responsible for its and its Users' use of the Provider Application and Provider Data consistent with this Agreement. Customer will not: (i) make the Provider Applications or the Provider Data available to anyone other than Users; (ii) sell, resell, rent, lease or otherwise distribute the Provider Applications or Provider Data; (iii) use the Provider Applications, to send or store infringing, obscene, threatening, libelous, or otherwise unlawful or tortious material or communications, including material that violates applicable law or third party privacy rights; (iv) use the Provider Applications other than in accordance with the Documentation or in a manner that interferes with, unduly burdens, or disrupts the integrity, performance or availability of the Provider Applications or other users' receipt of the Provider Applications; (v) attempt to gain unauthorized access to the Provider Application, the Provider Data, use any component of the Provider Application to establish an integration with a third party service or application other than those described in an Order Form (vi) access or use the Provider Applications or the Provider Data for the purpose of building a similar or competitive product or service, monitoring its availability, performance or functionality, or for any other benchmarking or competitive purposes; or (vii) copy, modify, translate, create a derivative work of, reverse engineer, reverse assemble, disassemble, or decompile the Provider Applications or Provider Data, or any part thereof, or otherwise attempt to discover its source code.
- 3.7. <u>Temporary Suspension</u>. Except for suspensions for nonpayment under Section 4.2 below, Provider may immediately suspend Customer's or its Users' access to the Provider Application if either Customer or a User is engaged in, or Provider in good faith suspects is engaged in, any conduct constituting a violation of the terms of this Agreement, applicable law or third party right, including the terms of any agreement between Customer and its data licensors, or the terms of any Third Party Service on which its use of the Provider Application relies. In addition, Provider shall be entitled to remove or suspend the supply of any Provider Data or Customer Data if: (a) Provider determines that retrieval or processing of such Customer Data or Provider Data violates any law, rule, regulation or court order, (b) Provider receives notice or demand from the data licensor responsible for such Provider Data or Customer Data that threatens legal action based on continued retrieval or processing of the same; (c) the Provider Data or Customer Data is delayed, becomes technically unavailable or inaccessible or unusable through no fault of Provider. Provider will contact Customer prior to or contemporaneously to such suspension. Provider shall use diligent efforts to limit suspension only to affected Users or portions of the Provider Applications, Customer Data or Provider Data, as applicable, and to promptly restore access to the same as soon as the issue giving rise to such suspension has been resolved.

4. FEES AND PAYMENT TERMS

- 4.1. <u>Fees.</u> Customer will pay all undisputed fees specified in all Order Forms hereunder. Except as otherwise expressly specified in this Agreement or in an Order Form, (i) fees are quoted and payable in United States dollars, (ii) fees are based on Locations purchased, (iii) payment obligations are non-cancelable and fees paid are non-refundable. All amounts payable under this Agreement will be made without setoff or counterclaim, and without any deduction or withholding.
- 4.2. <u>Suspension of Service for Nonpayment.</u> If any amounts owed under this Agreement are overdue from the due date, Provider may, without limiting Provider's other rights and remedies, suspend Customer's and its Users' access to the Provider Applications or use of any Provider Application until such amounts are paid in full, but provided that (i) Provider has first given Customer prior notice that its account is overdue, and (ii) Customer fails to initiate payment within ten (10) business days from the date of Provider's notice of overdue payments.

- 4.3. <u>Payment Disputes.</u> Provider agrees that it will not exercise its rights under Section 4.2 (Suspension of Service for Nonpayment) if the applicable charges are under reasonable and good-faith dispute and Customer is cooperating diligently to resolve the dispute. _Without prejudice to Smarking's other rights and remedies, undisputed invoiced amounts not received by Provider by the due date may accrue late interest at rate of 1.5 % of the outstanding balance per month (or the maximum rate allowed by applicable law, if less).
- 1.4. <u>Taxes</u>. Customer is solely responsible for the payment of all taxes, assessments, tariffs, duties or other fees imposed, assessed or collected by or under the authority of any governmental body (collectively, "<u>Taxes</u>") arising from Provider's provision of the Provider Applications and/or Services hereunder, except any taxes assessed upon Provider's net income. If Provider is required to directly pay Taxes related to Customer's use of the Provider Applications or receipt of any Services hereunder, Customer agrees to promptly reimburse Provider for any amounts paid by Provider.

5. PROPRIETARY RIGHTS

- 5.1. <u>Customer Ownership.</u> As between Provider and Customer, Customer exclusively owns all right, title and interest in and to all Customer Data, and subject to the rights expressly granted hereunder, Customer and its suppliers and licensors retain all right, title and interest in and to the Customer Data and Customer's other Confidential Information, including all related intellectual property rights. No rights are granted to Provider hereunder other than as expressly set forth in this Agreement.
- 5.2. <u>Provider Ownership.</u> As between Provider and Customer, Provider and its suppliers (including Provider's data licensors) and licensors exclusively own all right, title and interest in and to the Provider Applications, Provider Data, Product Usage Information, Derived Data, and Provider's other Confidential Information, including all related intellectual property rights. No rights are granted to Customer hereunder other than as expressly set forth in this Agreement. Neither Customer nor any Users will delete or in any manner alter the copyright, trademark, and other proprietary notices of Provider, if any, appearing on any Provider Application or Documentation.
- 5.3. <u>Suggestions</u>. Customer may, from time to time and in its sole discretion, provide suggestions, enhancement requests, recommendations or other feedback relating to the Provider Applications ("<u>Product Feedback</u>"). Provider shall have a royalty-free, worldwide, transferable, sublicenseable, irrevocable, perpetual license to use or incorporate into the Provider Applications any Product Feedback. Customer acknowledges and agrees that any Provider Application incorporating such Product Feedback shall be the sole and exclusive property of Provider and all such Product Feedback shall be free from any confidentiality restrictions that might otherwise be imposed upon Provider pursuant to Section 6 below. Product Feedback used by Provider will never identify Customer or Users, or contain Customer Data.
- <u>Product Usage Information and Derived Data.</u> Provider monitors all use of the Provider Application for security and operational purposes ("<u>Product Usage</u> Information"), and may aggregate and/or analyze Customer Data alone or in combination with Provider Data or data from other sources via the application of advanced manipulations and analytics developed or licensed by Provider or combinations thereof, that result in the derivation of new and/or enhanced data pertaining to the parking industry ("Derived Data"). Derived Data shall not be a mere copy of the Customer Data, but portions of Customer Data may be incorporated therein, and to such extent are licensed to Provider on a perpetual, royalty-free, and worldwide basis solely for use together with and as part of the Derived Data and not for standalone use. Derived Data and Product Usage Data are owned by Provider and may be used by Provider for Provider's legitimate business purposes without royalty or other compensation to Customer. Product Usage Information may, include but is not limited to, compiling statistical and performance information related to the provision and operation of the Provider Applications, service levels, usage levels, peak usage, feature usage and other similar technical monitoring. Customer agrees that Provider may make Product Usage Information and Derived Data publicly available and/or incorporate it into other Provider offerings, provided that such information does not identify any Users or constitute a mere copy of the Customer Data.

6. CONFIDENTIALITY

6.1. <u>Definitions.</u> "<u>Confidential Information</u>" means all confidential or proprietary information ("<u>Receiving Party</u>"), whether orally or in writing, that is designated as confidential or that reasonably should be understood to be confidential given the nature of the information and the circumstances of disclosure, including the terms and conditions of this Agreement, each Order Form, and any discussions between the parties regarding an existing or prospective purchase of the Services. Confidential Information of Provider shall specifically include, but is

Confidential Smarking, Inc. Subscription Services Agreement 4 of 7

not limited to, Provider's pricing and/or discounting, non-public business information of Provider and its employees, providers or suppliers, the Provider Applications, Provider Data, Documentation, Provider's roadmap, Provider's marketing plans, or Provider's client lists, Provider's non-public financial or business information. Customer's Confidential Information includes, but is not limited to, Customer Data, User lists, Customer's marketing or sales plans, and Customer's non-public financial or business information.

- 6.2. Treatment of Confidential Information. The Receiving Party shall not use or disclose any Confidential Information of the Disclosing Party for any purpose other than to perform an obligation or exercise a right as expressly permitted or required by this Agreement, except with the Disclosing Party's permission. The Receiving Party shall only disclose the Confidential Information of the Disclosing Party to its employees, contractors, service providers, and professional advisors, who have a need to know such Confidential Information and who are bound by an obligation of confidence no less restrictive than those set forth herein ("Representatives"), and provided further that the Receiving Party shall remain liable for the acts or omissions of such Representatives to the same extent assumed for itself hereunder.
- 6.3. <u>Permitted Disclosure</u>. The obligation of nondisclosure set forth herein shall not apply to any Confidential Information that: (i) is or becomes publicly available without a breach of any obligation owed by the Receiving Party to the Disclosing Party; (ii) is already known to the Receiving Party at the time of its disclosure by the Disclosing Party, without a breach of any obligation owed to the Disclosing Party; (iii) following its disclosure to the Receiving Party, is received by the Receiving Party from a third party without breach of any obligation owed to the Disclosing Party; or (iv) is authorized for disclosure by the Disclosing Party or the legal owner of such information, if the Disclosing Party is not the legal owner of such; (v) independently developed by the Receiving Party without reference to or use of the Disclosing Party's Confidential Information; or (vi) the Receiving Party is required to disclose by any applicable law, by any rule or regulation of any court or government agency of competent jurisdiction, or pursuant to legal process; provided that the Receiving Party provides the Disclosing Party with prompt written notice of the requirement to disclose, reasonable assistance in the opposing or limiting of such disclosure and limits such disclosure to that strictly required by such court, government agency or legal process.
- 6.4. <u>Notification of Unauthorized Disclosure</u>. The Receiving Party shall promptly inform the Disclosing Party of any verified unauthorized disclosure of the Disclosing Party's Confidential Information, including any verified breach of security of the Provider Applications resulting in the unauthorized disclosure of Confidential Information, Customer Data, or Provider Data. The parties shall cooperate diligently to implement prompt measures to mitigate further unauthorized disclosures. Provider may, without requiring Customer's consent, communicate with law enforcement personnel, service providers, insurance providers, and other relevant personnel required to immediately take action to resolve or address such incident, but shall not issue communications to Users or customers of Customer without prior notification to and approval of Customer. Customer shall not make any public statement or issue any public communication regarding any incident described in this Section, without Provider's prior written consent, except as strictly required by law. In addition to the foregoing, upon the occurrence of a verified breach of security of the Provider Applications, or upon written notice from Customer, Provider shall either suspend or cease further processing of Customer Data and/or take immediate steps to remediate its breach of security and/or any unauthorized processing of Customer Data.
- 6.5. <u>Injunctive Relief.</u> The Parties agree that any unauthorized disclosure of Confidential Information may cause immediate and irreparable injury to the Disclosing Party and that, in the event of such breach, the Receiving Party will be entitled to immediate injunctive and other equitable relief, without bond and without the necessity of showing actual monetary damages.

7. WARRANTIES; DISCLAIMERS

7.1. Warranties. Each party warrants that it has the power to enter into this Agreement and that doing so will not violate any other agreement to which the contracting party is bound. Provider warrants to Customer that during the Subscription Term, the Provider Applications will perform in all material respects the features and functions described in the accompanying Documentation. Customer's sole and exclusive remedy for Provider's breach of this warranty shall be that Provider shall be required to use commercially reasonable efforts to modify the Provider Applications to achieve in all material respects the functionality described in the Documentation. Provider shall have no obligation with respect to a warranty claim unless notified of such claim in writing within thirty (30) days of the first instance of any material functionality problem. The warranties set forth in this Section 7.1 are made to and for the benefit of Customer only. Such warranties shall only apply if the applicable Provider Applications were utilized in accordance with the Documentation, this Agreement and applicable law. In addition, Provider warrants that Provider's

personnel will act and perform its duties, including Implementation Services and technical support, in a professional and workmanlike manner in conformance with generally accepted industry standards and applicable law.

- 7.2. General Disclaimers. EXCEPT FOR EXPRESS WARRANTIES MADE BY PROVIDER OR CUSTOMER TO THE OTHER UNDER THIS AGREEMENT, TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, NEITHER PARTY (NOR THEIR RESPECTIVE DATA SUPPLIERS) MAKES ANY OTHER WARRANTIES TO THE OTHER, IMPLIED OR STATUTORY. EACH PARTY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, GOOD TITLE, SATISFACTORY QUALITY AND NONINFRINGEMENT.
- 3. Provider-Specific Disclaimers. Except as expressly warranted in Section 7.1 above, Provider does not warrant that the Provider Application, Provider Data (i) meets or will meet Customer's or its Users' specific needs, (ii) are error-free, or (iii) are not susceptible to intrusion, attack or computer virus infection. The Provider Data is provided to Customer strictly on an "as is" basis without warranty of any kind and Provider and its data licensors disclaim all warranties, express or implied, including any warranties of accuracy, completeness, correctness, merchantability or fitness for a particular purpose related to the Provider Data. Customer acknowledges that neither Provider nor its data licensors will be liable to Customer for any loss, damage or injury arising out of or caused in whole or in part by business decisions made Customer on the basis of Provider Data. In addition, Provider assumes no obligation or liability whatsoever with respect to Customer Data that is lost, modified, erased or corrupted as a result of actions initiated by Users in their use of the Provider Applications or Third Party Service.

3. INDEMNIFICATION

Indemnification by Provider.

To the fullest extent permitted by law, the Provider and any entity or person for whom the Provider is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the Customer -, its elected and appointed officials, employees and volunteers and others working on their behalf against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from the Customer, its elected and appointed officials, employees, volunteers or others working on their behalf, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arise out of the acts, errors or omissions of the Provider including its employees and agents, in the performance of this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or others working on behalf of the Customer.

The Customer agrees that the contractors shall be solely responsible for job site safety and all contractors shall be required in the Customer contract with such contractors to indemnify the Provider for any liability incurred by the Provider as a result of the contractor's negligent acts or omissions. However, such indemnification shall not extend to liability resulting from the negligence of the Provider.

LIMITATION OF LIABILITY

9.1. Exclusion of Other Damages. In no event will either party be liable to the other for damages other than direct damages, including, without limitation: any indirect, special, incidental, consequential, exemplary or punitive damages, whether in tort, contract, or otherwise; or any damages arising out of or in connection with any malfunctions, regulatory non-compliance, delays, loss of data, lost profits, lost savings, interruption of service, loss of business or anticipatory profits, whether or not the party has been advised of the possibility of such damages ("Indirect Damages"). For clarity, the exclusion of Indirect Damages shall not apply with respect to awarded damages or settlement amounts which the indemnifying party is obligated to pay to the prevailing third party claimant in connection with a claim for which an indemnity is owed pursuant to Section 8 above.

Confidential Smarking, Inc. Subscription Services Agreement 5 of 7

8.1.

10. TERM AND TERMINATION

- 10.1. <u>Term</u>. This Agreement is effective on the Effective Data and shall continue in full force and effect until terminated in accordance with the provisions herein. Except as otherwise specified in an Order Form, each Subscription Term will automatically renew for successive one (1) year periods unless either party gives the other party written notice of non-renewal at least forty-five (45) days prior to the end of the then current Subscription Term.
- 10.2. <u>Termination for Cause</u>. This Agreement and an Order Form may be terminated by either party for cause as follows: (i) upon thirty (30) days written notice if the other party breaches or defaults under any material provision of this Agreement or Order Form, as applicable, and does not cure such breach prior to the end of such thirty (30) day period, (ii) effective immediately if the other party is declared insolvent, ceases to do business, or otherwise terminates its business operations, except as a result of an assignment permitted hereunder.
- 10.3. Expiration and Effect of Termination. In the event of termination of an Order Form or this Agreement, upon Customer's written request, Provider shall continue to make available the Customer Data in the current format in which it is stored in the Provider Application for thirty (30) days following termination, during which Customer shall be solely responsible for retrieving the Customer Data. After such thirty (30) day period, Provider shall have no obligation to maintain or provide any Customer Data, and may thereafter unless legally prohibited, delete all Customer Data in its systems or otherwise in its possession or under its control in accordance with its data policies and procedures. Customer's right to use Analytics that are exported by Customer out of the Provider Application during the Subscription Term, shall survive termination or expiration of this Agreement indefinitely. Except for the foregoing, all other rights and licenses granted by one party to the other under this Agreement shall immediately terminate, including but not limited to, Customer's ongoing right to access or use the Provider Applications, Documentation, Provider Data, or associated materials. In the event of termination of Implementation Services due to termination of the Agreement or the Order Form (other than termination as a result of Provider's breach), Customer agrees to pay Provider all fees due, and unreimbursed out-of-pocket expenses incurred by Provider for the ordered Implementation Services up to the date of termination or expiration of such Implementation Services.
- 10.4. <u>Survival</u>. Except to the extent expressly provided to the contrary herein, Sections 5, 6, 7.2, 7.3, 9, 10 and 11 shall survive the termination of this Agreement.

11. GENERAL

- 11.1. <u>Relationship</u>. The relationship between the parties created by this Agreement is non-exclusive and that of independent contractors. Neither party will be deemed to be or hold itself out as a partner, joint venture or agent of the other party.
- 11.2. Entire Understanding. This Agreement (including any exhibits, ordering documents or URLs incorporated by reference herein) states the entire understanding between the parties with respect to its subject matter, and supersedes all prior proposals, marketing materials, negotiations and other written or oral communications between the parties with respect to the subject matter of this Agreement. To the extent of any conflict or inconsistency between the provisions in the body of this Agreement and any exhibit or addendum hereto or any Order Form, the terms of such exhibit, addendum or Order Form shall prevail. Notwithstanding any language to the contrary therein, no terms or conditions stated in Customer's purchase order or in any other order acknowledgement or similar documentation (excluding Order Forms) are or will be deemed incorporated into or form any part of this Agreement, and all such terms or conditions are null and void.
- 11.3. <u>Modification and Waiver</u>. Except as expressly set forth in this Agreement, no modification of this Agreement, and no waiver of any breach of this Agreement, is legally binding against the other party unless in writing and signed by both parties. A determination that any provision of this Agreement is invalid will not affect the other provisions of this Agreement.

11.4.

11.5 Governing Law and Venue. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL §600.5001 et seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.

- 11.5. <u>Assignment.</u> Either party may assign this Agreement in its entirety (including all Order Forms), without consent of the other party but on written notice to the other party, to its affiliate, parent entity, or subsidiary, or in connection with a merger, acquisition, corporate reorganization, or sale of all or substantially all of its assets not involving a direct competitor of the other party. Subject to the foregoing, this Agreement shall bind and inure to the benefit of the parties, their respective successors and permitted assigns. There are no third party beneficiaries to this Agreement.
- 11.6. Notices. Except for email notifications sent by Provider to issue or terminate User login credentials, provide account or service notices or updates, issue invoices or statements, accept payments, or otherwise communicate with Customer regarding the Provider Application, all other legal notices required to be sent hereunder must be in writing and will be deemed to have been given upon (i) the date sent by confirmed facsimile, (ii) on the date it was delivered by courier, or (iii) if by certified mail return receipt requested, on the date received, to the addresses set forth above and to the attention of the parties accepting this Agreement and the relevant Order Form, with a copy to its General Counsel, or to such other address or individual as the parties may specify from time to time by written notice to the other party. All communications and notices pursuant to this Agreement shall be in the English language.
- 11.7. Force Majeure. Except for performance of a payment obligation, neither party shall be liable under this Agreement for delays, failures to perform, damages, losses or destruction, or malfunction of any equipment, or any consequence thereof, caused or occasioned by, or due to fire, earthquake, flood, water, the elements, labor disputes or shortages, utility curtailments, power failures, explosions, civil disturbances, governmental actions, shortages of equipment or supplies, unavailability of transportation, acts or omissions of third parties, or any other cause beyond its reasonable control. If the force majeure continues for more than thirty (30) calendar days, then either party may terminate the Agreement for convenience upon written notice to the other party.
- 11.8. <u>Severability</u>. If any provision of this Agreement is declared invalid or unenforceable by a court or administrative agency of competent jurisdiction, the remaining provisions hereof shall remain in full force and effect and this Agreement shall be construed and performed as if it did not contain the invalid or unenforceable provision.

11.9. Insurance.

The Provider shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required by this paragraph. All certificates of insurance shall be with insurance carriers licensed and admitted to do business in the State of Michigan. All coverages shall be with insurance carriers acceptable to the Customer. The Provider shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:

- A. <u>Workers' Compensation Insurance</u>: Provider shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- B. <u>Commercial General Liability Insurance</u>: Provider shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.

Confidential Smarking, Inc. Subscription Services Agreement 6 of 7

- C. Motor Vehicle Liability Insurance: Provider shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all nonowned vehicles, and all hired vehicles.
- D. Additional Insured: The Commercial General Liability and Motor Vehicle Liability, as described above, shall include an endorsement stating the following shall be Additional Insureds: The City of Birmingham including all elected and appointed officials, all employees, all boards, commissions and/or authorities and board members. This coverage shall be primary and any other insurance maintained by the additional insureds shall be considered to be excess and non-contributing with this insurance required from Provider under this Section.
- E. Professional Liability Insurance: If Professional Liability Insurance is available, Professional Liability Insurance with limits of not less than \$2,000,000 per claim if Provider will provide service that are customarily subject to this type of coverage.
- F. <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance, Professional Liability Insurance and Motor Vehicle Liability Insurance as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal shall be sent to: Director of

- Finance, City of Birmingham, P.O. Box 3001, 151 Martin Street, Birmingham, Michigan 48012.
- <u>Proof of Insurance Coverage</u>: Provider shall provide the Customer at the time the Agreement is returned for execution, Certificates of Insurance and/or policies, acceptable to the City, as listed below.

G.

- Two (2) copies of Certificate of Insurance for Workers' Compensation Insurance;
- Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance;
- Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
- Two (2) copies of Certificate of Insurance for Professional Liability Insurance;
- H. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this Agreement, Provider shall deliver renewal certificates and/or policies to the Customer at least (10) days prior to the expiration date.

Confidential Smarking, Inc. Subscription Services Agreement 7 of 7

City of Birmingham

Introduction to Smarking



Chris Hayes, Regional Sales Manager

Kurt F. Wedel, VP Sales and Business Development



Today's Goals and Agenda

Agenda:

- Smarking company and product overview
- Questions and answers

Goals:

- Meet your expectations for this meeting
- Answer as many questions about Smarking as possible



About Smarking – Who We Are

- Founded in 2013 by two MIT PhD's
 - You can't manage what you don't measure
 - "Apply data science and yield techniques and technology used in hotel and airlines"
- Smarking is the parking industry's leading provider of parking data management software
 - SaaS-based for ease, efficiency and convenience
 - No other company has the breadth and depth of our parking management system
- We've aggregated close to 50 parking data sources, for a 360 business view of parking portfolios in over 2,000 locations

AMANO McGANN





























About Smarking – Our Value

- Every municipality is different, and the value propositions are just as varied:
 - Develop, track and enable policy
 - Optimize land use
 - Make data-based decisions as opposed to emotional/subjective
 - Enhance constituent experience constituents, retailers, businesses
 - Enable transparency with constituents
 - Building a flexible bridge to future technologies and best practices
- We enable customers to efficiently and easily access information:
 - Occupancy, revenue, duration
 - Discounts, payment, programs, and other variables
- Bottom line
 - Increase revenue, or change behavior
 - Decrease costs
 - Increase operational knowledge
 - Increase customer satisfaction, both internal and end user customers

Mobile Reports and Alerts



Computer Dashboard





Smarking – Visual Overview





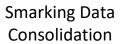


PARCS, Payment, Internal or 3rd Party Data











- Aggregate
- Consolidate
- QA and Normalize





Smarking Applications



Management and Analytics



Customer Applications



Internal Applications



External Applications



Valued Customers – Partial List

Owners









bxp

Boston Properties

MACERICH









Operators



















DENISON PARKING



Muni's, Airports, etc









california



SANDIEGO INTERNATIONAL AIRPORT















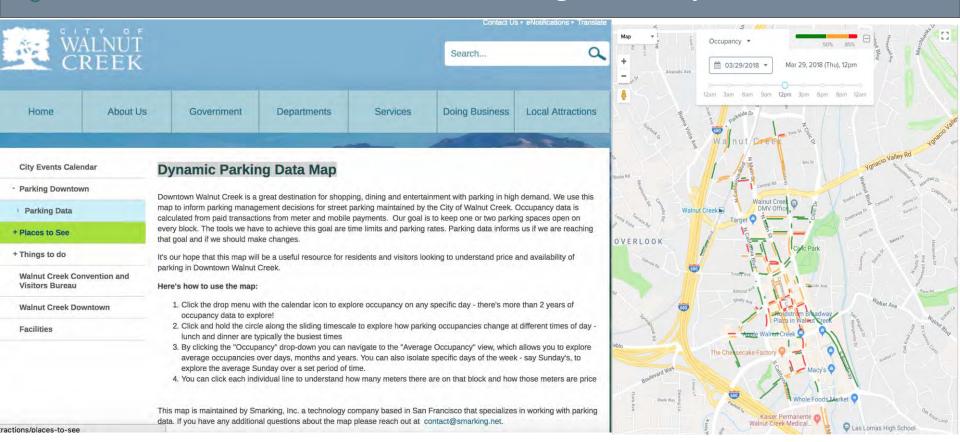




Santa Monica'



Walnut Creek, CA – Real-Time Parking Data Map



Live Public Facing Website: http://www.walnut-creek.org/local-attractions/parking-data/



Union City, CA – Real-Time Parking Data (via API)



For navigation directions click on the parking area name below.

Real Time Parking Occupancy Powered by Smarking (§)

Lot 1	Lot 2	11th St.	Station Center
212	191	56	86
spots available	spots available	spots available	spots available
J St. / 12th St.	Union Square	Alvarado Niles Rd.	Meyers Dr.
42	32	56	39
spots available	spots available	spots available	spots available

Parking Uses & Payment Types

Best for BART Commuters - Area S Permit

- Where: Lot 2 / Meyers Dr. / J St. and 12th St. / Alvanido-Niles Rd. (Northbound)
- · Hours: Monday Friday, 8am to 6pm
- . Cost: \$120 per quarter / or four payments per year
- Buy online: <u>ucparking.org</u>
- Questions: 510.477.1780

Ideal for Neighborhood Visits - Pay & Display

- . Where: Union Square / 11th St. / Cheeves Way
- How to pay: Enter hours to park / pay with card or coin / take receipt / place on dash
- · Cost: \$0.50 per hour (4 hours max)

For Occasional BART Trips - Pay by Space

- Where: Lot 1 / Lot 2 / Station Center Parking Garage
- How to pay: Enter space # / enter hours to park / pay with card/coin / keep receipt
- . Cost: \$0.50 per hour (4 hours max)

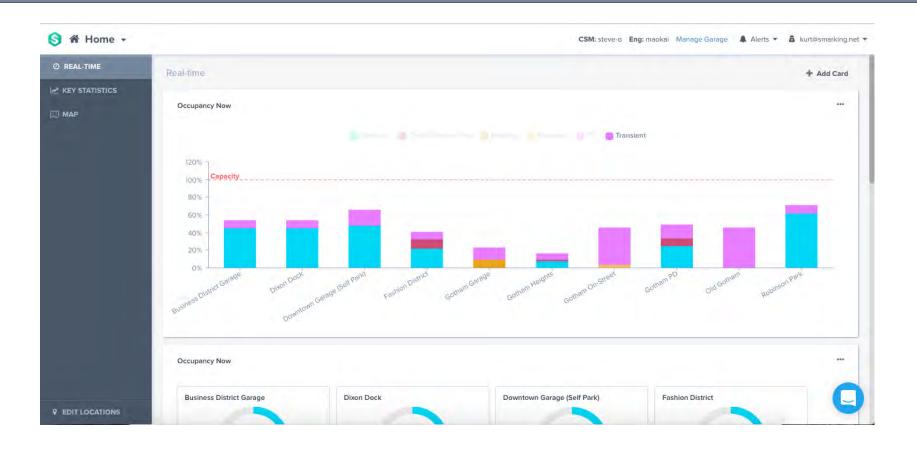
For Residents and Retail Tenants - Area M Permit

- Where: Station Center Parking Garage
- . Who: Station Center residents and retail tenants only
- . Cost: \$120 per guarter / or four payments per year
- . Buy online: ucparking.org
- Questions: 510.477.1780

Live Public Facing Website: https://www.unioncity.org/173/Parking

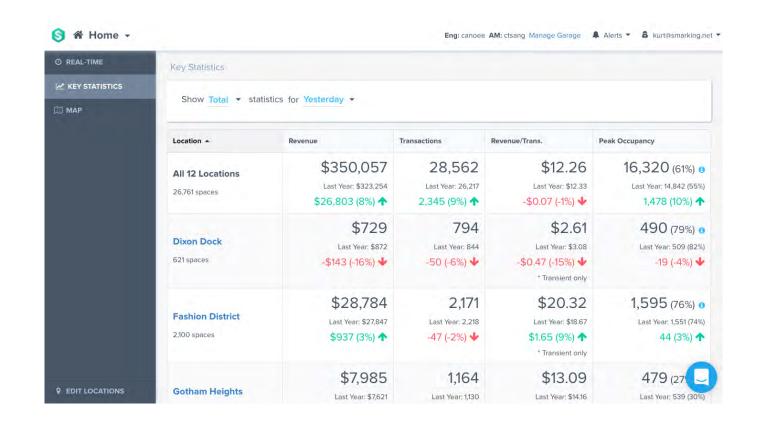


Dashboard – Operational Overview



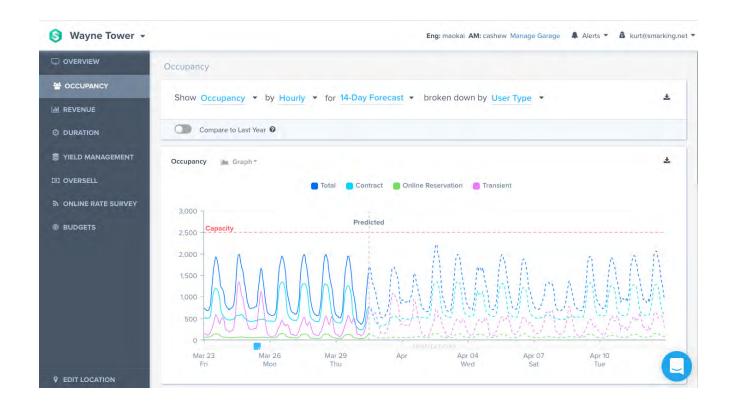


YTD Revenue Overview



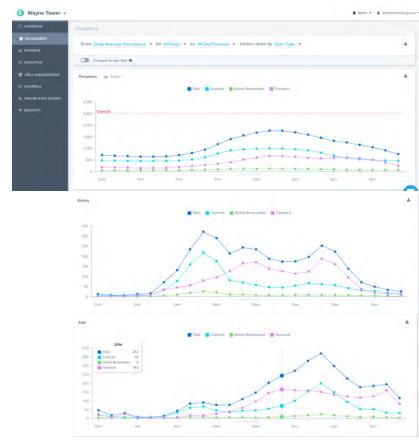


Parking Location Occupancy – Historical/Forecast Visualization





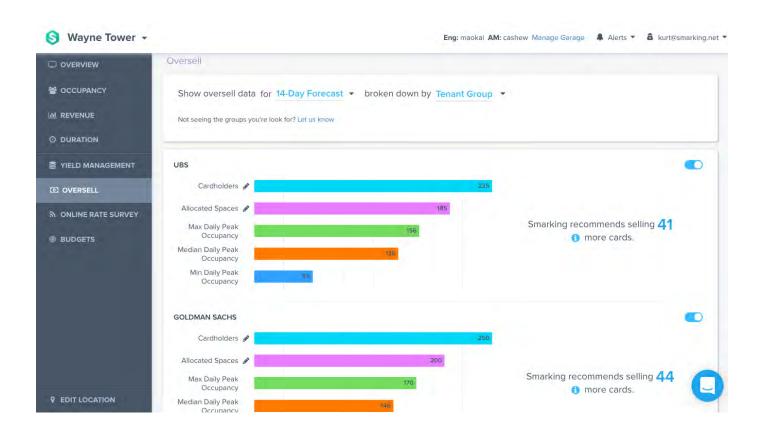
Parking Occupancy – Average Occupancy, Entries and Exits



Proprietary and Confidential

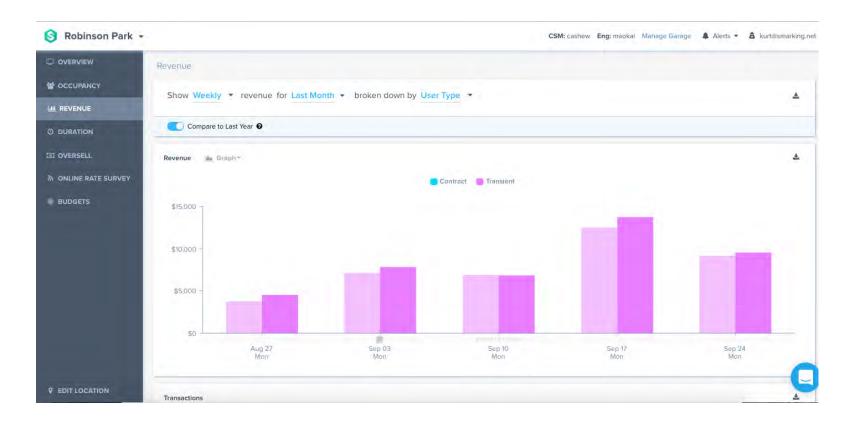


Parking Oversell Analysis





Revenue Comparison to Last Year





Parking Duration





MEMORANDUM

Department of Public Services

DATE: October 18, 2018

TO: Joseph A. Valentine, City Manager

FROM: Lauren A. Wood, Director of Public Services

SUBJECT: Ice Sports Arena – Pro Shop Space Lease

INTRODUCTION:

The City of Birmingham was approached in June 2018 by the Birmingham Hockey Association and Birmingham Unified High School Hockey Team to use the vacant Pro Shop space for offices and meeting space for both groups during the 2018-2019 hockey season. At the time of the initial request, the City of Birmingham was just about to enter into a facility assessment engagement with Plante Moran CRESA for a building and operational review of the Birmingham Ice Sports Arena.

Since the use of this space by the hockey teams would not interfere with any facility or operational changes, at least for the short-term, we now recommend a lease be entered into for the use of the Pro Shop space. There is a clause in the Lease Agreement for the City to terminate such arrangement, based on the required 10-day notice, should it become necessary during the duration of this lease. In view of this, the amount of \$400.00 per month for this vacant space is considered reasonable. The Pro Shop space is 322 square feet.

BACKGROUND:

The Pro Shop space has not been leased out since 2014. The Oakland County Assessors use the space when they are working in the City on a yearly basis. Other Ice Arena users may from time to time use the space for various informal purposes. Historically, a variety of lease arrangements have been in place over the years. Dating back to 1985 this space was managed by outside firms as a Pro Shop for ice hockey/skating merchandise. The City of Birmingham operated the Pro Shop from 1999-2006. Since 2007 up until 2014 two other vendors used the space and paid the City of Birmingham rent around this same amount. The City staff will continue to have access into the skate storage and utility rooms visa vie the Pro Shop.

In the past, bidding out for the use of this space as a Pro Shop was not successful and the two organizations interested in leasing the space are current users of the facility, making this is a winwin for both of us. Otherwise, the room is not occupied other than as needed by various ice arena users.

LEGAL REVIEW:

The City Attorney's Office prepared the Lease Agreement accordingly for this purpose. The Agreement is enclosed and has been signed by the City Attorney, members of the Administration and the Lessees.

FISCAL IMPACT:

The Lease amount of \$400.00 per month will be considered revenue for the Ice Arena. Otherwise, there is no additional fiscal impact with respect to this item. The revenue account is #101-000.000-646.0012 Pro Shop Lease Fees.

SUMMARY:

The Department of Public Services recommends the approval of the Pro Shop Lease between the City of Birmingham and Birmingham Hockey Association and Birmingham Unified High School Hockey Team, effective November 1, 2018 through the end of the season. The Administration will determine the actual final day of the season with BHA/BU, accordingly.

ATTACHMENTS:

A copy of the letters requesting to lease the vacant Pro Shop in the Ice Arena dated June 11, 2018 and September 21, 2018 are attached. The Lease Agreement prepared by the City Attorney's Office is included along with a copy of the insurance certificate.

SUGGESTED RESOLUTION:

To approve the Pro Shop Space Lease Agreement with Birmingham Hockey Association and Birmingham Unified High School Hockey Team for use of the space in the Birmingham Ice Sports Arena referred to as the Pro Shop effective November 1, 2018 for the amount of \$400.00 per month until the end of the season. Further, to authorize the Mayor and Clerk to sign the agreement upon receipt of the required insurance.



June 11, 2018

Lauren A. Wood, Director of Public Services
City of Birmingham
851 S. Eton
Birmingham, MI 48009

Dear Lauren:

On behalf of the board of the Birmingham Hockey Association would like to request the utilization of the vacant pro shop located inside the Birmingham Ice Sports Arena as an office for offices for the Birmingham Hockey Association (BHA) and Birmingham Unified High School Hockey Team (BU).

Both organizations have a lot of traffic in the lobby and would use the space for discussions and meetings for both the BHA and BU organizations. Both organizations jointly would propose to pay the City of Birmingham Ice Sports Arena \$400 per month for the use of the unutilized space.

Please let us know if this is acceptable to you. If you have any further questions or concerns please contact Robert Runco at (248)388-8100.

Sincerely,

Tom Mula

Tom Maliszewski III

BHA Board President

Robert Runco

BHA Board Member



September 21, 2018

Lauren Wood, Director of Public Services City of Birmingham 851 S Eaton Birmingham, Mi. 48009

Lauren,

On behalf of the Birmingham Hockey Association and the Birmingham Unified Hockey Team we would like to request the utilization of the vacant space located inside the Birmingham Ice Sports Arena. We would like to use this space as office space that we would use to conduct coaching and family meetings. We will use all our own office equipment and not interfere with the integrity of the space. Both organizations currently conduct our meetings in the lobby and feel that we can be much more efficient in this office space. We would only use the space during normal rink operation times and mostly during our own ice times and only for family and team related meetings.

BHA and BU propose that we pay the City of Birmingham a total of \$400 per month for the use of this space.

Please let us know if this is acceptable to you. If you have any further questions, please feel free to call me directly at 248-388-8100.

Sincerely,

Robert Runco

PRO SHOP LEASE AGREEMENT

THIS PRO SHOP LEASE AGREEMENT, entered into thisday of	
2018 by and between the CITY OF BIRMINGHAM, a municipal corporation	n, located
in the County of Oakland, State of Michigan, hereinafter referred to as the "CI	ITY", and
BIRMINGHAM HOCKEY ASSOCIATION (BHA) AND BIRMINGHAM I	UNIFIED
HOCKEY TEAM (BU) hereinafter collectively referred to as the "LESSEES";	

WHEREAS, the **CITY** desires to lease the area designated as the pro shop located inside the Birmingham Ice Sports Arena for meetings and conferences related to the operation of BHA and BU according to the terms and conditions hereinafter stated.

NOW, THEREFORE, IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

- The CITY leases to the LESSEES the area designated as the pro shop located in the Birmingham Ice Sports Arena and grants to the LESSEES the rights and privilege for use of the Pro Shop Area for meetings, and conferences related to the operation of BHA AND BU.
 - a. There will be no sales or service of skates or other equipment in this area.
 - b. The City reserves the right to access this area and to use utility/storage rooms for City operations.
 - c. BHA/BU will install opaque covering on glass windows at the initiation of this Agreement and will remove same on termination.
- 2. **LESSEES** will pay the City the Sum of Four Hundred and 00/100 Dollars (\$400.00) per month commencing November 1, 2018 and on the 1st of each month throughout the season.
- During the term of this Agreement and during all times that the arena building is open to the public, the LESSEES, including its agents and employees, shall have free access to the leased premises and the free and uninterrupted right of ingress and egress to and from same. The CITY shall have the right to terminate this Agreement prior to the end of the term without cause. If the CITY terminates this Agreement prior to the end of the season, the CITY shall provide the LESSEES with 10 days written notice of the early termination.

- 4. During the term of the Lease, the employees of **LESSEES** shall have the right to park their motor vehicles without any cost or charge in the Kenning Park public parking lot, so long as said use is in connection with the operation of the **LESSEES'** business at the arena.
- The LESSEES shall hire personnel of good character and fitness to operate the Pro Shop and shall ensure that a sufficient number of employees are working at all times so as to guarantee adequate service to the public as determined by the CITY. In the event that the CITY determines that the presence of an employee of the LESSEES is detrimental to the CITY or in any way interferes with the CITY's operation of the Ice Arena, upon providing written notice to the LESSEES stating the employee's name and the conduct of the employee, the LESSEES shall no longer engage that particular employee to work at the Pro Shop.
- 6. The LESSEES shall observe and comply with all local, state, and federal laws, rules, regulations, and ordinances, and upon notice of any violation, shall immediately correct the violation and comply with such law, rule, regulation, or ordinance.
- 7. The **LESSEES** shall not discriminate against any employee or applicant for employment on the basis of race, sex, creed, color or national origin.
- 8. The **LESSEES** are hereby authorized to keep, maintain and operate on the leased premises and during the term hereof, such furniture, fixtures, equipment and inventory as the **LESSEES** shall determine is necessary for the operation of **LESSEES**' business on the premises. The title to any workstands, machines, counters, equipment or other personal property installed on the premises by the **LESSEES**, together with any merchandise, shall remain the sole property of the **LESSEES**. At the expiration of this Lease, the **LESSEES** shall have a reasonable amount of time to remove its personal property from the premises and shall return the premises to a condition acceptable to the **CITY**, taking into consideration normal wear and tear incidental to its use.
- 9. The **CITY** shall pay for the electricity used by the **LESSES** to operate its business.
- 10. However, the **CITY** may permit businesses or organizations to sell products for use in the **CITY's** annual ice show or other city-sponsored events.
- 11. Subsequent to entering into this Agreement, if any **CITY** official, his or her spouse, child or parent shall become directly or indirectly interested in this Lease Agreement, the **CITY** shall have the right to terminate this Agreement without further liability if the disqualification has not been removed within thirty (30)

- days after the **CITY** has given notice of the disqualifying interest. The **CITY** official shall have no vote on any issue involving the Agreement during the thirty (30) day period.
- The LESSEES and the CITY agree that the LESSEES are acting as independent 12. contractors with respect to the LESSEES' role in providing services to the CITY pursuant to this Agreement, and as such, shall be liable for its own actions and neither the LESSEES nor its employees shall be construed as employees of the CITY. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the CITY nor the LESSEES shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The LESSEES shall not be considered entitled or eligible to participate in any benefits or privileges given or extended by the CITY, or be deemed an employee of the CITY for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the CITY.
- 13. To the fullest extent permitted by law, the LESSEES agree to defend, pay on behalf of, and hold harmless the CITY, its elected and appointed officials, all employees and volunteers working on behalf of the CITY, its boards, commissions and/or authorities, including employees and volunteers thereof, against any claims, demands, suits or loss, including all costs and reasonable attorneys' fees connected therewith, for any damages which may be asserted or recovered against or from the CITY, its elected and appointed officials, all employees and volunteers working on behalf of the CITY, its boards, commissions and/or authorities, including employees and volunteers thereof, by reason of personal injury, including bodily injury and death, and/or property damage, including loss of use thereof, which arises out of or is in any way connected with this Agreement.
- 14. The **LESSES** shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required by this paragraph. All certificates of insurance shall be with insurance carriers licensed and admitted to do business in the State of Michigan. The **LESSES** shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:
 - A <u>Workers' Compensation Insurance</u>: **LESSEES** shall procure and maintain during the life of this contract, Workers' Compensation

- Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- B. <u>Commercial General Liability Insurance</u>: **LESSEES** shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
- C. <u>Motor Vehicle Liability</u>: **LESSEES** shall procure and maintain during the life of this contract Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$ 1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- D. <u>Additional Insured</u>: Commercial General Liability, Motor Vehicle Liability Insurance and Fire Legal Liability Insurance, as described above, shall include an endorsement stating the following shall be *Additional Insureds*: The City of Birmingham including all elected and appointed officials, all employees, all boards, commissions and/or authorities and board members. This coverage shall be primary and any other insurance maintained by the additional insureds shall be considered to be excess and non-contributing with this insurance required from **LESSEES** under this Section.
- E <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance, Fire Legal Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal shall be sent to: Director of Finance, City of Birmingham, P.O. Box 3001, 151 Martin Street, Birmingham, Michigan 48012.
- F. <u>Proof of Insurance Coverage</u>: **LESSEES** shall provide the **CITY** at the time the contracts are returned for execution, Certificates of Insurance and/or policies, acceptable to the CITY, as listed below.
 - 1) Two (2) copies of Certificate of Insurance for Workers' Compensation;

- 2) Two (2) copies of Certificate of Insurance for Commercial General Liability;
- 3) Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
- 4) If so requested, Certified Copies of all policies mentioned above will be furnished.
- G. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this contract, **LESSEES** shall deliver renewal certificates and/or policies to the **CITY** at least (10) days prior to the expiration date.
- 15. The LESSEES shall be responsible for all damage to CITY owned property at the arena when the LESSEES, its agents or employees, causes such damage. The LESSEES shall reimburse the CITY for all costs and expenses reasonably incurred to repair or replace such damaged equipment.
- Any disputes arising under this Agreement shall be settled either by commencement of a suit in Oakland County Circuit Court or by compulsory arbitration, at the election of the CITY. The LESSEES shall notify the CITY of any dispute it has arising out of this Agreement and shall demand that the CITY elect whether the dispute is to be resolved by submitting it to compulsory arbitration or by commencement of a suit in Oakland County Circuit Court. The CITY shall make its election in writing within thirty (30) days from the receipt of such notice. If the CITY elects to have the dispute resolved by compulsory arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan, with each of the parties appointing one arbitrator and the two thus appointed appointing a third. In the event the CITY fails to make such an election, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court.
- 17. If either party shall neglect or fail to perform any of its obligations under this Agreement, and such failure is not remedied within thirty (30) days after receiving written notice from the other party of such failure, the other party shall have the right to terminate this Agreement. An example of this would be continued complaints on products and service being offered and performed.
- 18. The covenants, conditions and the agreements herein contained are hereby declared binding on the CITY and the LESSEES including their respective successors or assigns. There shall be no change, modification, or alteration of this Agreement except in writing, signed by both parties. Neither party shall

transfer or assign any of the rights under this Agreement without the prior written consent of the other.

19. Notwithstanding anything herein to the contrary, in the event that the **CITY** transfers the control of the operation of the Arena to another party this agreement may be terminated at the election of the **CITY**. The **CITY** shall give the **LESSEES** thirty (30) days' notice of such termination.

IN WITNESS WHEREOF, the said parties have caused this Agreement to be executed as of the date and year above written.

	(LESSEES) BIRMINGHAM HOCKEY ASSOCIATION (BEAND BIRMINGHAM UNIFIED HOCKEY TEXT) (BU)	
M.	By: Tom Maliszewski, III F/23/MBHA/Bb Board President By: Robert Runco BHA Board Member	
CITY OF BIRMINGHAM		
By:Andrew M. Harris, Mayor		
By:	*	
Approved:	Mailfill	
Joseph A. Valentine, City Manager (Approved as to substance)	Mark Gerber (Approved as to financial obligation)	
Lauren A. Wood, Director of Public Services (Approved as to substance)	(Approved as to form)	
•		

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

10/22/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

this certificate does not confer rights t	o the	certificate holder in lieu of su		ent(s).				
HODUCER K&K Insurance Group, Inc.	;.		CONTACT NAME:	K&K Insuran	ce Group, Inc.			
1712 Magnayox Way			PHONE (A/C, No. Ext):	800-441-399		FAX (A/C, No):	26	0-459-5120
Fort Wayne, IN 46804			E-MAIL ADDRESS:		·	1 (100, 110).		100 0120
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USA Hockey, Inc. & Its Member L 1775 Bob Johnson Drive	5-		INSURER C:					
Colorado Springs CO 80906			INSURER D :					
			INSURER E :					
			INSURER F:		• •			
OVERAGES CER	TIFIC	ATE NUMBER: 44984167			REVISION NUI	MBER:		
THIS IS TO CERTIFY THAT THE POLICIES INDICATED. NOTWITHSTANDING ANY RECERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH	QUIRE PERTA POLICI	EMENT, TERM OR CONDITION NN, THE INSURANCE AFFORDI NES, LIMITS SHOWN MAY HAVE	OF ANY CONTR ED BY THE PO BEEN REDUCE!	RACT OR OTHER LICIES DESCRIBE DBY PAID CLAIMS	DOCUMENT WITH D HEREIN IS SU	H RESPECT	TO V	WHICH THIS
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(Mandatory in NH) If yes, describe under					E.L. DISEASE - EA I			
If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POL	LICY LIMIT \$		
SCRIPTION OF OPERATIONS / LOCATIONS / VEHICL	LES (AC	ORD 101, Additional Remarks Schedul	e, may be attached	If more space is requir	red)			
lub Name: MIH 4001-Birmingham Hockey Effective Dates: October 22, 2018-Septem .ocation: Birmingham Ice Arena, 2300 E Li Pertificate holder is named as an additional of the named insured.	ber 1, 2 Incoln :	2019 St, Birmingham, MI 48009	rising out of the	operations				
ERTIFICATE HOLDER			CANCELLAT	ION				
Owner of Ice Arena								
City of Birmingham Michigan Birmingham Ice Arena 2300 E Lincoln Street		:	THE EXPIRA	OF THE ABOVE E ATION DATE THE E WITH THE POLK	EREOF, NOTICE			

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Birmingham MI 48009

AUTHORIZED REPRESENTATIVE

Scott Lunsford



MEMORANDUM

Fire Department

DATE: October 19, 2018

TO: Joseph A. Valentine, City Manager

FROM: John M. Connaughton, Fire Chief

SUBJECT: Resolution to Adopt the Oakland County Hazard Mitigation Plan

INTRODUCTION:

The City of Birmingham is required by the Federal Emergency Management Agency (FEMA) to have a Hazard Mitigation Plan which is updated every five years. The City has adopted Oakland County Hazard Mitigation Plan (HMP) which will allow the City to receive mitigation funds from the State of Michigan and FEMA. In 2017, Oakland County updated their HMP, the City needs to adopt the updated, 2017 HMP.

BACKGROUND:

The City of Birmingham and Oakland County are subject to natural and man-made hazards that can threaten life, health, property and the environment. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities FEMA 592, June 2007 and 44 CFR Part 201, require local governments to develop a Hazard Mitigation Plan that identifies strategies to minimize the impact of these hazards in order to be eligible for pre- or post- disaster mitigation funding. In response Oakland County prepared a multi-jurisdictional HMP, dated January 17, 2005, and has prepared this 2017 Oakland County HMP Update to better understand significant local and Oakland County hazards, their impacts and to identify ways to mitigate those hazards.

The planning process included input from each city, township, village and school district to identify potential hazards and mitigation strategies to reduce the risks from natural, human and technological hazards.

LEGAL REVIEW:

A legal review was conducted and no legal issues exist.

FISCAL IMPACT:

There is no fiscal impact.

SUMMARY

In late 2017, FEMA approved the updated HMP. FEMA approval, however, is contingent upon adoption by each municipality, once this is completed the HMP will not be in draft form. The plan was adopted by the Oakland County Board of Commissioners in December 2017, and now must be adopted by each individual community. The City of Birmingham must adopt the Plan to maintain eligibility for FEMA hazard mitigation grant funding. Attached is section one of the Oakland County Hazard Mitigation Plan for your review.

Section two & three are specific plans for municipalities and school districts and therefore are restricted for release under FEMA.

ATTACHMENTS:

Oakland County Hazard Mitigation Plan, Section one.

SUGGESTED RESOLUTION:

To adopt the 2017 Oakland County Hazard Mitigation Plan for the City of Birmingham. Further, to authorize the Mayor and Clerk to sign the Resolution on behalf of the City.

|--|

ADOPTION OF THE OAKLAND COUNTY HAZARD MITIGATION PLAN

WHEREAS, the mission of City of Birmingham includes the charge to protect the health, safety, and general welfare of the people of Birmingham; and

WHEREAS, Birmingham, Michigan is subject to flooding, tornadoes, winter storms, and other natural, technological, and human hazards; and

WHEREAS, the Oakland County Homeland Security Division and the Oakland County Local Emergency Planning Committee, comprised of representatives from the County, municipalities, and stakeholder organizations, have prepared a recommended Hazard Mitigation Plan that reviews the options to protect people and reduce damage from these hazards; and

WHEREAS, Birmingham has participated in the planning process for development of this Plan, providing information specific to local hazard priorities, encouraging public participation, identifying desired hazard mitigation strategies, and reviewing the draft Plan; and

WHEREAS, the Oakland County Homeland Security Division (HSD), with the Oakland County Local Emergency Planning Committee (LEPC), has developed the OAKLAND COUNTY HAZARD MITIGATION PLAN (the "Plan") as an official document of the County and establishing a County Hazard Mitigation Coordinating Committee, pursuant to the Disaster Mitigation Act of 2000 (PL-106-390) and associated regulations (44 CFR 210.6); and

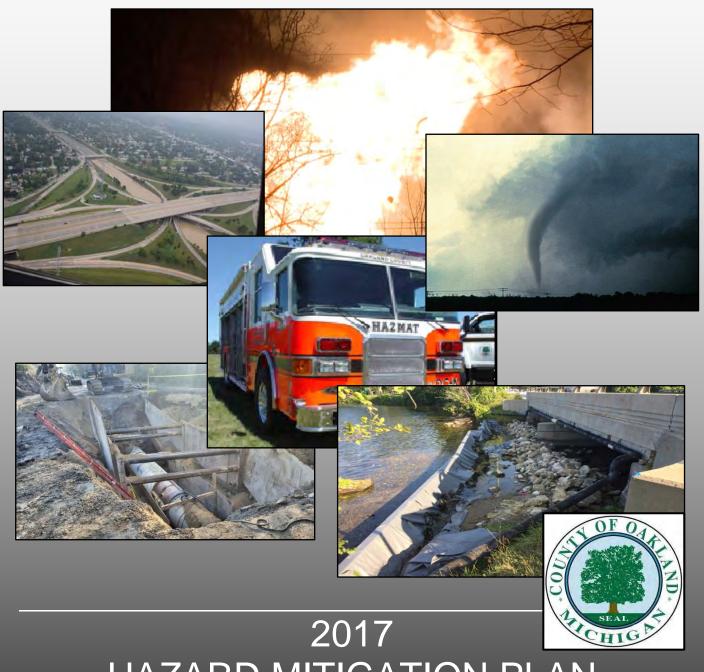
WHEREAS, the Plan has been widely circulated for review by the County's residents, municipal officials, and state, federal, and local review agencies and has been revised to reflect their concerns; and

NOW THEREFORE BE IT RESOLVED by the Birmingham City Commission that:

- 1. The Oakland County Hazard Mitigation Plan is hereby adopted as an official plan of Birmingham.
- 2. The Emergency Management Coordinator is charged with supervising the implementation of the Plan's recommendations, as they pertain to Birmingham and within the funding limitations as provided by the Birmingham City Commission or other sources.

Passed by the Birmingham City Commission o	n October 29, 2018.	
Mayor	Clerk	_

Oakland County Hazard Mitigation Plan



HAZARD MITIGATION PLAN

December 2017



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Oakland County, Michigan Multi-Jurisdiction All Hazard Mitigation Plan

UPDATE

December 2017

Prepared for:

Oakland County Homeland Security Division 1200 N Telegraph Road Pontiac, MI 48341



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Letter from the Oakland County Executive



L. BROOKS PATTERSON, OAKLAND COUNTY EXECUTIVE

To the Residents of Oakland County:

Oakland County has a reputation as the best managed county in America because we are always looking to the horizon to see what challenges lie ahead and then plan accordingly to meet them. That planning includes being prepared for any natural or manmade hazards such as severe weather or an act of terrorism.

Oakland County updates its Hazard Mitigation
Plan every five years with your input, in keeping
with Federal Emergency Management
Administration (FEMA) guidelines. In 2017,
Oakland County Homeland Security Division
contracted Integrated Solutions Consulting (ISC), a
small business focused on implementing



comprehensive crises and consequence management solutions, to survey residents, business, schools, and other organizations to identify policies and actions that will help reduce the impact of a disaster on our community and mitigate losses during an emergency. Oakland County and ISC then reviewed and prioritized that information in order to update the Hazard Mitigation Plan. It is worth noting that a pre-disaster mitigation planning grant which Oakland County won in 2016 funded ISC and the survey.

Oakland County has updated its Hazard Mitigation Plan in collaboration with the communities in which you live, work, and play. It is through this team effort that Homeland Security Division ensures Oakland County and its cities, villages, and townships have adopted response plans that will keep residents safe and prepared.

L. Brooks Patterson Oakland County Executive

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Executive Summary

Oakland County is subject to natural and man-made hazards that may impact health, quality of life, property, the environment and/or infrastructure. Because of the location and land use of Oakland County, certain hazard events have historically been more significant than others. Future conditions may cause other hazards to increase in significance. Providing strategies that minimize the impact of these hazards requires a commitment to a multiple-step program, including defining the problem, identifying preventive measures, implementing mitigation strategies and incorporating hazard mitigation in County-wide planning efforts. Oakland County has prepared this multi-jurisdictional 2017 Oakland County All Hazard Mitigation Plan (HMP) Update (Plan) to better understand significant Oakland County hazards and their impacts and to identify ways to mitigate those hazards. All 62 communities and 28 school districts in Oakland County participated in this process and are included in the Plan.

The Plan Process

This Plan was completed with the assistance of the Oakland County Homeland Security Division, members of the Oakland County Local Emergency Planning Committee (LEPC), members of the community, representatives and leaders from each of the 62 communities and many of the 28 school districts in the County, the Michigan State Police Emergency Management and Homeland Security Division Mitigation Recovery Section and numerous other stakeholders. Over 150 individuals were involved in the preparation, evaluation, and community outreach components of this Plan. The Plan was prepared using three (3) groups: An Advisory/Steering Committee provided guidance, evaluation and assessment; a group of community representatives provided local input from each community in Oakland County; and a group of community leaders provided local input and assisted with community outreach and Plan adoption.

The goal of hazard mitigation is to eliminate or reduce loss of life and property from hazards that occur in the County by protecting the health, safety and economic interests of its residents. Oakland County identified the following hazard mitigation goals.

- 1. Retain access to Federal Emergency Management Agency (FEMA) funding for Oakland County and its communities by complying with Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities dated May 2017 (42 USC 5165) and Code of Federal Regulations (CFR), Title 44, Part 201.
- 2. Provide a basis for identifying and mitigating hazards that affect Oakland County and its communities.
- 3. Develop a method to incorporate and integrate hazard identification and mitigation into the planning process of Oakland County and its communities.

Specific tasks for the completion of this Plan included the following:

- Identifying hazards and risks
- Updating the hazard history
- Updating the community profiles
- Assessing vulnerabilities
- Identifying repetitive loss properties



- Defining and updating mitigation goals and objectives
- Evaluating the status and relevance of previous goals and strategies
- Identifying and prioritizing hazard mitigation strategies
- Developing and updating Action Plans for a select list of mitigation strategies
- Preparing a draft report for Oakland County, municipal and public review
- Soliciting Oakland County, municipal and public feedback
- Preparing a final report
- Providing community outreach and communication
- Documenting the planning process
- Adopting the final Plan

Hazard Assessment

The Plan evaluated over 50 hazards during the 2017 Oakland County HMP Update. Hazards were identified using a combination of historical research, surveys, workshops, community and public meetings, and the 2012 Plan. Based on this evaluation, specific hazards were identified as requiring additional consideration, and therefore are the focus of this Mitigation Plan. These hazards were selected to represent both County-wide and local community concerns. Evaluation of these hazards does not reduce the significance of a hazard event from any of the hazards evaluated, but provides a method for Oakland County to focus mitigation activities and resources.

The following hazards were identified as significant.

Table 1: Oakland County Hazard Ranking

Natural Hazards		Score
1	Winter Storm and Blizzards	52
2	Riverine Flooding	49
3	Urban Flooding	46
4	High Winds/Severe Winds	46
5	Hail	42
6	Tornadoes	40
7	Extreme Cold	40
8	Thunderstorms (Lightning)	39
9	Ice and/or Sleet Storms	33
10	Extreme Heat	30
11	Drought	25
12	Fog	23
13	Earthquake	21
14	Wildfire	19
15	Natural Subsidence	10
Manmade/Technological Hazards S		Score
1	Structural Fire	41
2	Transportation Accidents: Highway	40
3	Hazardous Materials Incidents: Transportation	38
4	Hazardous Materials Incidents: Fixed Facility	38



		1
5	Petroleum and Natural Gas Pipeline Accidents	38
6	Infrastructure Failure: Electrical System Failure Incident	35
7	Infrastructure Failure: Water System Disruption	33
8	Transportation Accidents: Rail	32
9	Criminal Acts: Vandalism	32
10	Infrastructure Failure: Storm Water System Incident	32
11	Criminal Acts: Arson	31
12	Infrastructure Failure: Communication System Failure Incident	29
13	Invasive Species	28
14	Dam Failure	26
15	Criminal Acts: Mass Shootings/Active Assailant	25
16	Infrastructure Failure: Sewer System Incident	25
17	Nuclear Power Plant Accidents	22
18	Transportation Accidents: Air	21
19	Gas/Oil Shortage	21
20	Oil and Gas Well Incident	20
21	Infrastructure Failure: Transportation (Bridges, Roads, Overpasses) Infrastructure System Failure Incident	20
22	Scrap Tire Fire	17
Political Hazards		Score
1	Terrorism and Sabotage	33
2	Civil Disturbances	23
3	Weapons of Mass Destruction	19
Public Health Hazards S		
1	Public Health Emergencies	37

Hazard Mitigation

Plan participants assessed over 300 hazard mitigation strategies, including strategies from FEMA documents, strategies from the 2012 Oakland County Plan and suggestions from the communities, Advisory Committee members and school districts. These strategies were evaluated by the Advisory Committee during the third meeting held on November 3, 2017, resulting in a prioritized list of 147 new strategies, in addition to 229 ongoing/updated mitigation strategies from the 2012 Plan, and 126 completed strategies. Fifteen were removed or considered not relevant.

Major categories that represented the identified mitigation strategies, included (in order of priority as identified by the Advisory Committee):

- 1. Emergency Planning
- 2. Emergency Training for First Responders
- 3. Infrastructure work
- 4. Culverts/General Flood/Water System
- 5. Personal Preparedness Encouragement
- 6. Radio/Communication/Notification System
- 7. Security Improvements



- 8. Emergency Supplies/Small Equipment
- 9. Generator
- 10. Warning Sirens/Loud Speakers
- 11. Hire/Train Staff
- 12. Large Response Equipment or Construction Project
- 13. Emergency Shelters

Introduction

Oakland County is subject to natural and man-made hazards that can threaten life, health, property and the environment. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and 44 CFR Part 201, require local governments to develop a Hazard Mitigation Plan (HMP) that identifies strategies to minimize the impact of these hazards in order to be eligible for pre- or post-disaster mitigation funding. In response, Oakland County prepared a multijurisdictional Hazard Mitigation Plan (HMP), dated January 17, 2005 and completed the first update in 2012 to better understand significant Oakland County hazards, their impacts and to identify ways to mitigate those hazards. The second update took place in 2017.

GENESEE

GENESEE

ST. CLAIR

OAKLAND

Lake St Clair

WAYNE

WAYNE

State of Michigan

County

Oakland County

Source: Oakland County, MI, USDA, SEMCOG | Created by: ASTI



Acknowledgements

Development of the multi-jurisdictional 2017 Oakland County All Hazard Mitigation Plan (HMP) Update (Plan) required the time, talents, effort and ideas of numerous individuals. Over 150 stakeholders, community leaders, residents and Oakland County staff participated in the development of this Plan. Staff from the Oakland County Homeland Security Division, members of the Oakland County Local Emergency Planning Committee (LEPC), members of the community and representatives and leaders from all 62 communities and many of the 28 school districts in Oakland County provided input. In addition, this Plan would not have been completed without the assistance of the Michigan State Police Emergency Management and Homeland Security Division Mitigation Recovery Section.

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- Wes Goodman, Lake Orion Schools
- John B Martin, Novi Fire
- Kevin Sullivan, Ferndale Fire
- Tedd Strobehn, Boehle Chemicals
- Melanie Ben-Ezra, OCHD
- Kevin Scheid, OCHSD
- Brian Crane, Franklin
- Dean Schultz, OCRISK

Oakland County Advisory Committee Members

- City of Auburn Hills: James Manning, Fire Chief
- City of Berkley: Matthew Koehn, PS Director
- City of Bloomfield Hills: David Hendrickson, PS Director
- City of Birmingham: John Connaughton, Fire Chief
- City of Ferndale: Kevin Sullivan, Fire Chief
- City of Huntington Woods: Andrew Pazuchowski, PS Director
- City of Novi: David Molloy, Police Chief
- City of Troy: Brian Kischnick, City Manager
- City of Walled Lake: Jim Coomer, Fire Chief
- Township of Addison: Bruce Pearson, Twp Supervisor
- Township of Highland: Ken Chapman, Fire Chief
- Township of Orion: Robert Smith, Fire Chief
- Township of Springfield: Dave Feichtner, Fire Chief
- Township of White Lake: Andrew Gurka, Fire Chief
- City of Clarkston: Mitch Petterson, Fire Chief
- City of Clawson: Harry Anderson, Police Chief
- City of Farmington: Frank Demers, PS Director
- City of Farmington Hills: Lt. James Neufeld, EMC
- City of Hazel Park: Richard Story, Fire Chief
- City of Keego Harbor: Ken Hurst, Police Chief
- City of Lake Angelus: Jim Prosser, Police Chief
- City of Lathrup Village: Scott McKee, Police Chief



- City of Madison Heights: Greg Lelito, Fire Chief
- City of Northville: Michael Carlson, Police Chief
- City of Oak Park: Steve Cooper, PS Director
- City of Orchard Lake Village: Joe George, Police Chief
- City of Pleasant Ridge: James Breuckman, City Manager
- City of Pontiac: John Lyman, Fire Chief
- City of Rochester: John Cieslik, Fire Chief
- City of Rochester Hills: Sean Canto, Fire Chief
- City of South Lyon: Lloyd T. Collins, Police Chief
- City of Southfield: William Johns, EMD
- City of Sylvan Lake: John Martin, Police Chief
- City of Wixom: Clarence Goodlein, PS Director
- Township of Bloomfield: Dave Piche, Fire Chief
- Township of Brandon: Dave Kwapis, Fire Chief
- Township of Commerce: Todd A. Martin, Fire Chief
- Township of Groveland: Steve McGee, Fire Chief
- Township of Holly: George Kullis, Supervisor
- Township of Independence: Mitch Petterson, Fire Chief
- Township of Lyon: Ken VanSparrentak, Fire Chief
- Township of Milford: Don D. Green, Twp Supervisor
- Township of Novi: John J. Juntunen, Twp Supervisor
- Township of Oakland: Paul Strelchuk, Fire Chief
- Township of Oxford: Pete Scholz, Fire Chief
- Township of Rose: Jeremy Lintz, Fire Chief
- Township of Southfield: Tony Averbuch, Fire Chief
- Township of Waterford: John Lyman, Fire Chief
- Township of West Bloomfield: Greg Flynn, Fire Chief
- Village of Beverly Hills: Richard Torongeau, PS Director
- Village of Bingham Farms: Tony Averbuch, Fire Chief
- Village of Bloomfield: Dave Piche, Fire Chief
- Village of Franklin: Daniel Roberts, Police Chief
- Village of Holly: Steve McGee, Fire Chief
- Village of Lake Orion: Jerry Narsh, Police Chief
- Village of Leonard: Mike McDonald, Vlg President
- Village of Milford: Tom Lindberg, Police Chief
- Village of Ortonville: Dave Kwapis, Fire Chief
- Village of Oxford: Pete Scholz, Fire Chief
- Village of Wolverine Lake: John Ellsworth, Police Chief
- Township of Royal Oak: Donna Squalls, Twp Supervisor
- Michigan State Police: Lieutenant Timothy Ketvirtis, District 2 Coordinator

Michigan State Police Emergency Management Division Mitigation Recovery Section

Michael Sobocinski, Local Hazard Mitigation Specialist



Hazard Mitigation Plan Process

Figure 2: Plan Development and Planning Process



This multi-jurisdictional Hazard Mitigation Plan (the Plan or HMP) was originally created in 2005 and updated in 2011-2012 for Oakland County, and the communities within Oakland County, to better understand natural and man-made hazards and their impacts and to identify ways to mitigate those hazards to protect the health, safety and economic interests of its residents. The plan was again updated in 2017. Each of the 62 communities and 28 school districts within Oakland County participated in this Plan and, therefore, are covered by this Plan. Each of the 62 communities were included in the 2005 and 2012 plans and are again included in this update.

This Plan is designed to comply with requirements of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities and 44 CFR Part 201, which states that local governments, to be eligible for pre-disaster and/or post- disaster mitigation funds, must have an approved Hazard Mitigation Plan in place. The Plan is also designed to comply with the Federal Emergency Management Act, Federal Emergency Management Agency (FEMA) and Michigan State Police Emergency Management and Homeland Security Division Mitigation Recovery Section (EMHSD) guidance documents (particularly the Local Multi-Hazard Mitigation Planning Guidebook dated 2013) and other applicable federal, state and local regulations. This was accomplished by evaluating the impacts of known natural and man-made hazards, prioritizing mitigation alternatives and coordinating hazard mitigation with other Oakland County programs and policies.

During the planning process, Oakland County and community representatives discussed nearly 50 hazards in 4 categories as described below. Some of these were consolidated into similar groupings (e.g., all forms of infrastructure failure were ultimately combined) and Advisory Committee and community representatives rated the importance of these hazards.

¹ Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities (42 USC 5165), 44 CFR Part 201



Per FEMA's mandate to address all natural hazards, the following natural hazards were not included because these hazards do not directly impact the County. They are:

- Hurricanes
- Sea Level Rise
- Storm Surge
- Tsunami

Hazard definitions are included in **Hazard Profile & Risk Assessment**. These hazards were selected based on the requirements of the *Local Multi-Hazard Mitigation Planning Guidebook* and the Michigan State Police Emergency Management and Homeland Security Division.

Natural Hazards

- Drought
- Earthquake
- Extreme Temperatures Extreme Cold
- Extreme Temperatures Extreme Heat
- Fire Wildfires
- Flooding Riverine
- Fog
- Invasive Species
- Subsidence Natural
- Thunderstorms Hail
- Thunderstorms Lightning
- Thunderstorms Severe Wind
- Tornadoes
- Winter Hazards Ice and Sleet
- Winter Hazards Snowstorms

Manmade/Technological Hazards

- Criminal Acts Vandalism and Arson
- Criminal Acts Mass Shootings
- Fire Scrap Tire
- Fire Structural
- Flooding Dam Failure
- Flooding Urban
- Hazmat Incidents Fixed Site
- Hazmat Incidents Transportation

- Infrastructure Failure Bridges, Roads, Overpasses
- Infrastructure Failure Communications
- Infrastructure Failure Electrical Systems
- Infrastructure Failure Sewer System
- Infrastructure Failure Storm Water System
- Infrastructure Failure Water System
- Nuclear Power Plant Accidents
- Oil and Gas Well Accidents
- Petroleum and Natural Gas Pipeline Accidents
- Subsidence Mining
- Transportation Accidents Air
- Transportation Accidents Highway
- Transportation Accidents Marine
- Transportation Accidents Rail
- Gas/Oil Shortages or Supply Disruptions

Political Hazards

- Civil Disturbance
- Terrorism and Sabotage
- Weapons of Mass Destruction

Public Health Hazards

• Public Health Emergencies



Plan Goals and Objectives

The general goals of any Hazard Mitigation Plan include: saving lives and protecting property, preserving and protecting an area's environment and economy and preserving and maintaining an area's essential services and quality of life. The Plan includes these general goals.

In 2017, the Advisory Committee chose to keep the 2012 goals. These goals, objectives and means for achieving them are discussed further in **Mitigation Goals and Objectives**.

- 1. Protect public health and safety and prevent and reduce loss of life and injury.
- 2. Improve and support public and private organizational response capabilities.
- 3. Increase awareness and preparedness of public, business, non-profit, government, etc. about hazards.
- 4. Prevent and reduce damage to public and private property and infrastructure.
- 5. Protect critical assets hospitals, nursing homes and schools.
- 6. Encourage personal responsibility.

Planning Process

The Plan was prepared to provide a basis for identifying and managing natural, technological and human hazards and to meet federal, state and local requirements for hazard mitigation and FEMA grant funding. Plan preparation involved completion of the following tasks:

- Identify hazards and risks.
- Update the hazard history.
- Update the community profiles.
- Assess vulnerabilities.
- Identify repetitive loss properties.
- Define and update goals and objectives.
- Evaluate the status and relevance of previous goals and strategies.
- Identify and prioritize hazard mitigation strategies.
- Develop and update Action Plans for a select list of mitigation strategies.
- Prepare a draft report for Oakland County, municipal and public review.
- Solicit Oakland County, municipal and public feedback.
- Prepare a final report.
- Provide community outreach and communication.
- Document the planning process.
- Adopt the final plan.

With approved FEMA grant funding, Oakland County contracted Integrated Solutions Consulting to facilitate the hazard mitigation planning process and prepare the final 2017 Oakland County HMP Update. As described below, updating this Plan involved assistance in identifying and evaluating hazards and mitigation options from 4 key groups: An Advisory Committee, community representatives from the 62 municipalities and 28 school districts in the County, public input and other stakeholders. Each of these is described further in the section **Plan Participation**.



Planning Approach

Updating the Plan began with an initial meeting between project staff and staff of the Oakland County Homeland Security Division which was held on May 5, 2017. Following this meeting, the planning process involved review of the existing Plan; updating Oakland County's hazard history; gathering information on local hazards from individual communities; gathering input on hazard priorities; identifying specific vulnerabilities and desired mitigation strategies; evaluating the previous Plan goals, objectives, and mitigation strategies; determining the status of previous mitigation strategies and Action Plans; identifying repetitive loss properties; facilitating the activities of the Advisory Committee and conducting multiple public meetings.

A meeting to identify/discuss hazard risk concerns and participate in the hazard identification and risk prioritization process was conducted on August 4, 2017.

Information regarding hazards in the County and applicable mitigation strategies was also obtained from 4 workshops held throughout the County and a comprehensive public survey that reached 1,150 residents and resulted in 854 completed responses. Advisory Committee members, community and school representatives, and the public were asked to rate each of the hazards in terms of perceived risk. They were also asked to rate "mitigation importance" for each of the identified hazards in the plan. Information from this survey was used to inform the hazard risk prioritization process.

During the month of October 2017, four (4) workshops were held throughout the County, and municipal and school representatives were invited to attend. These workshops included local planning members from each of the communities and schools. Participants validated the County's risk assessment findings, described specific hazard risks and concerns for their own communities and schools, updated existing mitigation actions/strategies from the 2005 and 2012 Plan, and worked with their local planning team to identify new mitigation initiatives. Through a combination of ranking exercises, worksheets and discussion, workshop participants evaluated hazard risk results; evaluated the 2012 Plan goals, objectives, mitigation strategies, Action Plans and rankings; identified goals and objectives for the 2017 Oakland County HMP Update and selected options for mitigating specific hazards to be included in this Plan.

Existing Plans and Programs

Since a Hazard Mitigation Plan is only a part of the emergency planning, mitigation, preparedness, response and recovery process, a second objective of the planning process was to coordinate Plan preparation with existing Oakland County emergency plans, programs, procedures and organizations. For purposes of this Plan, existing hazard mitigation goals and objectives within Oakland County were reviewed. It should be noted that this Plan does not replace any existing plans or programs, but is intended to provide a reference on hazard mitigation to be used in planning and program development.

County Goals and Objectives

Successful implementation of this Plan requires that it fit within, and be consistent with, other goals, objectives and programs of Oakland County government. As such, identified goals and



objectives, mission statements and other guiding principles of relevant Oakland County agencies were reviewed as part of the planning process. Oakland County's Hazard Mitigation Planning Process is not intended to replace any other County planning effort, but should be considered in future County-wide planning. Specific goals and objectives developed as part of this 2017 Oakland County HMP Update fit within the context of the existing role of the Oakland County Homeland Security Division and the strategic initiatives of Oakland County.

Coordinating Oakland County's hazard mitigation planning and implementation is, largely, a function of including this Plan's information and a general focus on hazard mitigation within the overall planning and goal setting activities of the County. Future coordination of this Plan with other activities in Oakland County will be conducted by the Oakland County LEPC as described in the **Plan Maintenance Process**.

Homeland Security Division

In 2005, Oakland County Emergency Response and Preparedness (ERP) served as the lead agency for development of the Oakland County Hazard Mitigation Plan. ERP has since been renamed the Oakland County Homeland Security Division (HSD). The HSD handles all matters of emergency management within Oakland County and is the lead agency for both development and implementation of this HMP Update. Roles and responsibilities of the Homeland Security Division include the following.²

- **Mitigation:** Eliminate, reduce or prevent long-term risk to human life and property from natural and man-made hazards.
- **Emergency Preparedness:** Advance emergency planning that develops operational capabilities and facilitates an effective response in the event an emergency occurs.
- **Emergency Response:** Action taken immediately before, during or directly after an emergency to save lives, minimize damage to property and enhance the effectiveness of recovery.
- **Recovery:** Short-term activity to return vital life support systems to minimum operating standards and long-term activity designed to return life to normal or improved levels.

Oakland County

Oakland County's key initiatives in 2005 included the following:³

- Making Oakland County the economic engine of Michigan.
- Conservative and prudent fiscal management of Oakland County government.
- Create and promote innovative programs and service.
- Technological superiority.

The current key initiatives of Oakland County in 2012 were:⁴

• Increase jobs and diversify the job market while increasing the presence in international markets.

² Source: Oakland County Homeland Security Division website, http://www.oakgov.com/homelandsecurity/about/, January 5, 2012

³ Source: Oakland County Executive website, http://www.co.oakland.mi.us/exec/initiatives/, September 7, 2004.

⁴ Source: Oakland County Executive website, http://www.co.oakland.mi.us/exec/initiatives/, January 5, 2012



- Conservative and prudent fiscal management of Oakland County government.
- Increase educational opportunities available to children to prepare them for success.
- Create and promote innovative programs and services that increase the quality of life of the residents including the Rail-to-Trails system and Oak Street program.
- Reduce infant mortality rates for residents and encourage maternal health.
- Provide free wireless internet to all residents of Oakland County.

Oakland County's key initiatives in 2017 were:

- Promoting Oakland County as "A Great Place to Live, Work, and Play".
- Emerging Sectors Initiative: job creation and diversification are transferring Oakland County's economy from manufacturing based to knowledge based.
- Medical Main Street®: A no-cost network of health care and life science leaders in healthrelated industries, your partner to life science, bio-technology, pharmacology, and health care.
- Develop innovative life-saving Autonomous Vehicle Network Pilot Program at no cost to taxpayers.

Plan Participation

The focus of the 2017 Oakland County HMP Update was a series of structured discussions with, and opportunities for feedback from, Oakland County officials, municipal officials, affected stakeholders and the general public. Social media and email communications, as well as an online planning system, enabled project staff to keep in contact with the affected parties and supply information to a broad audience. In particular, these included the following opportunities for outreach and input:

- A project online planning system (https://oakland.isc-cemp.com)
- Email notices describing the planning process made available to the Advisory Committee and municipal/school officials
- Online and hardcopy survey provided to the Advisory Committee, municipal/school officials, and the general public (http://oakland.preparedness.sgizmo.com/s3/)
- A series of Webinars to introduce the mitigation planning process to local and school officials.
- Four (4) workshops held strategically throughout the County for the identification and prioritization of hazards, hazard mitigation strategies and Action Plans.
- Creation and distribution of online forms so county, municipal, and school stakeholders could easily submit local hazard risk concerns and mitigation strategies.
 - o Hazard Form: https://integratedsolutions.wufoo.com/forms/khx8k751tbt3wg/
 - o New Mitigation Action Projects Form: https://integratedsolutions.wufoo.com/forms/qo0ndg617ys5lw/
- Email and phone communication with leaders and representatives from each of the communities, school districts and Advisory Committee.
- Telephone and face-to-face interviews with leaders and representatives from the County, municipalities, and public school districts.
- Three (3) public meetings were held throughout the County during the month of October



• Copies of the draft plan were made available for review and comment on the Oakland County web site.

County Participation

The Oakland County Homeland Security Division provided contract administration, participation on the Advisory Committee, local matching funds for the development of this Plan (in the form of staff salaries and direct expenses), Geographic Information System (GIS) data, technical and regional information, meeting facilities and printing and duplication services. Oakland County continued to be instrumental in preparing county maps and data, providing a meeting location for the Advisory Committee, and coordinating various Oakland County departments. Oakland County is responsible for utilization, updating and oversight of the Plan and supporting local units of government with grant funding.

Advisory Committee

A project Advisory Committee was formed to provide input on the hazards and mitigation options applicable to Oakland County and to oversee the 2017 Oakland County HMP Update. The Advisory Committee was made up of people who assisted in the previous plan, as well as new members. The existing Oakland County Local Emergency Planning Committee (LEPC) made up the core of the Advisory Committee. Additional stakeholders within Oakland County were also invited to participate. The Advisory Committee participated in the hazard identification and risk assessment, determined Plan goals and objectives, evaluated mitigation alternatives and prepared the final Action Plans through a series of workshops and surveys.

Community Representatives

Representatives from each of the 62 municipalities coordinated community input and met with project staff to discuss hazard identification, mitigation options and community-specific vulnerabilities. The communities also evaluated the status of the 2012 Plan goals, hazards and mitigation strategies. Based on availability, individual community representatives were composed of the municipality's Emergency Management Coordinator (EMC), fire and police personnel, and/or community leaders (mayor, township supervisor, etc.) for each of the 62 municipalities.

Community representatives were kept informed on the planning progress through the online planning system, webinars and email correspondence, and were invited to comment on the Draft Plan posted on the web site. Community representatives received an initial announcement concerning the project, emails outlining various methods of participating in the project, and access to the draft Plan. A list of community representatives that participated is included in Volume II.



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Table 2: Oakland County Plan Participation Documentation

Jurisdiction	Attended Mtg/Webinar	New Action(s) Submitted	Old Actions Updated	Other Outreach Efforts: Conference Call	Other Outreach Efforts: Direct Email	Participated in Plan Update
Bloomfield Hills City	Yes	No	Yes	11/20, 11/29	11/15/2017	Yes
Keego Harbor City	No	Yes	Yes	11/13/2017, 12/11/2017	11/13/2017	Yes
Pleasant Ridge City	Yes	Yes	Yes	11/14/2017	11/14/2017	Yes
Sylvan Lake City	No	Yes	Yes	11/20/2017	11/14, 11/20	Yes
Addison Twp	Yes	Yes	Yes		11/20, 11/27	Yes
Auburn Hills City	Yes	Yes	Yes		11/15/2017	Yes
Berkley City	Yes	Yes	Yes		11/15/2017	Yes
Beverly Hills Village	Yes	Yes	Yes			Yes
Bingham Farms Village	Yes	Yes	Yes			Yes
Birmingham City	No	Yes	Yes	11/13/2017	11/13/2017	Yes
Bloomfield Twp	N/A	N/A	N/A			Own Plan
Bloomfield Village	N/A	N/A	N/A			Own Plan
Brandon Twp	Yes	Yes	Yes	11/20, 11/29	11/15/2017	Yes
Clarkston City	Yes	Yes	Yes	11/20/2017	11/16/2017	Yes
Clawson City	Yes	Yes	Yes			Yes
Commerce Twp	No	Yes	Yes	11/13/2017		Yes
Farmington City	Yes	Yes	Yes		11/15/2017	Yes
Farmington Hills City	Yes	Yes	Yes	11/27/2017	11/15/2017	Yes
Ferndale City	Yes	Yes	Yes			Yes
Franklin Village	Yes	Yes	Yes			Yes
Groveland Twp	Yes	Yes	Yes	11/13/2017	11/13/2017	Yes
Hazel Park City	Yes	Yes	Yes	11/13/2017	11/13/2017	Yes
Highland Twp	Yes	Yes	Yes	11/13/2017	11/13/2017	Yes
Holly Twp	Yes	Yes	Yes			Yes
Holly Village	Yes	Yes	Yes	11/13/2017	11/13/2017	Yes
Huntington Woods City	Yes	Yes	Yes			Yes
Independence Twp	Yes	Yes	Yes	11/20/2017	11/16/2017	Yes
Lake Angelus City	Yes	Yes	Yes	11/14/2017	11/14/2017	Yes
Lake Orion Village	Yes	Yes	Yes	11/20/2017	11/15/2017	Yes
Lathrup Village City	Yes	Yes	Yes	11/20/2017	11/15/2017	Yes
Leonard Village	Yes	Yes	Yes		11/20/2017	Yes
Lyon Twp	Yes	Yes	Yes	11/20/2017	11/15/2017	Yes



Jurisdiction	Attended Mtg/Webinar	New Action(s) Submitted	Old Actions Updated	Other Outreach Efforts: Conference Call	Other Outreach Efforts: Direct Email	Participated in Plan Update
Madison Heights City	Yes	Yes	Yes	11/20/2017	11/15/2017	Yes
Milford Twp	Yes	Yes	Yes	11/20, 11/21	11/15/2017	Yes
Milford Village	Yes	Yes	Yes			Yes
Northville City	Yes	Yes	Yes			Yes
Novi City	Yes	Yes	Yes			Yes
Novi Twp	Yes	Yes	Yes	11/14/2017	11/14/2017	Yes
Oak Park City	Yes	Yes	Yes	11/14, 11/20	11/20/2017	Yes
Oakland Twp	Yes	Yes	Yes	11/14/2017	11/14/2017	Yes
Orchard Lake City	Yes	Yes	Yes		11/15/2017	Yes
Orion Twp	Yes	Yes	Yes	11/14/2017	11/14/2017	Yes
Ortonville Village	Yes	Yes	Yes	11/20, 11/29	11/15/2017	Yes
Oxford Twp	Yes	Yes	Yes		11/16/2017	Yes
Oxford Village	Yes	Yes	Yes		11/16/2017	Yes
Pontiac City	Yes	Yes	Yes		11/20/2017	Yes
Rochester City	Yes	Yes	Yes			Yes
Rochester Hills City	Yes	Yes	Yes			Yes
Rose Twp	Yes	Yes	Yes	11/20/2017	11/15/2017	Yes
Royal Oak City	N/A	N/A	N/A			Own Plan
Royal Oak Twp	Yes	Yes	Yes	11/14/2017	11/14/2017	Yes
South Lyon City	Yes	Yes	Yes			Yes
Southfield City	Yes	Yes	Yes		11/15/2017	Yes
Southfield Twp	Yes	Yes	Yes	11/20/2017	11/15/2017	Yes
Springfield Twp	Yes	Yes	Yes		11/15/2017	Yes
Troy City	Yes	Yes	Yes		11/29/2017	Yes
Walled Lake City	Yes	Yes	Yes	11/20/2017	11/15/2017	Yes
Waterford Twp	Yes	Yes	Yes		11/20, 11/30	Yes
West Bloomfield Twp	Yes	Yes	Yes	11/14/2017	11/14/2017	Yes
White Lake Twp	Yes	Yes	Yes	11/15/2017	11/15/2017	Yes
Wixom City	Yes	Yes	yes	11/20/2017	11/15/2017	Yes
Wolverine Lake Village	Yes	Yes	Yes		11/20/2017	Yes



School District Representatives

Emergency planning and response personnel and/or safe school representatives for each of Oakland County's 28 public school districts and 2 public universities were contacted and interviewed by project staff. Each school representative was asked to identify hazards associated with the school district and ways in which those hazards could be mitigated. As a historical note, the schools were not included in the 2005 Plan since public school districts were not considered separate government agencies when the 2005 Plan was written; therefore, no evaluation of past goals, hazards or mitigation strategies was conducted at that time. However, schools were invited to participate in the 2012 and 2017 Plan. A list of the school district representatives is included in Volume III.

Public Outreach

Three public meetings were held throughout the County during the month of October and November 2017. The first public meeting was held at Oakland County International Airport on October 17, 2017 from 6 p.m. to 8 p.m. Another public meeting was held October 23, 2017 at the Farmington Hills Fire Station #5 from 6 p.m. to 8 p.m. The final public meeting was held on November 1, 2017 at the Oakland County Homeland Security Division from 7 p.m. to 9 p.m. The purpose of the meetings was to share and validate the hazard risk findings, receive public input on important mitigation initiatives, and to provide an overview of the project, discuss the processes and purposes of the planning process and resulting HMP and to provide the project contacts and web links to individuals who wanted to receive further information, or to provide input, regarding the Plan and planning process.

The public meetings were publicized with advertisements in the Oakland Press and by e-mail sent to members of the Advisory Committee and municipal/school stakeholders. Invites were also sent to key community groups. Copies of public meeting materials and outreach efforts are provided in Appendix B.

Other Stakeholders

In addition to involving representatives of regional agencies and neighboring communities as part of the project Advisory Committee, the following stakeholders were invited to provide input on the draft Plan:

- American Red Cross Southeastern Michigan Chapter
- Michigan State University Cooperative Extension Service
- Oakland County Water Resources Commissioner's Office
- Road Commission for Oakland County
- Oakland County Planning and Economic Development Services
- Oakland County Health Division
- Oakland County Sheriff's Office
- Friends of the Rouge
- Clinton River Watershed Council
- Huron River Watershed Council
- Genesee County LEPC
- Lapeer County LEPC



- Livingston County LEPC
- Macomb County LEPC
- St. Clair County LEPC
- Washtenaw County LEPC
- Wayne County LEPC
- U.S. Geological Survey
- U.S. Army Corps of Engineers
- National Weather Service
- Southeast Michigan Council of Governments (SEMCOG)

Plan Activities

Online Planning System

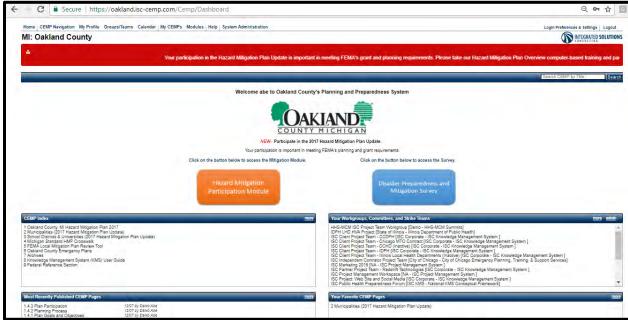
One of the key features of the Online Planning System was the ability to provide real-time access to the plan and to allow stakeholders to comment on key sections (https://oakland.isc-cemp.com). Advisory Committee members and municipal/school stakeholders were given access to the system. Comments can be used to encourage collaboration for plan maintenance. The Comments tool allowed the user to make comments on any page within the manual and mark the comment as an observation or feedback. Comments for pages were visible to all administrators and users who had editing privileges for the specific page.

To make a comment, users were instructed to click on the Comment link on the bottom of the content page and a pop-up box would appear. The person used the drop-down box to designate whether the comment was a Feedback or an Observation. After entering the comment, they clicked the Send Comments button to submit.

The comment would appear after the page refreshes (if user is allowed to view comments). An email notification was sent to users who were designated to receive comment notification.



Figure 3: Online Planning System



Surveys

A hazard mitigation and preparedness questionnaire was developed to gauge household preparedness for all hazards and the level of knowledge of tools and techniques that assist in reducing risk and loss. This questionnaire was designed to help identify areas vulnerable to one or more hazards. The answers to its questions helped guide the Advisory Committee in prioritizing hazards of impact and in selecting goals, objectives and mitigation strategies. The 30-question survey reached 1,150 residents and resulted in 854 completed responses. On average, it took respondents 16 minutes to complete the survey. Advisory Committee members, community and school representatives, and the public were asked to rate each of the hazards in terms of perceived risk. They were also asked to rate "mitigation importance" for each of the identified hazards in the plan. Information from this survey was used to inform the hazard risk prioritization process.

The complete questionnaire and a summary of its findings can be found in Appendix D and E. The online version of the questionnaire can be accessed at: http://oakland.preparedness.sgizmo.com/s3/



Figure 4: Online Questionnaire



Advisory Committee Meetings

The Advisory Committee met four (4) times between May and December 2017, in a series of meetings.

Meeting agendas and attendance logs can be found in Appendix B of this document. All Advisory Committee meeting times and locations were sent via e-mail and with follow-up phone calls, as needed. See Appendix B for a copy of Agendas, meeting materials, and photos of the meetings.

Webinars

Multiple Webinars were conducted between August 29, 2017 and September 8, 2017. In total, seven (7) webinars were offered to municipal and school district representatives. Webinars lasted about 1 hour. The purpose of these webinars was to provide stakeholders with an orientation to the mitigation planning process, and to provide a brief tutorial on the online planning system so municipal and school stakeholders could access their community or school district's portion of the plan.

Workshops

Four (4) workshops held strategically throughout the County for the identification and prioritization of hazards, hazard mitigation strategies and Action Plans. The workshops were specifically geared for municipal and school district stakeholders. Specifically, participants validated the County's risk assessment findings, described specific hazard risks and concerns for their own communities and schools, updated existing mitigation actions/strategies from the 2005 and 2012 Plan, and worked with their local planning team to identify new mitigation initiatives. Through a combination of ranking exercises, worksheets and discussion, workshop participants



evaluated hazard risk results; evaluated the 2012 Plan goals, objectives, mitigation strategies, Action Plans and rankings; identified goals and objectives for the 2017 Oakland County HMP Update and selected options for mitigating specific hazards to be included in this Plan.

Participants were encouraged to bring their local planning team, which included the following:

- Building Code Enforcement
- City Management/County Administration
- Emergency Management
- Fire Department/District
- Floodplain Administration
- Geographic Information Systems
- Parks and Recreation
- Planning/Community Development
- Public Works
- Storm water Management
- Transportation (Roads and Bridges)
- City Council/Board of Commissioners
- Planning Commission
- Planning/Community Development

- Regional/Metropolitan Planning Organization(s)
- City/County Attorney's Office
- Economic Development Agency
- Local Emergency Planning Committee
- Police/Sheriff's Department
- Sanitation Department
- Tax Assessor's Office
- Special Districts and Authorities
- Airport, Seaport Authorities
- Fire Control District
- Flood Control District
- School District(s)
- Transit Authority
- Utility Districts

Workshops were held at the following locations:

Tuesday, October 17th	Oakland International Airport 6500 Highland Rd. Waterford MI 48327	Local/School Emergency Management Team 2pm to 4 pm Public Meeting 6 pm to 8 pm
Wednesday, October 18th	Independence Twp Fire Station 1 6500 Citation Dr. Clarkston MI 48346	Local/School Emergency Management Team 2 pm to 4 pm
Monday, October 23rd	Farmington Hills Fire Station 5 21455 W. 11 Mile Rd Farmington Hills MI 48336	Local/School Emergency Management Team 2 pm to 4 pm Public Meeting 6 pm to 8 pm
Tuesday, October 24th	Baker's of Milford 2923 S. Milford Rd. Milford MI 48381	Local/School Emergency Management Team 2 pm to 4 pm

The agenda, meeting materials and photos are presented in Appendix B and C.



Community Meetings and Outreach

Representatives from each community in Oakland County were contacted to identify hazards of particular concern to that community and to evaluate the status of the 2012 mitigation strategies and goals. Local community concerns regarding individual hazards may be based on the history of hazard occurrence, potential for future hazard occurrence, consequence(s) of the hazard or hazards that are highlighted in community mitigation goals and objectives.

- 1. Initial e-mail/phone contact: A representative for each community, typically the emergency management coordinator, was identified as the initial contact. The individual was contacted to confirm their community's participation and was asked to identify other individuals within the community that should also participate in discussion involving hazard mitigation.
- 2. Telephone interviews and meetings (Workshops and Webinars) with the community representatives: Project staff contacted representatives from each community to identify and discuss locally significant hazards and preferred mitigation strategies. Meeting participation varied, but typically included the police and/or fire chief or local emergency management coordinator; the mayor, township supervisor, or village president and/or the leaders of one or more other municipal department. A list of meeting participants for each community is included in Volume II and III.
- 3. To further facilitate municipal and school district participation, the creation and distribution of online forms so county, municipal, and school stakeholders could easily submit local hazard risk concerns and mitigation strategies were created and distributed.
 - o Hazard Form: https://integratedsolutions.wufoo.com/forms/khx8k751tbt3wg/
 - o New Mitigation Action Projects Form: https://integratedsolutions.wufoo.com/forms/qo0ndg617ys5lw/

Plan Adoption

Formal adoption of a Hazard Mitigation Plan is required for FEMA for approval. The Draft Plan was provided to members of the project Advisory Committee. Copies of the Draft Plan were also provided to each municipality in Oakland County, to other stakeholders and the public via the Oakland County Homeland Security Division website.

Upon completing the comment/review period, the plan was submitted to the Michigan State Police, for review and comment. Following the State's review, the plan was submitted to FEMA for their review and conditional approval.

Upon FEMA review and conditional approval, the Plan was presented to the Oakland County Board of Commissioners for approval and adoption. The Oakland County Hazard Mitigation Plan was formally adopted by the Oakland County Board of Commissioners on [Insert Date of Adoption]. A copy of the County's resolution is included in Appendix G.

FEMA and the Michigan State Police also require that all multi-jurisdictional Plans be adopted, in whole or in part, by individual municipalities within the planning area. Municipal officials were informed of this requirement by letter and during the face-to-face interviews. A sample resolution of adoption was provided to each community by mail with a letter announcing the availability of



the Draft Plan for review. Information regarding local hazard priorities and local hazard mitigation strategies is included in separate subsections of the Plan so that each community may readily reference and adopt sections specific to their municipality. The communities listed in Table 2 have adopted this Plan, either in whole or in part, as indicated.

Plan Maintenance

Oakland County Homeland Security Division staff and the Oakland County Local Emergency Planning Committee (LEPC) will periodically review the Plan for required changes. Plan evaluation and maintenance is the responsibility of the Oakland County Homeland Security Division. Reviews of the hazard priorities, mitigation strategies and Action Plans will be conducted as necessary to maintain consistency with changes in the community, hazard history, and goals and objectives of Oakland County.

Changes constituting a substantive revision to the Plan will require that the new Plan be provided to the Oakland County Board of Commissioners, and the individual communities participating in the Plan, for approval and re-adoption.

The Plan must be updated and approved by FEMA within 5 years of the previous Plan's approval for Oakland County and Oakland County communities and school districts to remain eligible for pre-disaster and post-disaster funding. Please refer to the **Plan Maintenance and Implementation** section for additional information regarding this process.

Community Adoption

Table 3: Community Adoption

Community	Items Adopted	Date Adopted
Addison, City of		
Auburn Hills, City of		
Berkley, City of		
Beverly Hills, Village of		
Bingham Farms, Village of		
Birmingham, City of		
Bloomfield Hills, City of		
Bloomfield, Township of		
Bloomfield, Village of		
Brandon, Township of		
Clarkston, City of		
Clawson, City of		
Commerce, Township of		
Farmington, City of		
Farmington Hills, City of		
Ferndale, City of		
Franklin, Village of		



Community	Items Adopted	Date Adopted
Groveland, Township of		2 att 12 apreca
Hazel Park, City of		
Highland, Township of		
Holly, Township of		
Holly, Village of		
Huntington Woods, City of		
Independence, Township of		
Keego Harbor, City of		
Lake Angelus, City of		
Lake Orion, Village of		
Lathrup Village, City of		
Leonard, Village of		
Lyon, Township of		
Madison Heights, City of		
Milford, Township of		
Milford, Village of		
Northville, City of		
Novi, City of		
Novi, Township of Oakland, Township of		
Oak Park, City of		
•		
Orchard Lake, City of		
Orion, Township of		
Ortonville, Village of		
Oxford, Township of		
Oxford, Village		
Pleasant Ridge, City of		
Pontiac, City of		
Rochester, City of		
Rochester Hills, City of		
Rose, Township of		
Royal Oak, City of		
Royal Oak, Township of		
Southfield, City of		
Southfield, Township of		
Sylvan Lake, City of		
Troy, City		
Walled Lake, City		
Waterford, Township of		
West Bloomfield, Township of		
White Lake, Township of		
Wixom, City of		
Wolverine, Village of		



Community Profile

Historical Overview

The earliest inhabitants of the area were Native Americans of the Ottawa, Ojibwa, and Potawatomi Tribes. Many of Oakland County's main transportation routes originated from Native American trails such as the Saginaw Trail (Woodward Avenue), Shiawassee Trail (Orchard Lake Road) and Grand River Trail (Grand River Avenue).

In 1818, a group of men from Detroit and Macomb County formed the Pontiac Company with intent to purchase land and establish a town within Oakland County. Later that same year, a group of professionals and businessmen from Detroit surveyed the area and reported on Oakland County's abundant natural resources.

On January 12, 1819, Oakland County was officially organized by proclamation of Governor Lewis Cass. The Oakland County seat was established in Pontiac, with financial and property contributions from the Pontiac Company. Oakland County was divided into 2 townships, Oakland Township in the north and Bloomfield Township in the south. By 1827, Oakland County was further divided to encompass 5 townships with the addition of Farmington, Troy and Pontiac Townships.

The first official census of Oakland County was conducted in 1820 and reported a population of 330 people. The population quickly grew within the next 10 years to include 4,911 people in 1830. By 1870, Oakland County, population 40,867, was the fifth largest in the state. The 2010 U.S. Census reported 1,202,362 residents, which is second in Michigan only to Wayne County. According to Census projections, Oakland County is the thirty-third (33rd) most populous County in the United States with an estimated population of 1,243,970 people in 2016.⁵

Geography and Climate

Oakland County covers approximately 907 square miles and is located in southeast Michigan, north of Wayne County and west of Macomb County. The topography of Oakland County ranges from flat to gently rolling. Oakland County contains the headwaters for 5 major river systems or watersheds.

Weather in Oakland County is consistent with non-coastal areas of southeastern Michigan. Table 3 provides average monthly weather conditions in Oakland County from 2012 - 2016 as published by the National Climatic Data Center.

*Note: Consistent data could not be found for average snowfall from 2012 - 2016. Data for average snowfall in Table 3 reflects averages up to 2012.

⁵ United States Census Bureau



Table 4: Oakland County Temperature and Precipitation Averages

Month	Average Daily Temperature (F)	Average Precipitation (inches)	Average Snowfall (inches)
January	23.08	1.39	7.9
February	22.06	.794	7.3
March	35.64	1.34	5.8
April	45.52	2.73	1.6
May	60.4	3.06	0.0
June	68.06	3.14	0.0
July	72.14	3.42	0.0
August	70.7	3.39	0.0
September	63.58	2.68	0.0
October	51.68	2.39	0.1
November	39.4	1.45	2.5
December	30.98	1.41	8.1
Annual/Ave Total	48.6	27.19	33.3

Source: National Oceanic and Atmospheric Administration, Data Center, www.ncdc.noaa.gov, Pontiac Michigan, June 2017.



Figure 5: Watersheds



Source: Michigan DNR



Land Use Patterns

Although Oakland County's Planning and Economic Development Services Department provides a variety of planning tools and services, Oakland County does not exercise land use or zoning control. Instead, each of the individual cities, townships and villages in Oakland County are zoned and exercise their own control regarding land use planning and permitting. The exception is the Village of Bloomfield which is a subdivision within Bloomfield Township and not a separate political jurisdiction.

The current major land use in Oakland County is single-family residential followed by parks and recreational lands and open space. Since 1990, the land use category that has exhibited the greatest acreage increase has been single-family residential. The greatest decline exhibited has been in agricultural acreage. The Land Use Patterns and Trends table below details land use/land cover in Oakland County.

The increase in single-family residential land use is mirrored by Oakland County's housing characteristics. 2016 American Community Survey, 68.7% of Oakland County's housing units consist of single-family detached homes and 22.0% consist of multiple family housing units. The median home value of owner-occupied housing units in Oakland County is approximately \$191,500 and the median gross rent is \$968 per rental unit per month. Approximately 6.8% of all housing units in Oakland County are vacant.

Table 5: 2000 to 2008 Land Use Patterns & Trends

Land Use Types	2000 Acres	2008 Acres	Change
Single-Family	218,285	313,547	95,262
Multiple-Family	12,608	7,369	-5,239
Commercial	19,655	26,589	6,934
Governmental/Instrumental	13,711	26,014	12,303
Industrial	18,961	29,442	10,481
Transportation, Communication and Utility	9,917	60,623	50,706
Park, Recreation, and Open Space	22,789	66,314	43,525
Agriculture	42,920	21,005	-21,915
Other	193,302	832	NA
Water	28,310	28,895	585
Total Acres	540,458	580,628	170

Source: Southeast Michigan Council of Governments, www.semcog.org. Community Profile for Oakland County, viewed June 15, 2017

Transportation Network

There are approximately 7,343 miles of public roads within Oakland County. Oakland County roads are maintained by the Road Commission for Oakland County. This Road Commission is charged with maintaining over 2,700 miles of county roads, 230 miles of state highway and

⁶ Census Reporter, https://censusreporter.org/profiles/05000US26125-oakland-county-mi/, viewed June 15, 2017

⁷ SEMCOG, http://www.semcog.org/Community-Profiles#Transportation, viewed June 15, 2017.



approximately 1,500 county, city, and state traffic signals in Oakland County.⁸ Portions of the County road system are also maintained by the Michigan Department of Transportation and some municipalities.

The Suburban Mobility Authority for Regional Transportation (SMART) provides bus service to 54 fixed routes throughout Oakland, Wayne and Macomb Counties. SMART buses run 7 days per week, 22 hours per day and provide 12 million rides per day. SMART also provides specialized services to the elderly and handicapped.⁹

Oakland County has three (3) first-class airports: Oakland County International Airport, Oakland Southwest Airport and Oakland Troy Airport. ¹⁰ The Oakland County International Airport is designated a general aviation reliever airport that serves individuals, business and industry. It is the world's 13th busiest general aviation airport with approximately 128,766 takeoffs/landings per year. Over 554 aircraft are based at the airport. ¹¹ The Oakland Southwest Airport is a public airport located in Hudson, Michigan, and services southwest Oakland County. Approximately 59 aircraft are based at the airport, 54 of which are single engine planes. ¹² Oakland Troy Airport is used by private, corporate and charter aircraft. Approximately 103 aircraft are based at the airport, of which 92 are single engine planes and five are helicopters. Charter passenger, air freight, aircraft maintenance and fueling are available on the field. ¹³

Passenger rail service is provided by Amtrak with stations located in Pontiac, Birmingham, and Royal Oak. The rail service connects to Detroit, which further connects passengers to numerous cities throughout the country. Freight rail lines are located throughout Oakland County and are operated by Canadian National Railway and CSX Transportation. ¹⁴

⁸ Oakland County Road Commission, http://www.rcocweb.org/27/About-Us, viewed June 15, 2017.

⁹ SMART, http://www.smartbus.org/aboutus/overview/Pages/default.aspx, viewed June 15, 2017.

¹⁰ Oakland County, http://www.oakgov.com/aviation/.viewed June 15, 2017.

¹¹ Ibid

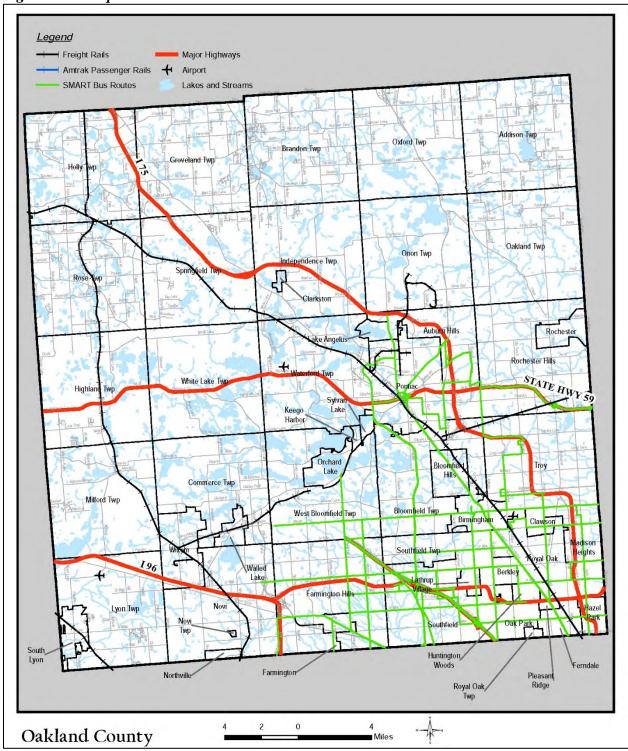
¹² Air Nav, www.airnav.com/airport/Y47, viewed June 15, 2017.

¹³ Air Nav, www.airnav.com/airport/KVLL, viewed June 15, 2017.

¹⁴ Oakland County, http://accessoakland.oakgov.com/datasets/oc-railroad, viewed June 15, 2017.



Figure 6: Transportation Networks



Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI



Population and Demographic Characteristics

Oakland County is the second most populous county in Michigan.¹⁵ Population projections estimate that in 2035 the population will increase approximately 10% above 2010 U.S. Census values. The following tables contain demographic information for Oakland County, as provided by the Southeast Michigan Council of Governments (SEMCOG), 2010 U.S. Census Bureau and 2015 American Community Survey.¹⁶¹⁷

Table 6: 1990 through 2035 Oakland County Population Projection

<i>G</i>	
Year	Population Count/Projection
1990	1,083,592
2000	1,194,156
2010	1,202,362
2020	1,218,449
2035	1,232,672

Source: SEMCOG, viewed June 15, 2017

Table 7: 2016 Household Characteristics

Subject	Number	Percent
Total Housing Units	533,097	
Households (Occupied Units)	496,727	93.2
Family Households	321,879	64.8
Family Households with Own Children Under 18	138,587	27.9
Average Household Size	2.46	-

Source: 2016 American Community Survey, viewed December 14, 2017

Table 8: 2016 Oakland County Age, Gender, and Race Statistics

Subject	Number	Percent
Total Population	1,235,215	100.0
Age		
Under 5 Years	68,130	5.5
5 to 9 Years	74,219	6.0
10 to 14 Years	79,556	6.4
15 to 19 Years	80,087	6.5
20 to 24 Years	72,466	5.9
25 to 34 Years	153,031	12.4
35 to 44 Years	159,762	12.9
45 to 54 Years	188,161	15.2
55 to 59 Years	93,929	7.6
60 to 64 Years	79,927	6.5
65 to 74 Years	107,043	8.7

¹⁵ U.S. Census Bureau, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk, viewed June 15, 2017

¹⁶ SEMCOG, http://www.semcog.org/Community-Profiles, viewed June 15, 2017.

¹⁷ American Community Survey, US Census Bureau, viewed August 15, 2017



Subject	Number	Percent
75 to 84 Years	52,645	4.3
85 Years and Over	26,259	2.1
Race		
Non-Hispanic	1,188,732	96.2
White	937,568	75.9
Black or African-American	170,742	13.8
Asian	80,680	6.5
Multi-racial	33,360	2.7
Other	9,390	.8
Hispanic	46,483	3.8

Source: 2016 U.S. Census Bureau, viewed June 15, 2017, SEMCOG, viewed June 15, 2017

Table 9: 2016 School Enrollment

Subject	Number	Percent
Population 3 Years and Over Enrolled	312,733	100.0
Nursery School, Preschool	19,939	6.4
Kindergarten	13,619	4.4
Elementary School (grades 1-8)	123,217	39.4
High School (grades 9-12)	69,323	22.2
College or Graduate School	86,636	27.7

Source: 2016 American Community Survey, viewed December 14, 2017

Table 10: 2016 Educational Attainment

Subject	Number	Percent
Population 25 Years and Over	860,757	100.0
Less than 9th Grade	18,343	2.1
9th to 12th Grade, No Diploma	37,959	4.4
High School Graduate	167,959	19.5
Some College, No Degree	182,857	21.2
Associate's Degree	66,118	7.7
Bachelor's Degree	221,412	25.7
Graduate or Professional Degree	166,109	19.3

Source: 2016 American Community Survey, viewed December 14, 2017

Table 11: 2016 Disability Status of the Civilian

Disability Status of Civilian	Number	Percent
Total Civilian Noninstitutionalized	1,229,304	100.0
With a Disability	143,237	11.7
Under 5 Years	68,121	100.00
With a Disability	812	1.2
5 to 17 Years	204,829	100.00
With a Disability	10,356	5.1
18 to 34 Years	253,222	100.00
With a Disability	15,308	6.0



Disability Status of Civilian	Number	Percent
35 to 64 Years	520,670	100.00
With a Disability	56,735	10.9
65 to 74 Years	106,431	100.00
With a Disability	23,556	22.1
75 Years and Over	76,031	100.00
With a Disability	36,470	48.0

Source: 2016 American Community Survey, viewed December 14, 2017

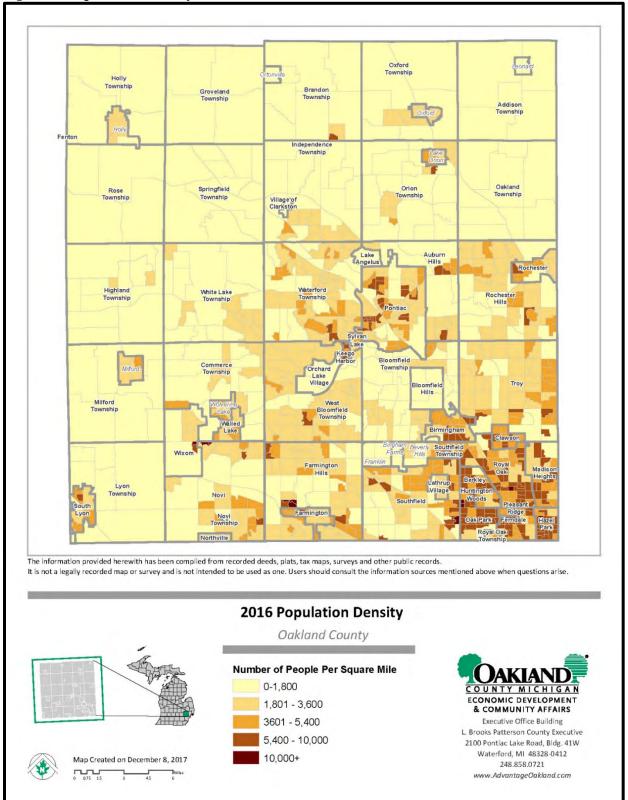
Table 12: 2016 Language Spoken at Home

Subject	Number	Percent
Population 5 Years and Over	1,167,085	100.0
English Only	997,467	85.5
Language Other than English	169,618	14.5
Spanish	29,923	2.6
Other Indo-European Languages	62,165	5.3
Asian and Pacific Islander Languages	43,429	3.7
Other Languages	34,101	2.9

Source: 2016 American Community Survey, viewed December 14, 2017



Figure 7: Population Density



Source: Oakland County, MI



Economic Characteristics

According to the SEMCOG 2040 Forecast produced in 2012, there were approximately 901,219 jobs within Oakland County as of 2015. Based off U.S. Census Bureau estimates, approximately 80% of the Oakland County population is over 16 years of age with 66% of that population in the workforce. 18

Table 13: Industries

Industry	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	1,601	0.3%
Construction	24,315	3.9%
Manufacturing	113,152	18.3%
Wholesale trade	16,202	2.6%
Retail trade	62,192	10.0%
Transportation and warehousing, and utilities	17,566	2.8%
Information	12,767	2.1%
Finance and insurance, and real estate and rental and leasing	47,726	7.7%
Professional, scientific, and management, and administrative and waste management services	87,708	14.2%
Educational services, and health care and social assistance	140,927	22.8%
Arts, entertainment, and recreation, and accommodation and food services	52,857	8.5%
Other services, except public administration	24,922	4.0%
Public administration	17,138	2.8%
Total (Employed Civilian population over age 16)	619,073	100%

Source: Table DP03 2016 American Community Survey 5-Year Estimates

Table 14: Household Income

Income	Number	Percent
Less than \$10,000	26,372	5.3%
\$10,000 to \$14,999	18,287	3.7%
\$15,000 to \$24,999	40,393	8.2%
\$25,000 to \$34,999	39,878	8.1%
\$35,000 to \$49,999	59,411	12.0%
\$50,000 to \$74,999	85,151	17.3%
\$75,000 to \$99,999	63,752	12.9%
\$100,000 to \$149,999	81,666	16.5%
\$150,000 to \$199,999	36,993	7.5%
\$200,000 or more	41,586	8.4%
Median household income (dollars)	67,465	13.7%
Mean household income (dollars)	92,580	18.8%
Total Households	493,489	100%

Source: Table DP03 2015 American Community Survey 5-Year Estimates

¹⁸ SEMCOG, http://www.semcog.org/Data/apps/comprof/economy.cfm?cpid=2999, viewed June 22, 2017.



Community Services/Organizations

Natural gas service is provided to Oakland County customers by Consumers Energy, DTE Gas, and SEMCO. Those outside of natural gas service areas and those using other heating fuels are serviced by AmeriGas, Ferrellgas, Hamilton's Propane, Northwest Energy and Oakland Fuels. Electrical service is provided by Consumers Energy and DTE Electric. The primary telephone service providers are AT&T, CenturyTel Midwest, Frontier and Verizon North. Water and sewer services for a large portion of Oakland County are overseen by the Water Resources Commissioner's Office.

Oakland County provides a number of services to residents through various agencies and departments, including the Office of the Water Resources Commissioner, Homeland Security Division, Equalization, Health Division, Parks and Recreation, Planning and Economic Development Services and the Oakland County Sheriff's Office. Many of the County's services operate from the Oakland County government campus at 1200 North Telegraph Road in Pontiac, Michigan.

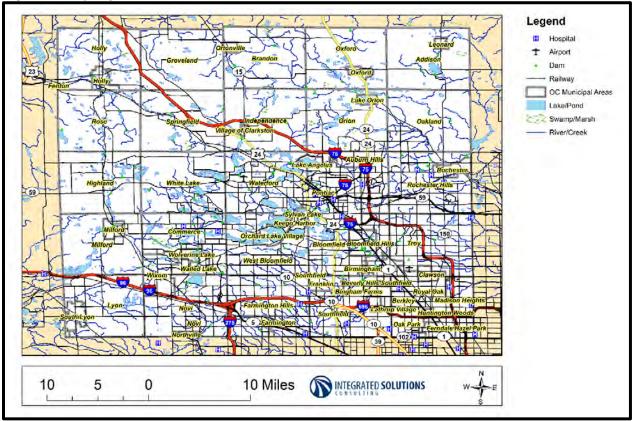
Oakland County is served by 28 school districts. Also within Oakland County are multiple colleges and universities. Additional learning resources are provided through public library services throughout the County.

Oakland County has an extensive Parks and Recreation Department which maintains 13 County parks. The County is also home to numerous festivals such as the annual Arts, Beats and Eats; Renaissance Festival and the Woodward Dream Cruise. Major shopping and entertainment venues within the County include the Great Lakes Crossing Outlets, the Somerset Collection, Twelve Oaks Mall, the Suburban Collection Showplace, and the DTE Energy Music Theatre.



Critical Assets





The following list of the top critical assets was developed based on current and future land use in Oakland County, the nature of hazards which may affect the County and the results of community input. The following facilities and infrastructure were identified as critical to providing essential products and services to the general public, preserving the welfare and quality of life of the community and assuring public safety, emergency response and disaster recovery. Changes to the critical assets list from the 2005 Plan included adding "other response facilities" to hospitals and removing natural areas from the list. Natural areas are included under open spaces. The advisory committee voted on the following critical assets list during the plan update process:

- Central business districts
- Commercial sites
- Hospitals/other response facilities
- Industrial sites
- Open spaces
- Public facilities
- Residential areas
- Roads, railroads and bridges
- Schools and churches



- Sports and entertainment venues
- Utility facilities

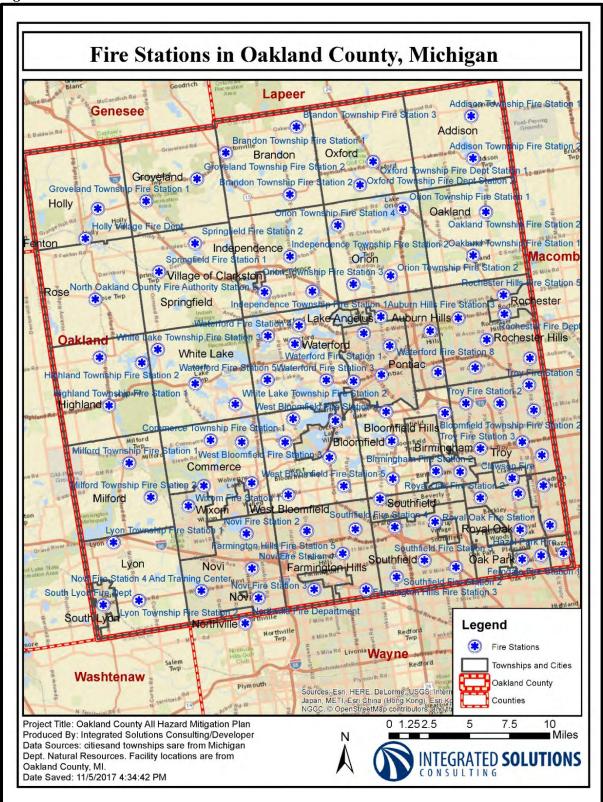
Natural features are highly valued assets in Oakland County. Oakland County Planning and Economic Development Services has established a priority ranking for all natural features to preserve the remainder of the County's natural heritage. The purpose of establishing priority areas is to maintain the economic, environmental, educational and recreational benefits that natural areas provide.

Additional assets, because of their increased vulnerability and/or importance to the community, are noted in this section of the plan. They include:

- Historical Sites
- Manufactured Housing



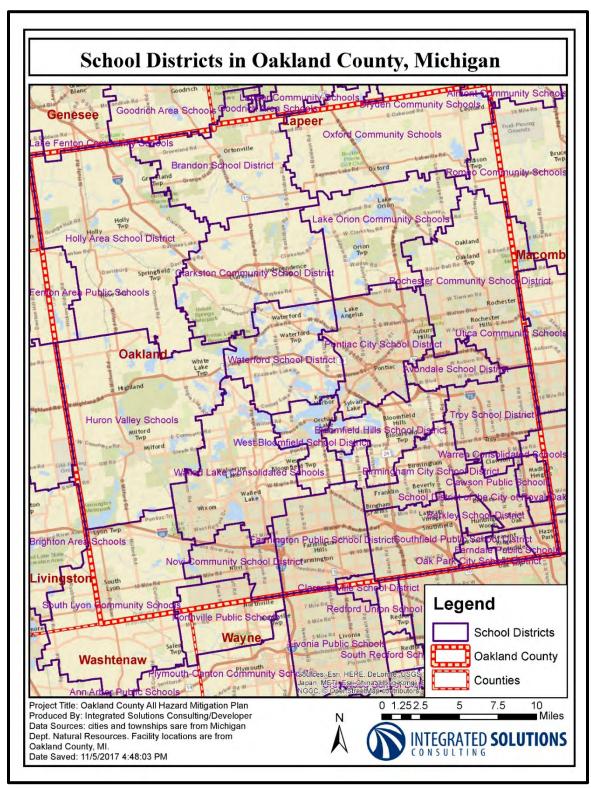
Figure 9: Fire Stations



Source: Oakland County, MI



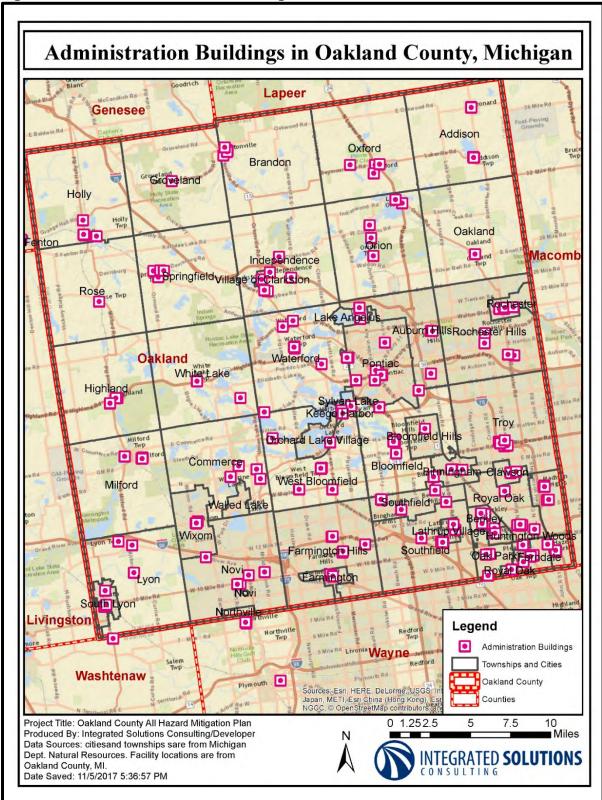
Figure 10: School Districts



Source: Oakland County, MI



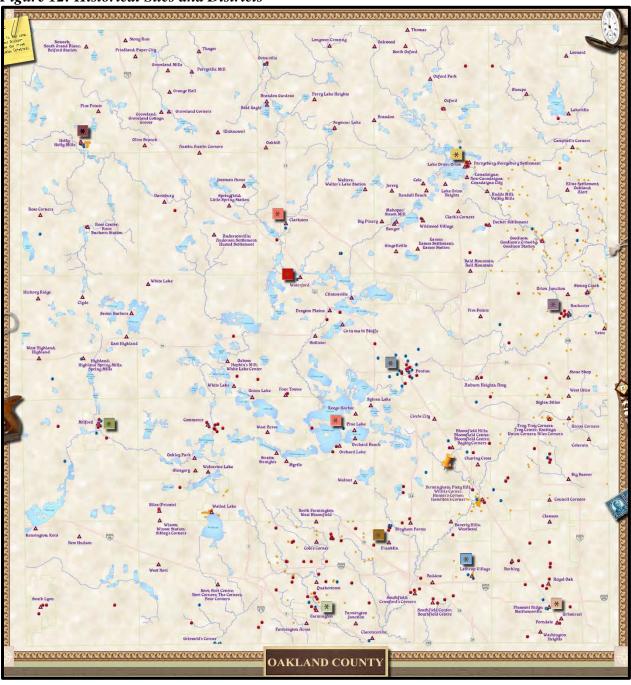
Figure 11: Administration-related Buildings



Source: Oakland County, MI









Source: Oakland County, MI



Table 15: Historical Designations

Oakland County Historic Designations

REVISED 12/8/2017

Community	CVT Type	National Historic Landmarks	National Register of Historic Places	Michigan State Register of Historic Sites	Local Historic District
Addison	Township	No	No	2	
Auburn Hills	City	No	No	2	
Berkley	City	No	No	2	
Beverly Hills	Village	No	No	1	
Bingham Farms	Village	No	No	No	
Birmingham	City	No	3	2	Yes
Bloomfield Hills	City	1	2	1	
Bloomfield	Township	No	2	4	
Brandon	Township	No	No	1	
Clarkston	City	No	1	No	Yes
Hazel Park	City	No	No	No	
Commerce	Township	No	1	8	
Farmington Hills	City	No	3	29	Yes
Leonard	Village	No	No	No	
Fenton		No	No	No	
Oak Park	City	No	No	No	
Waterford	Township	No	1	5	Yes
Groveland	Township	No	No	No	
Holly	Township	No	2	No	
Lathrup Village	City	No	2	No	Yes
Wixom	City	No	No	3	
Clawson	City	No	No	No	
Huntington Woods		No	No	1	Yes
Independence	Township	No	1	2	
Keego Harbor	City	No	No	No	
Lake Angelus	City	No	No	No	
Farmington	City	No	1	2	Yes
Ferndale	City	No	No	2	
Franklin	Village	No	2	4	Yes
Lyon	Township	No	No	1	
Madison Heights	City	No	No	No	
Milford	Township	No	1	1	
Milford	Village	No	3	6	Yes
Northville	City	No	1	No	
Novi	City	No	1	1	
Novi	Township	No	No	No	
Holly	Village	No	3	3	Yes
Oakland	Township	No	3	2	Yes
Orchard Lake	City	No	1	3	Yes
Orion	Township	No	No	3	
Lake Orion	Village	No	No	6	Yes
Oxford	Township	No	1	1	
Ortonville	Village	No	1	1	
Pleasant Ridge	City	No	2	No	Yes



Oakland County Historic Designations

REVISED 12/8/2017

Community	CVT Type	National Historic Landmarks	National Register of Historic Places	Michigan State Register of Historic Sites	Local Historic District
Oxford	Village	No	No	3	
Rochester Hills	City	No	3	5	Yes
Pontiac	City	No	15	11	Yes
Rose	Township	No	1	1	
Royal Oak	City	No	1	7	Yes
Royal Oak	Township	No	No	1	
South Lyon	City	No	No	3	
Southfield	City	No	No	8	Yes
Southfield	Township	No	No	No	
Springfield	Township	No	No	1	
Sylvan Lake	City	No	No	No	
Troy	City	No	2	10	Yes
Rochester	City	No	2	7	
Highland	Township	No	2	No	
West Bloomfield	Township	No	No	No	
White Lake	Township	No	No	2	
Walled Lake	City	No	No	1	Yes
Wolverine Lake	Village	No	No	No	
Total		1	64	159	

Source: Oakland County, MI



Figure 13: Manufactured Home Communities Oxford Addison Township Lake Orion Bloomfield Township omfiel Hills West Bloomfield Township -Birminghan Franklin Berkley Lyon Lathrup Village Oak Park Royal Oak Northville The information provided herewith has been compiled from recorded deeds, plats, tax maps, surveys and other public records. It is not a legally recorded map or survey and is not intended to be used as one. Users should consult the information sources mentioned above when questions arise. **Manufactured Home Communities**

Existing Land Use 2016 Mobile Home Park Mobile Home Park ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS Executive Office Building L. Brooks Patterson County Executive

Executive Office Building
L. Brooks Patterson County Executive
2100 Pontiac Lake Road, Bidg. 41W
Waterford, MI 48328-0412
248.858.0721
www.AdvantageOakland.com

Source: Oakland County, MI

Map Created on December 8, 2017



Hazard Profile & Risk Assessment

The Plan evaluated over 50 hazards during the 2017 Oakland County HMP Update. Hazards were identified using a combination of historical research, surveys, workshops, community and public meetings, and the 2012 Plan. Based on this evaluation, specific hazards were identified as requiring additional consideration, and therefore are the focus of this Mitigation Plan. These hazards were selected to represent both County-wide and local community concerns. Evaluation of these hazards does not reduce the significance of a hazard event from any of the hazards evaluated, but provides a method for Oakland County to focus mitigation activities and resources.

Some of the hazards were consolidated into similar groupings (e.g., all forms of infrastructure failure were ultimately combined). Per FEMA's mandate to address all natural hazards, the following natural hazards were not included because these hazards do not directly impact the County. They are:

- Hurricanes
- Sea Level Rise
- Storm Surge
- Tsunami

While this section provides a detailed description and profile of each hazard, the analysis is provided at the county level. **Specific hazard risks and concerns for the municipalities and school districts are addressed in Volume II and Volume III of this Plan.** The hazards that are addressed in this section are:

Natural Hazards

- Drought
- Earthquake
- Extreme Temperatures Extreme Cold
- Extreme Temperatures Extreme Heat
- Fire Wildfires
- Flooding Riverine
- Fog
- Invasive Species
- Subsidence Natural
- Thunderstorms Hail
- Thunderstorms Lightning
- Thunderstorms Severe Wind
- Tornadoes
- Winter Hazards Ice and Sleet
- Winter Hazards Snowstorms

Manmade/Technological Hazards

- Criminal Acts Vandalism and Arson
- Criminal Acts Mass Shootings
- Fire Scrap Tire
- Fire Structural
- Flooding Dam Failure
- Flooding Urban
- Hazmat Incidents Fixed Site
- Hazmat Incidents Transportation
- Infrastructure Failure Bridges, Roads, Overpasses
- Infrastructure Failure Communications
- Infrastructure Failure Electrical Systems
- Infrastructure Failure Sewer System



- Infrastructure Failure Storm Water System
- Infrastructure Failure Water System
- Nuclear Power Plant Accidents
- Oil and Gas Well Accidents
- Petroleum and Natural Gas Pipeline Accidents
- Subsidence Mining
- Transportation Accidents Air
- Transportation Accidents Highway
- Transportation Accidents Marine

- Transportation Accidents Rail
- Gas/Oil Shortages or Supply Disruptions

Political Hazards

- Civil Disturbance
- Terrorism and Sabotage
- Weapons of Mass Destruction

Public Health Hazards

• Public Health Emergencies

This section provides a comprehensive profile of each hazard. It identifies those hazards that have occurred or could occur in Oakland County. Each hazard profile is organized, as such:

1. Definition

The description gives an overarching picture of the hazard.

2. Historical Events

This section describes actual occurrences. If local examples or occurrences were not available, state and/or relevant national and international instances were used.

3. Frequency/Probability & Previous Occurrences

This section describes how often the hazard has occurred. The National Climatic Data Center was used to populate this section for many natural hazards. If there were no previous examples of this hazard affecting the County, or the County was only minimally affected, other geographical areas were considered, including State, National and in some cases, International locations.

4. Area Impacted

The location identifies which area(s) the hazard has impacted and/or is most likely to affect.

5. Health and Safety

This section describes the life safety considerations related to the hazard.

6. Economic Impact

The economic impact of disasters can be devastating. This section attempts to capture the direct and indirect costs, damages, and cascading impacts resulting from the hazard.

7. Critical Facilities/Services

This section describes the key assets within the County and services that are most likely to be affect by the hazard, such as property damages or other vulnerabilities.



8. Hazard Evaluation and Impact/consequence Assessment

Finally, the hazard assessment section shows the ratings assigned to the various categories of the Community Vulnerability, Risk, and Resiliency (CVR2) process. The CVR2 process is a scientific and patented method developed by Integrated Solutions Consulting for analyzing and ranking hazard risk. A detailed description of the methodology is provided in the Hazard Assessment & Analysis section.

Civil Disturbances

Definition

A public gathering or inmate uprising that disrupts essential functions and results in unlawful behavior such as rioting or arson. This event involves a large number of people and requires a significant response effort by law enforcement and/or emergency responders.

Historical Events

In Michigan, large civil disturbances are not common and typically are a result of the following causes:

- Labor disputes
- Controversial court judgment or government actions
- Resource shortages
- Demonstrations by special interest groups
- Unfair death or injury
- Celebrating a victory by a sports team.

Although not in Oakland County, the five-day 1967 Detroit Riot (from July 23rd to 27th) left 43 people dead and 1,189 injured. Over 7,200 people were arrested and property damages reached into the hundreds of millions of dollars. Racial tensions sparked the Detroit Riot.

An anti-war demonstration at Memorial Park in Royal Oak, Michigan took place on May 6, 1970. Upon leaving the park, the protesters (many of whom were young) got into a confrontation with local police. Five protesters were arrested, three protesters were injured, and one policeman was injured.

The Memorial Park Riot took place between August 24th and 27th, 1970 in Royal Oak, Michigan. Police shut down the park due to drug sales, drug use, and illegal parties. When the police went to shut down the park, 800 youths confronted the police officers and sparked a four-hour riot. Windows were broken and barricades were built on Woodward Avenue. One hundred protesters were arrested the second night of the riots and a curfew was imposed. Due to the curfew, at least 1,000 young rioters moved north into Birmingham on the third night (some estimates have up to 2,000 rioters involved). Over 560 people were arrested on the third night, and a curfew was imposed in both Royal Oak and Birmingham. No violence occurred on the fourth night, although 90 people were arrested for breaking curfew.

In 2008, approximately 100 people started rioting with police at what is now McLaren Hospital in Pontiac following a police investigation into the shooting of a local man. The Pontiac Police called



for assistance from Michigan State Police and the Oakland County Sheriff's Office to bring the crowd under control. ¹⁹ Neighboring areas, such as the City of Detroit, have a history of major civil disturbances, primarily as a result of civil rights demonstrations and labor disputes.

Frequency & Probability

A civil disturbance occurs in Michigan approximately once every 10 years.²⁰ Civil disturbances are most common in areas of economic or social inequality, sporting events, universities and colleges and prisons. The most likely causes for a civil disturbance in the County would be a result of a labor dispute, a sporting event or a demonstration at a college, government or military facility within the County. Oakland County houses the Palace of Auburn Hills, 19 universities and colleges, 10 detention facilities/correctional camps and numerous cities.

Although there is limited history of civil disturbances within Oakland County, the potential for this hazard to occur is somewhat elevated due to the number of sport/entertainment venues, educational facilities, detention facilities and government facilities within the County.

Health & Safety

The 2008 Pontiac riot was small and localized. There were no reports of death or serious injuries resulting from the riot. State-wide, there have been over 75 deaths and over 1,700 injuries from major civil disturbances from 1943 - 2008.²¹

Area Impacted

Civil disturbance events often involve acts of arson, looting and vandalism which can result in devastating levels of property damage. There were no reports found listing the amount of property damage resulting from the Pontiac riot. From 1967 to 2001, civil disturbances in Michigan have totaled over \$50 million in property damage.²²

Places of public gathering such as festivals, sporting and entertainment venues, colleges and universities, detention facilities and government facilities are the most likely places for a civil disturbance to occur.

Economic Impact

The economic impact of a civil disturbance reaches far beyond emergency response costs and property damage. Economic recovery from civil disturbances is very slow and often requires government assistance to revive the local economy. This hazard can tarnish an area's image and deter potential investors and residents. The Pontiac riot was small and localized. The economic impact of the riot was localized and short term because of limited publicity and short duration without any reported deaths or serious injuries.

¹⁹ Oakland County Sheriff Report, July 2, 2008.

²⁰ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 7 and 16-22.

²¹ Oakland County Sheriff Report, July 2, 2008.

²² Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 7 and 16-22.



Critical Facilities/Services

The nature of civil disturbances is such that local emergency response services are often overwhelmed. As a result, aid is often required from other local or state units.

The high degree of property damage that may occur from this hazard can greatly impact the ability to operate or provide services at the hazard location (particularly sporting and entertainment venues, colleges and universities, detention facilities and government facilities). The Pontiac riot required Michigan State Police and the Oakland County Sheriff's Office to assist the Pontiac Police Department. The riot occurred at a hospital after the police arrived to inspect the body of a rapper who had been shot and killed. Fortunately, the police were able to keep the riot localized and were able to diffuse the situation before any serious impacts.

Civil Disturbance Risk & Vulnerability Assessment

A civil disturbance in Michigan occurs, on average, once every 10 years. The most likely causes for a civil disturbance in the County are labor disputes, sporting events, viewed inequality, or demonstration at a college, government facility, detention facility, or military facility.

In 2008, approximately 100 people started rioting with police at what is now McLaren Oakland Hospital in Pontiac, following a police investigation into the shooting of a local man. The Pontiac Police Department called for assistance from the Michigan State Police and Oakland County Sheriff's Office to bring the crowd under control. No serious injuries or fatalities were reported.

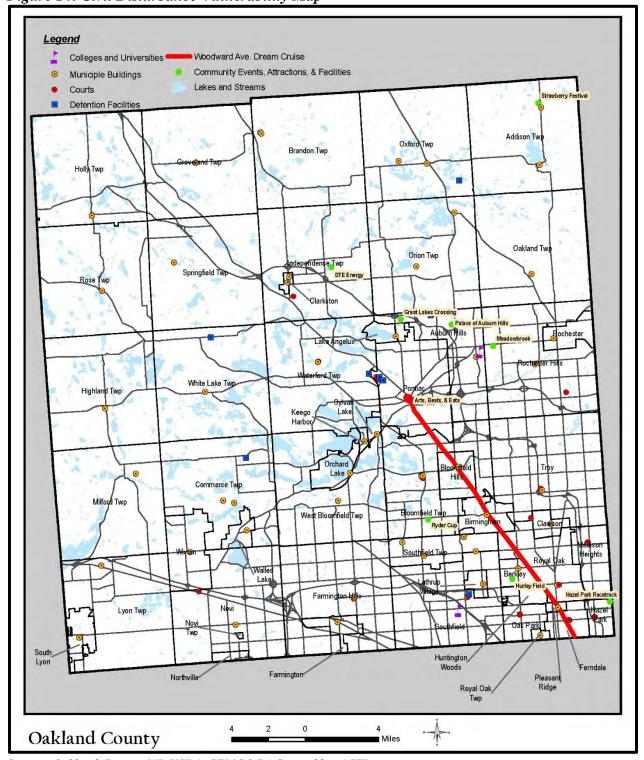
Oakland County features numerous places of public gathering including major entertainment venues, festivals, national events, major athletic facilities, places of political protest, and governmental facilities. The most vulnerable locations/events include the following.

- Courthouses and federal buildings
- Detention facilities
- DTE Energy Music Theatre
- Great Lakes Crossing Outlets
- Hazel Park Raceway
- Meadowbrook Hall & Theater
- Michigan State Fair
- Oakland Community College
- Oakland County Fair
- Oakland University
- Renaissance Festival
- Royal Oak Arts, Beats, & Eats
- Woodward Dream Cruise

Police stations are vulnerable in response to a civil disturbance event. Figure 14 displays the locations/events listed, as well as those of specific concern to communities. Locations of police stations in the County are also shown in Figure 14.



Figure 14: Civil Disturbance Vulnerability Map



Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI



Table 16: Civil Disturbance Hazard Evaluation and Impact/Consequence Assessment

1 abic 10. Civil Distarbance Hazara Dialation and Impacts Consequence Assessment						
Frequency & Probability ¹			13			
Potential N	Magnitude and Scale ¹		22			
Physical V	Julnerability Hazard Impag	ct ¹		58		
Social Vul	Inerability Hazard Impact ¹		59			
Communi	ty Conditions Hazard Impa	act ¹		40		
Overall Ca	apability and Capacity ²			73		
Mitigation	1^2		67			
Hazard Co	onsequence & Impact Scor	·e ¹	43			
Overall Ri	isk Rating ³		23			
		Leg	end			
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable		Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium		
51 – 75	Vulnerable	Capable		High		
76 - 100	Very Vulnerable	Very Capable		Extreme		
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown		

Criminal Acts

Vandalism

Definition

Vandalism is the willful or malicious destruction, injury, disfigurement or defacement of any public or private property, real or personal, without consent of the owner or person having control. A vandalism offense is an act of vandalism which is reported to a law enforcement agency.

Historical Events

Examples of acts of vandalism can include graffiti, tampering with traffic signs and damage to vacant buildings. In more extreme cases, vandalism can occur to public facilities or infrastructure and has the potential to result in significant impact to the community.

Oakland County certainly is not immune from acts of vandalism. In February 1984, vandals entered a parking lot for public school buses in Lake Orion. The vandals discharged extinguishers in nearly entire fleet of 52 buses. This act of vandalism cancelled school for 5,000 Lake Orion students.²³

Table 17: Total Vandalism Offenses in Oakland County

Year	Total
1997	10,753
1998	11,444

²³ Detroit Free Press, State Edition, February 17, 1984, Page 3A.



1999	8,206
2000	10,110
2001	10,117
2002	9,471
2003	9,610
2004	8,207
2005	8,002
2006	8,287
2012 (Damage to property)	5,132
2013 (Damage to property)	4,101
2014 (Damage to property)	3,819
2015 (Damage to property)	3,524
2016 (Damage to property)	3,785

Source: Michigan State Police, Uniform Crime Reports, Requested June 26, 2017

Frequency and Probability

From 1997 through 2006, there were a total of 94,207 vandalism offenses reported in Oakland County, an average of 9,421 vandalism offenses each year. ²⁴. It must be noted that no data for vandalism could be found for 2007 - present. To capture current data, "Damage to Property" was used to identify instances of vandalism. Given the well-established frequency of this hazard in previous years, it is anticipated that this hazard will continue to occur in the future.

Health & Safety

There is no data available for death or injury rates due to acts of vandalism. It is anticipated that the majority of these acts do not pose a threat to human health or safety. However, this may not be the case in instances of vandalism involving public infrastructure.

Area Impacted

Due to the nature of vandalism, property damage can be expected with each occurrence. Data regarding property damage due to vandalism is not available for Oakland County; however, the amount of property damage is directly related to the severity of the event. All areas of Oakland County are potential targets for vandalism. Higher rates of occurrence can be anticipated in areas of urban blight or vacant buildings.

Economic Impact

No information is available regarding the economic impact of vandalism in Oakland County. However, considering the effects of this crime, high rates of vandalism can decrease the attractiveness of neighborhoods or business districts. This can result in economic loss due to loss or business.

Critical Facilities/Services

²⁴ Michigan State Police, Uniform Crime Reports, Crime Statistics, Oakland County, 1997-2006 Requested on June 26, 2017.



Although not common, critical facilities and services can be directly impacted by vandalism. The 1984 vandalism of the Lake Orion school bus fleet is an example of the potentially far-reaching effects of vandalism.

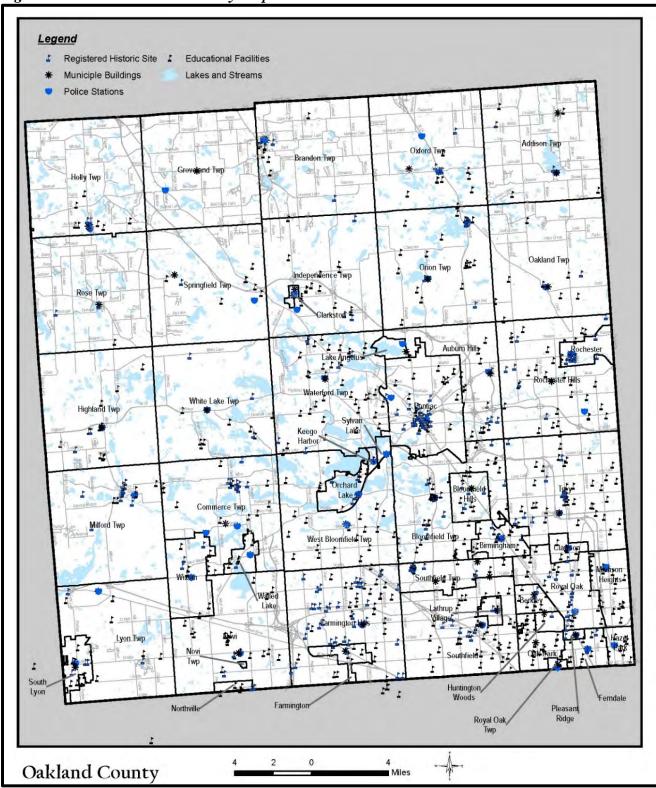
Vandalism Risk & Vulnerability Assessment

Oakland County averages 9,421 vandalism offenses each year. The entire County area is susceptible to vandalism. Facilities that have the highest vulnerability to an act of vandalism are government facilities, educational institutions, and registered historic sites. Police stations are a vulnerable asset in response to acts of vandalism.

Educational facilities, municipal buildings, court facilities, registered historic sites, and police station locations are included on Figure 15. Oakland County has over 26,000 land use acres of institutional establishments.



Figure 15: Vandalism Vulnerability Map



Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI



Table 18: Vandalism Hazard Evaluation and Impact/Consequence Assessment

1 ubic 10. V	Tuble 10. Vanualism Hazara Evaluation and Impact/Consequence Assessment					
Frequency & Probability ¹			38			
Potential N	Magnitude and Scale ¹		6			
Physical V	ulnerability Hazard Impag	ct ¹		39		
Social Vul	Inerability Hazard Impact ¹		40			
Communi	ty Conditions Hazard Impa	act ¹		28		
Overall Ca	apability and Capacity ²			79		
Mitigation	1^{2}		83			
Hazard Consequence & Impact Score ¹			27			
Overall Ri	sk Rating ³		32			
		Leg	gend			
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable		Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium		
51 – 75	Vulnerable	Capable		High		
76 - 100	Very Vulnerable	Very Capable		Extreme		
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown		

Arson

Definition

Arson is the willful or malicious burning or attempt to burn, with or without intent to defraud, a dwelling, public building, motor vehicle or personal property of another. An arson offense is an act of arson which is reported to a law enforcement agency.

Historical Events

According to the National Fire Protection Association, arson is the fourth leading cause of residential fires and fifth leading cause of residential fire deaths in the United States. At commercial sites, arson is also a major cause of deaths, injuries, and dollar loss. There were 1,222 reported arson fires in Oakland County from 2008 through 2015. Oakland County has experienced numerous arson fires at both private and public properties.

A residential arson fire on April 7, 2000, in Royal Oak Township killed 5 children, seriously injured 2 children and destroyed a home.²⁵

On April 24, 2015, several fires were set throughout Myth Golf and Banquets in Oakland Township. More than 50 golf carts and a building containing gasoline, fertilizer, and other chemicals burned in three separate fires – resulting in almost \$1 million in property damage.²⁶

Frequency & Probability

For the period of 2010 through 2015, Oakland County averaged 132 arson fires per year. This period saw arson rates drop significantly from previous levels (196 incidents in 2010 to 81 in

²⁵ Detroit Free Press, April 8, 2000, "Investigators search for clues in arson that killed 5 children".

²⁶ Linda Shepard, April 29, 2015, "Golf Course Arson Reported, \$1 Million in Damage".



2015).²⁷ It is likely that arson will continue to occur periodically in Oakland County, but with steady declines in annual frequency.

Health & Safety

According to the Oakland County Sheriff's Office, there were 6 arson related deaths investigated in 2007 and 2008.

Area Impacted

In the United States, arson is the leading cause of dollar loss from fires and one-fifth of all property loss is due to arson. According to the Michigan Chapter of the International Association of Arson Investigators, Oakland County had \$19.2 million worth of arson and suspicious fire damage in 2010, ranking fourth amongst Michigan counties. Any property is a potential target for arson. Given that arson is a property crime, it is anticipated that arson will occur in areas with high property crime rates.

Economic Impact

Information regarding the economic impact of arson in Oakland County is not available. However, considering the effects of this crime, high rates of arson can decrease the attractiveness of neighborhoods or business districts. This can result in economic loss due to loss of residents or businesses.

Critical Facilities/Services

Although not common, critical facilities and services can be directly impacted by arson. The April 2015 arson at Myth Golf Course is an example of the potential costly effects of this crime. Although arson can occur anywhere within Oakland County, an arson fire involving any of the County's assets could temporarily impede the County's ability to provide that service.

Arson Risk & Vulnerability Assessment

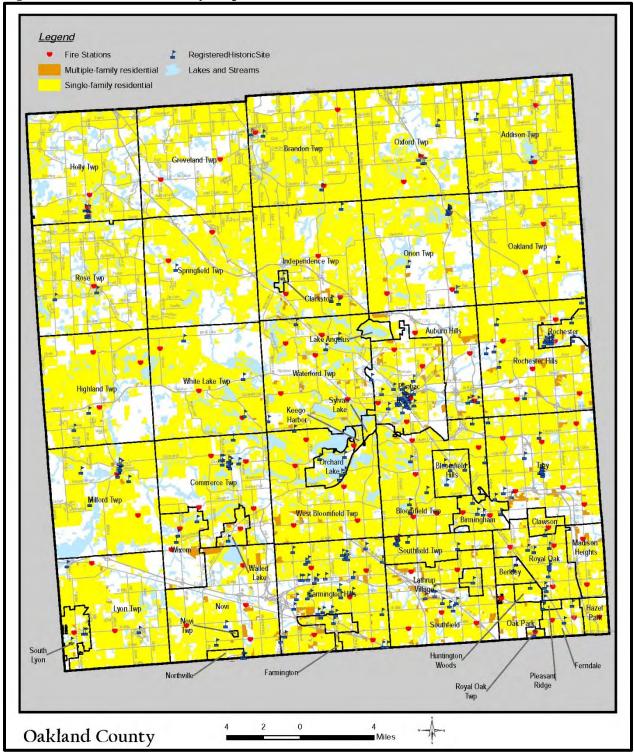
There were 1,222 reported arson fires in Oakland County from 2008 through 2015. Any property is a potential arson target. However, residential areas and historic sites are most vulnerable to acts of arson. Fire departments are a vulnerable asset in response to acts of arson. There are over 40 departments which respond to fires within Oakland County. Residential land use is shown on Figure 16, along with the locations of the County's registered historic sites and fire stations.

²⁷ Michigan State Police, Crime Data and Statistics, Oakland County, 2010 through 2015, requested in June 2017.

²⁸ U.S. Fire Administration, www.usfa.fema.gov.



Figure 16: Arson Vulnerability Map



Source: Oakland County, MI, USDA, SEMCOG | Created by: ASTI



Table 19: Arson Hazard Evaluation and Impact/Consequence Assessment

1 avie 19. E	able 19. Arson Hazara Evaluation and Impact/Consequence Assessment					
Frequency & Probability ¹			31			
Potential I	Magnitude and Scale ¹		19			
Physical V	Julnerability Hazard Impa	ct ¹	53			
Social Vu	Inerability Hazard Impact ¹		29			
Communi	ty Conditions Hazard Impa	act ¹		38		
Overall Ca	apability and Capacity ²			79		
Mitigation	n^2		78			
Hazard Co	onsequence & Impact Scor	e^1	31			
Overall R	isk Rating ³			31		
		Leg	end			
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable		Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium		
51 – 75	Vulnerable	Capable		High		
76 - 100	Very Vulnerable		Very Capable	Extreme		
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown		

Mass Shootings

Definition

A mass shooting is the discharge of firearm(s) multiple times by 1 or more parties resulting in the death of at least 4 persons.

Historical Events

There have been at least 2 mass shootings in Michigan since 1991, with 1 in Oakland County. On November 14, 1991, Thomas McIlvane killed 4 supervisors and wounded 5 other employees before killing himself at the Royal Oak Post Office after being fired for insubordination. ²⁹ Another incident at the Ford Motor Company factory in Wixom occurred November 14, 1996. It did not result in 4 or more deaths and, therefore, did not meet the technical definition of a mass shooting. However, 1 person was killed and several Ford employees and 2 Oakland County Sheriff's deputies were shot and wounded. This incident and September 11, 2001 have been credited with the push to implement the Oakland County Wireless Integrated (OakWin) System in Oakland County communities. ³⁰

The most recent mass shooting event that occurred in Michigan was on February 20, 2016. Jason Dalton, a driver for Uber, went on a several hour rampage throughout the city selecting his victims

²⁹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 202-205.

Oakland Press. July 27,2010, New radio system to be fully implemented by year's end. http://www.theoaklandpress.com/articles/2010/06/27/news/local_news/doc4c28009cacd9e959991745.txt



randomly. Six people were killed and two more injured during the six hours before his arrest including five people who were shot in the parking lot of a Cracker Barrel restaurant.³¹

Another notable incident occurred in June 11, 1999 when Joseph Brooks opened fire at his former psychiatrist's clinic, killing two people and injuring four others. Brooks then committed suicide. This occurred in Southfield, Michigan.

Frequency & Probability

The majority of mass shootings occur at the place of employment or schools and are conducted by someone that the victims know. Since 1991, there has been 1 occurrence of mass shooting in Oakland County and at least 3 in the state. The probability of this act occurring in the County is relatively low.

Health & Safety

The mass shooting incidents that have occurred in the state have been conducted by a single gunman. The single gunman limits the amount of guns, bullets and casualties. The number of deaths and injuries is dependent on the type of guns and bullets used, the location, number of people present, cover and escape routes and the intent of the gunman. The impact to health and safety has the potential to be high.

Area Impacted

The area impacted by mass shootings tends to be relatively localized to a single building or block. However, nearby schools, nursing homes and shopping districts may be temporarily locked down or closed to ensure the safety of individuals.

Economic Impact

The economic impact is dependent on the incident location, target and severity. A single gunman in a residential neighborhood who targets and kills known persons may affect housing values in the area in the short term. While multiple gunmen in a crowded business district with no discernible target may affect housing values, commercial values, retail sales, etc. for longer period of time. Mass shooting incidents disrupt the feeling of security and can have long term psychological effects on the community.

Critical Facilities/Services

Critical facilities and services have been historically targeted by gunmen. Critical facilities in the United States that have been targeted by mass shooting gunmen include open space, military bases, civic centers, nursing homes, schools, central business districts, and churches.

One of the most famous incidents is the 1999 Columbine shootings in which 2 teenage boys shot and killed 12 classmates and a teacher before killing themselves. In 2007, a student shot and killed 32 people and wounded 15 others at Virginia Tech before taking his own life. In that same year, a gunman killed 9 people and injured 5 others in a shopping center in Nebraska. In 2009, a man

³¹ Mother Jones, "U.S. Mass Shootings, 1982 -2017: Data From Mother Jones' Investigation". Data set accessed June 16, 2017.



killed 13 people at a civic center in New York. In that same year, a US Army psychologist opened fire at a military base in Texas, killing 13 and injuring 31.³²

Mass Shooting Risk & Vulnerability Assessment

There have been approximately 2 attempted mass shootings in Michigan since 1991, but the act has been on the rise in the United States over the past decade.

Mass shooting acts tend to occur in the place of (former) employment or at schools and universities; although they can occur in other crowded venues such as shopping centers and arenas. Mass shootings that occur in residential neighborhoods are normally centered around individuals the gunmen are familiar with. The most vulnerable targets would be the following:

- K-12 Schools
- Courthouses and federal buildings
- DTE Energy Music Theatre
- Detention facilities
- Great Lakes Crossing Outlets
- Hazel Park Raceway
- Meadowbrook Hall & Theater
- Michigan State Fair
- Oakland Community College
- Oakland County Fair
- Oakland University
- Renaissance Festival
- Royal Oak Arts, Beats, & Eats
- Woodward Dream Cruise
- Somerset Collection Mall
- Private corporations and corporate headquarters

Table 20: Mass Shooting Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹	19
Potential Magnitude and Scale ¹	19
Physical Vulnerability Hazard Impact ¹	28
Social Vulnerability Hazard Impact ¹	54
Community Conditions Hazard Impact ¹	38
Overall Capability and Capacity ²	73
Mitigation ²	67
Hazard Consequence & Impact Score ¹	34
Overall Risk Rating ³	25

³² USA Today. <u>Jury sentences Hasan to death for '09 Fort Hood massacre</u>. viewed June 26, 2017



Legend					
Score	1: Vulnerability Rating	3: Overall Risk Rating			
0 - 25	Minimally Vulnerable	Minimally Capable	Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable	Medium		
51 – 75	Vulnerable	Capable	High		
76 - 100	Very Vulnerable	Very Capable	Extreme		
N/A	Not Applicable/Unknown	Not Applicable/Unknown	Not Applicable/Unknown		

Drought

Definition

Drought is an extended period with significantly low precipitation levels that usually occurs during planting and growing seasons.

Historical Events

Extreme drought conditions in 1976-1977 contributed heavily to the large wildfire that struck the Seney area in Michigan's Upper Peninsula in July 1976.³³

During a drought in 1988, Michigan took several steps to combat the impacts of the drought on businesses, natural resources and individual citizens. A statewide burning ban was enacted and water use restrictions were put into place in many communities.

During a drought that struck Michigan from 1998-2003, one-third of the state's fruit, vegetable and field crops were destroyed. This drought resulted in an U.S. Department of Agriculture Disaster Declaration for 82 of the state's counties, including Oakland County. The drought led to water shortages in southeast Michigan forcing local officials to issue water usage restrictions.³⁴

The Upper Peninsula of Michigan suffered from drought conditions for between 16 and 22 months starting in 2005. The hay crop in the Eastern U.P. was only 50 to 70 percent of normal, and the resulting lack of feed led some farmers to downsize their cattle herds. In the northern tip of the Lower Peninsula, very high utility bills were suffered by the proprietors of farms and golf courses, due to the need for near-constant irrigation. Corn and bean crops were severely impacted. A burning ban was also issued for most of the state (the first such ban since 1998) to reduce the risk of wildfires. 35

Frequency & Probability

On average, there is 1 significant damaging drought every 10-15 years in the State of Michigan. ³⁶ Between January 1, 1950 and 2010, 2 moderate to severe drought events have been recorded for Oakland County, specifically. As of 2011, the State of Michigan had a Palmer

³³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 23.

³⁴ Ihid

³⁵ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated 2014 Edition)*, March 2014, page 224.

³⁶ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 23-28.



Drought Severity Index (PDSI) reading below zero for 3 or more consecutive months during the growing season in 27 out of the last 60 years. From January, 2013, to October, 2017, there have been four times at least 40% of the area of Michigan has been classified as abnormally dry – including twice when approximately 18% experienced moderate drought. The probability of a drought event occurring in Oakland County is likely because droughts affect the entire state and occur on average once every 10-15 years.

Health & Safety

The risk to human life from a drought event is low.³⁷ Possible loss of human life from a drought event is due to secondary effects such as extreme heat, fire and other health-related problems such as increased pollutant concentrations in surface water.

Area Impacted

Impacts primarily affect those employed in agriculture. Drought affects large widespread areas; however, the greatest impact is generally to agricultural lands. As of 2008, Oakland County contained approximately 21,005 acres of active agricultural land (3.6% of total).³⁸

Natural resources such as lakes, streams and other bodies of water could be affected by decreases in water levels. Also, fires resulting from drought can result in the destruction of trees and other natural habitats, as well as homes and businesses. The July 2001 drought affected 12 southeast Michigan counties, including Oakland County. The drought in September 2002 affected 12 counties, including Oakland County. ³⁹

Economic Impact

The impacts of drought on a community include water shortages; a decrease in the quantity and quality of agricultural crops; a decline of water levels in lakes, streams and other bodies of water; poor nourishment for wildlife and livestock; an increase in wildfires and increases in insect infestations, plant disease and wind erosion.

The 1988 drought/heat wave in the central and eastern U.S. (an event that greatly impacted Michigan) caused an estimated \$40 billion in damages from agricultural losses, disruption of river transportation, water supply shortages, wildfires and related economic impacts.⁴⁰

The July 2001 drought resulted in \$150 million in crop damage over a 12 county area of southeast Michigan reducing yields of corn, dry beans and soybeans to one-third of normal.⁴¹ The drought

³⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 23-28.

³⁸ SEMCOG, Land Use in Southeast Michigan 2000-2010, Specific to Oakland County, November 2011.

³⁹ National Climatic Data Sponsored Website, https://www.ncdc.noaa.gov/stormevents/, Standard Query for Severe Weather, June 2017.

⁴⁰ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 24.

⁴¹ National Climatic Data Sponsored Website, https://www.ncdc.noaa.gov/stormevents/eventdetails. Standard Query for Severe Weather, November 2011.



that occurred in September 2002 resulted in agriculture yields less than 50% of normal and many counties across eastern Michigan were declared agricultural disaster areas. 42

Critical Facilities/Services

Most facilities impacted from drought would be related to agriculture. Farms, large grain facilities and fruit and vegetable vendors/markets could potentially see a significant decrease in production and sales. Local and regional governmental services may be required to respond to drought. However, if the severity of the drought is significant, state and federal assistance could be required. Agricultural services and departments such as the Farm Bureau Agency and the U.S. Department of Agriculture may also be required to provide assistance.

Critical Facilities/Services

Most facilities impacted from drought would be related to agriculture. Farms, large grain facilities and fruit and vegetable vendors/markets could potentially see a significant decrease in production and sales. Local and regional governmental services may be required to respond to drought. However, if the severity of the drought is significant, state and federal assistance could be required. Agricultural services and departments such as the Farm Bureau Agency and the U.S. Department of Agriculture may also be required to provide assistance.

Drought Risk & Vulnerability Assessment

Between 1950 and 2017, 2 moderate to severe drought events have been recorded for Oakland County. The entire County's active agricultural lands are vulnerable to drought. Oakland County contains approximately 21,005 acres of active agricultural land.

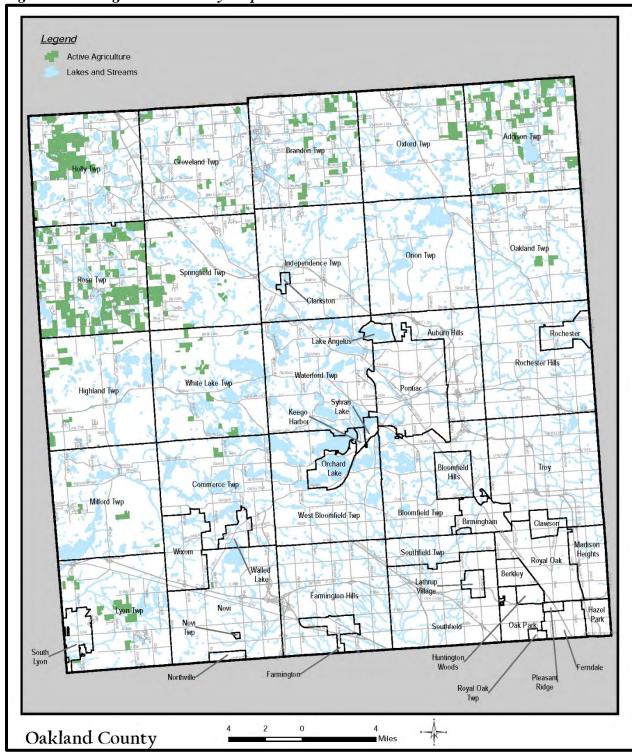
Figure 17, shows the location of active agricultural lands in Oakland County. Agricultural land in Oakland County has been decreasing as development moves in. The vulnerability to drought will continue to decrease as active agriculture decreases.

Natural Resources such as lakes, waters, streams, and other bodies of water could be affected by decreases in water levels. Water features are also shown on Figure 17. Waterford Township, West Bloomfield, and White Lake Township contain the most acreage for water land use in the County.

42	Ibid.



Figure 17: Drought Vulnerability Map



Source: Oakland County, MI, USDA, SEMCOG | Created by: ASTI



Table 21: Drought Hazard Evaluation and Impact/Consequence Assessment

1 4000 21. 2	tubic 21. Dibugiti Huzuru Diamation and Impact, Consequence Assessment					
Frequency & Probability ¹			25			
Potential Magnitude and Scale ¹			6			
Physical V	Julnerability Hazard Impag	ct ¹		28		
Social Vu	Inerability Hazard Impact ¹		29			
Communi	ty Conditions Hazard Impa	act ¹		35		
Overall Ca	apability and Capacity ²			73		
Mitigation	n^2		67			
Hazard Co	onsequence & Impact Scor	e^1	25			
Overall Ri	isk Rating ³		25			
		Leg	end			
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable		Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium		
51 – 75	Vulnerable	Capable		High		
76 - 100	Very Vulnerable	7	Very Capable	Extreme		
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown		

Earthquake

Definition

An earthquake is a sudden movement or motion in the earth caused by an abrupt release of slowly accumulating strain which results in ground shaking, surface faulting or ground failures.

Historical Events

Most earthquakes that occur in Michigan are minor tremors resulting in little damage. Several mildly damaging earthquakes have been documented in Michigan since the late 1700s. Michigan has fault lines in the bedrock geology that are considered stable; however, data is poorly documented. Michigan is most likely to be affected by earthquakes which occur in the New Madrid Seismic Zone (centered near the Arkansas/Tennessee state line) and upstate New York.

No severely destructive earthquakes have been documented in Michigan. However, several mildly damaging earthquakes have occurred since the late 1700's. ⁴³ There are no records of earthquakes originating within Oakland County. However, there have been several low-magnitude earthquakes centered outside of the County which have been felt in the County. ⁴⁴

Frequency & Probability

Frequency & Probability

Since 1938, there have been earthquakes that have been reported as centered in Michigan. The largest recorded earthquake originating in Michigan was centered in Coldwater and registered a

⁴³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March 2014)*, March 2014, pages 260-265.

⁴⁴ United Stated Geological Survey, Information by Region

⁻ Michigan, https://earthquake.usgs.gov/earthquakes/byregion/michigan.php, viewed June 19, 2017.



4.7 on the Richter scale. Since 1938, there have been approximately 26 earthquake related disturbances in Michigan. An earthquake of significant magnitude is unlikely to occur due to Oakland County's distance from the fault and the type of fault in Michigan. The frequency is assumed to be once every 100 or more years. Although a small disturbance from an earthquake is possible, the probability for a significant earthquake to occur in Oakland County is very low.

Some earthquakes have been attributed to hydraulic fracturing, or fracking.⁴⁶ Environmental experts from the USGS have determined that recent earthquakes in Ohio and Oklahoma may be the direct result of fracking. Fracking involves the use of a mixture of chemicals in a high-pressure water stream that is pushed into layers of bedrock. This causes the natural gas located in the area to be freed. Scientists state that fracking increases damage to existing fault lines causing them to shift or become unsteady.

Health & Safety

There have not been any recorded deaths or injuries related to earthquakes in Michigan. The risk rating for human life related to earthquake events is low.⁴⁷

Area Impacted

The number of people affected is dependent upon the earthquake magnitude and distance from the epicenter. Typically, an earthquake affects a large region, not a specific location. Because earthquakes typically have regional affects, the entire Oakland County population could be affected. However, given the historic severity, only a fraction of the population would be affected by a typical event. The impact of an earthquake would be primarily on water, sewer and gas pipelines which are located throughout Oakland County.

Oakland County includes an area of low seismic activity referred to as the Grenville Front. ⁴⁸ This front is a line marking relatively old changes in geological changes making it less of a hazard than a true fault line.

⁴⁵ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March 2014)*, March 2014, pages 260-265.

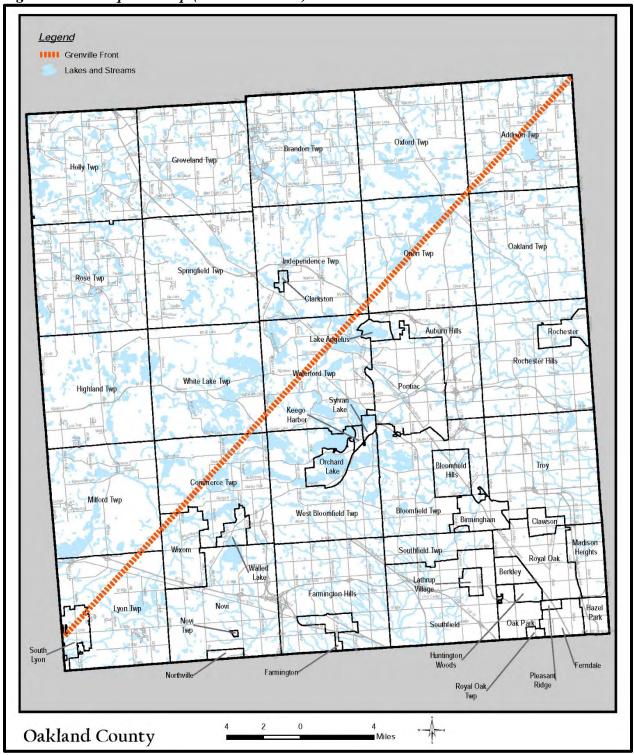
⁴⁶ Reuters, Fracking Official Cause of Ohio Earthquakes, January 4, 2011.

⁴⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 29-31.

⁴⁸ Oakland County Michigan Emergency Management, *Hazard Study*, August 1998, page 13.



Figure 18: Earthquake Map (Grenville Front)



Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI



Economic Impact

Damage occurs primarily to any type of structure or improvement. The amount of damage is directly proportional to the earthquake magnitude and a large amount of property damage could be anticipated due to the high development density in southern Oakland County. Given the historical severity, economic impacts are expected to be minimal. Since 1884, only a few earthquakes (most of which were minor tremors) resulted in minimal structural damage such a cracked plaster and damaged chimneys.

In Oakland County, the impact of an earthquake would be primarily on water, sewer and gas pipelines. The United States averages approximately \$550,000 per accident to natural gas and liquid pipelines due to earth movements.

Critical Facilities/Services

Due to the low probability of a severely destructive earthquake, response would most likely be limited to primary utility services and pipeline owners. Due to the lack of earthquake events in Michigan, additional investigation of the impact to critical facilities/services is not recommended at this time.

Earthquake Risk & Vulnerability Assessment

Most earthquakes that occur in Michigan are minor tremors resulting in little damage. Several mildly damaging earthquakes have been felt since the early 1800s. The primary vulnerable assets to an earthquake occurrence are the County's water, sewer, and natural gas services and natural gas/petroleum pipelines. The entire County has gas service available either through Consumers Energy or DTE. Municipal, community and County operated water and sanitary services are vulnerable, as well as all storm water drains. The Oakland County Water Resources Commissioner's Office water and sanitary sewer serviced areas are shown on the Earthquake Vulnerability Map, along with natural gas and petroleum pipeline locations. There are approximately 120 miles of natural gas distribution pipelines, 363 miles of natural gas transmission lines, and 107 miles of petroleum gas pipelines in the County.

Hydraulic fracturing (fracking) is believed to increase the frequency of earthquakes by disturbing the bedrock. Currently, the EPA and MDEQ are reviewing the hydraulic fracturing techniques and determining proper regulations.

• See Earthquake Vulnerability Map in Appendix A



Table 22: Earthquake Hazard Evaluation and Impact/Consequence Assessment

14010 221 2	miniquane mazura bran	atton and 1	inpuen consequence i	200000000000	
Frequency & Probability ¹			13		
Potential Magnitude and Scale ¹			4		
Physical V	Julnerability Hazard Impag	ct ¹		53	
Social Vu	Inerability Hazard Impact ¹		54		
Communi	ty Conditions Hazard Impa	act ¹		40	
Overall Ca	apability and Capacity ²			73	
Mitigation	n^2		67		
Hazard Co	onsequence & Impact Scor	·e ¹	37		
Overall Ri	isk Rating ³		21		
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Extreme Temperature

Extreme Heat

Definition

A prolonged period of extreme heat often accompanied by conditions such as high humidity, high winds and lack of rain. Although no standardized temperature is used to define extreme heat, prolonged periods of temperatures greater than 90°F are certainly of concern. The minimum mortality temperature threshold is lower in northern latitudes (from 65°F to 70°F) than in the southern United States (from 76°F to 90°F). Human health effects of heat are also dependent upon the age, health and physical activity of an individual, as well as humidity and access to air conditioning.

Historical Events

The highest temperature recorded in Michigan was 112°F on July 13, 1936, in Mio. During that week, 570 people died state-wide and there were 5,000 deaths nationwide attributed to the heat wave. 49

During a heat wave in the summer of 1988, 39 days had temperatures of 90°F or greater. Temperatures in southeast Michigan topped the 100°F mark on 5 occasions. ⁵⁰

⁴⁹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 45-49.

⁵⁰ Ibid.



In July 1999, a heat wave that struck the Midwest and east coast resulted in an estimated 256 heat-related deaths in 20 states, including 1 in Michigan.⁵¹

In mid-July of 2011, a heat wave helped cap off the warmest month on record at Detroit. Three direct deaths were reported (including one fatality in Oakland County) due to the heat wave, as heat indices were above 100 degrees.⁵²

Frequency & Probability

Between 1996 and 2017, there were 13 extreme heat days in Oakland County, although high temperatures that can lead to heat stress occur annually in the state. Extreme heat events are likely in Oakland County, but are based on seasonal weather patterns.

Health & Safety

The major threats associated with extreme heat are heatstroke and heat exhaustion. Nationally, extreme heat is responsible for 200 deaths a year.⁵³ Extreme heat primarily affects the most vulnerable segments of society such as the elderly, children, impoverished individuals and people in poor health.

Area Impacted

Extreme heat typically affects entire counties or regions of Michigan. Although the entire County would be affected, open spaces (at-risk for wildfires) and elderly housing areas (there are approximately 50 nursing homes in Oakland County⁵⁴) would be most impacted.

Economic Impact

Extreme heat is often accompanied by drought and can have hazardous effects on livestock, agricultural crops and energy demands and is associated with wildfires. Medical costs and increased emergency response costs would be anticipated.

Critical Facilities/Services

Primarily local and regional governmental services would be requested to assist in the event of extremely high temperatures. Hospitals and clinics would expect an increase in heat exhaustion and other heat-related illness cases.

Local utility companies would be essential for providing enough resources to supply an increased demand for power (increased demand for air conditioning).

If the severity of the extreme heat is significant enough to cause a drought, state and federal assistance could be available. Agricultural services and departments such as the Farm Bureau Agency and the U.S. Department of Agriculture will be the most likely type of agencies to provide assistance and aid.

⁵¹ Ibid

⁵² National Climatic Data Sponsored Website, https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=332675, viewed December 20, 2011.

⁵³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 45-49.

⁵⁴ CarePathways, Search for Nursing Homes-Oakland County, search, June 26, 2017.



Extreme Heat Risk & Vulnerability Assessment

Extreme temperature periods occur every year in the state and impact the entire County. Also, vulnerable to extreme temperatures are the elderly, young, disabled, and impoverished persons. Hospitals are vulnerable due to increase cases of heat stroke and heat exhaustion and other extreme temperature health-related illness cases. Almost 19% of the Oakland County population is vulnerable to extreme temperature based on age alone. There are approximately 50 nursing homes in Oakland County. The Extreme Temperature Vulnerability Map displays the locations of the Oakland County Water Resources Commissioner's Office water and sanitary sewer service areas, adult care facilities, day care facilities, and hospitals in the County.

• See Extreme Temperature Vulnerability Map in Appendix A

Table 23: Extreme Heat Hazard Evaluation and Impact/Consequence Assessment

Tubic 25. Extreme freui fraçai a Evaluation and Impact/Consequence Assessment								
Frequency	& Probability ¹		25					
Potential I	Magnitude and Scale ¹		22					
Physical V	Julnerability Hazard Impa	ct ¹	28					
Social Vu	lnerability Hazard Impact ¹		59					
Communi	ty Conditions Hazard Impa	act ¹	35					
Overall Capability and Capacity ²			79					
Mitigation ²			67					
Hazard Co	onsequence & Impact Scor	e^1	35					
Overall Risk Rating ³			30					
Legend								
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating				
0 - 25	Minimally Vulnerable	Minimally Capable		Low				
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium				
51 - 75	Vulnerable	Capable		High				
76 - 100	Very Vulnerable	Very Capable		Extreme				
N/A	Not Applicable/Unknown	Not Applicable/Unknown		Not Applicable/Unknown				

Extreme Cold

Definition

A prolonged period of extreme cold is usually accompanied by snowstorms, sleet and ice storms or hail. As with extreme heat, no standardized temperature is used to define extreme cold, although prolonged periods of temperatures below freezing, and especially below 20°F are of concern. Also, similarly to extreme heat, human mortality temperature thresholds vary with latitude. Areas of the southern United States are more susceptible to human health impacts from cold than areas in the north. Human health effects vary with an individual's age, physical condition, physical activity, wind chill and access to heated buildings.



Historical Events

The lowest temperature ever recorded in Michigan was -51°F on February 9, 1934, in Vanderbilt.⁵⁵

Between 1993 and 2016, 12 cold/extreme cold events were reported in Oakland County. The events resulted in a total of 4 deaths, 14 injuries, and \$25,000 in property damages in the county.

During an extreme cold event on January 4, 1999, 3 cold related deaths were reported in Oakland County: A Pontiac man died of exposure while walking home, an elderly woman died of exposure in the driveway at her nursing home and in West Bloomfield, a young adult male was found dead outside, though the exact cause of death was unknown. Four additional people were injured. ⁵⁶

An extreme cold event in that impacted Oakland County and the rest of southeast Michigan beginning on December 21, 2000 caused an estimated \$475,000 in property damage in Washtenaw County. Pipes burst due to the cold across the region. December 2000 remains one of the coldest Decembers in southeast Michigan history.

On March 2, 2002, it was reported that an 84-year-old woman in Troy was found dead on her retirement home patio. Hypothermia was the suspected cause of death.⁵⁷

During February 3-6, 2007, wind chills were between -15°F and -25°F. Schools were forced to close because it was too cold for students to walk or wait for a bus. Hospitals reported numerous cold related injuries including frostbite (in total, one person died and 170 were injured). Frozen pipes and water mains ruptured throughout southeast Michigan, flooding some areas and leaving many without water. Fire sprinkler lines froze and ruptured flooding large areas. Area homeless shelters were filled to capacity. In all, property damages to southeast Michigan were estimated at \$425,000 (Oakland County accounted for \$25,000 of those damages).

Frequency & Probability

Michigan has 3 to 50 days per year below 0°F and 90-180 days per year below freezing.⁵⁸ An extreme cold event in Oakland County is likely, but is based on seasonal weather patterns.

Health & Safety

Nationally, extreme cold is responsible for approximately 700 deaths per year.⁵⁹ Hypothermia and frostbite are the most common conditions associated with extreme cold. It should be noted that a significant number of cold-related deaths are due to illnesses and diseases that are exacerbated by severely cold weather.

⁵⁵ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 49.

⁵⁶ National Climatic Data Sponsored

Website, https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=26%2CMICHIGAN, Standard Query for Severe Weather, viewed January 5, 2012.

⁵⁷ Ibid

⁵⁸ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 49.

⁵⁹ Ibid



Extreme cold poses a significant health risk to the same segments of the population as extreme heat. Although extreme cold would impact all residents, the populations most at-risk for health hazards from extreme cold include young, elderly, disabled, and impoverished persons. Over half of the approximately 700 annual deaths nationally are persons 60 years of age or older. According to the 2010 census for Oakland County, nearly 6% of the population is under the age of 5 and over 13% is aged 65 years or older. Therefore, approximately 19% of the Oakland County population is at risk in extreme cold.

Area Impacted

Extreme cold events are caused by arctic air and polar winds causing wide areas to become bitterly cold. The elderly, young and those with pre-existing medical conditions are most at risk for injury or death. Water mains are at risk of freezing and rupture, which can cause flooding and leave citizens without water. Rapid freezing of lakes can damage structures stored in the water and can damage aquatic life populations short term.

Economic Impact

Water mains and household pipes are at risk of freezing and rupture. Bus systems may be forced to close down because it is too cold for people to be outdoors. Medical costs and increased emergency response costs would be anticipated.

Critical Facilities/Services

Primarily local and regional governmental services would be needed to assist those in need. Hospitals and clinics would see an increase in hypothermia, frostbite and other cold-related illnesses. Schools and transportation services may be closed due to safety concerns. Nursing homes, homeless shelters and other vulnerable populations would need to have the resources available to ensure the safety of the residents. Local distribution companies would be essential in repairing lines and providing enough resources to supply an increased demand for heat.

Extreme Cold Risk & Vulnerability Assessment

Extreme temperature periods occur every year in the state and impact the entire County. Underground utilities, primarily water and gas service areas, are vulnerable to extreme cold. The entire County has natural gas services available through Consumers Energy or DTE. Pontiac, Rochester Hills, Novi and Troy have the highest utility land use acreage in the County.

Also, vulnerable to extreme temperatures are the elderly, young, disabled, and impoverished persons. Hospitals are vulnerable due to increase cases of frost bite, hypothermia, and other extreme temperature health-related illness cases. Almost 19% of the Oakland County population is vulnerable to extreme temperature based on age alone.

• See Extreme Temperature Vulnerability Map in Appendix A

⁶⁰ U.S. Census Bureau, Profile of General Demographic Characteristics: 2010, Oakland County, Michigan.



Table 24: Extreme Cold Hazard Evaluation and Impact/Consequence Assessment

1 ubie 24. Exileme Com Huzara Evaluation and Impact Consequence Assessment								
Frequency & Probability ¹			38					
Potential I	Magnitude and Scale ¹		28					
Physical V	Julnerability Hazard Impag	ct ¹	53					
Social Vu	Inerability Hazard Impact ¹		59					
Communi	ty Conditions Hazard Impa	act ¹	35					
Overall Capability and Capacity ²			79					
Mitigation ²			67					
Hazard Consequence & Impact Score ¹			42					
Overall Risk Rating ³			40					
Legend								
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating				
0 - 25	Minimally Vulnerable	Minimally Capable		Low				
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium				
51 – 75	Vulnerable	Capable		High				
76 - 100	Very Vulnerable	Very Capable		Extreme				
N/A	Not Applicable/Unknown	Not Applicable/Unknown		Not Applicable/Unknown				

Fire Hazards

Wildfire

Definition

An uncontrolled fire within an open space, forested area, brush or grassed area or wild land.

Historical Events

In October 1871, Michigan's first recorded catastrophic fire occurred after a prolonged drought over much of the Great Lakes region. The wildfire killed 200 people and burned 1.2 million acres in Michigan's Lower Peninsula.⁶¹

In August 1976, a fire near Seney burned approximately 74,000 acres. Fire suppression and damage costs exceeded \$8 million.

In May 2012, a lightning strike caused two wildfires in Luce County. Strong south winds gusting over 30 mph on the quickly fanned the Duck Lake Wildfire and caused it to spread rapidly toward the Lake Superior shore forcing mandatory evacuations for people in the Pike Lake, Bodi Lake, Culhane Lake and Little Lake Harbor areas. The 21,069-acre wildfire, the third largest in modern Michigan history, burned 136 structures (including one store and one motel) before it was fully contained in mid-June. The Pine Creek North Wildfire spread to 3500 acres by the 25th but was 95 percent contained by the 28th. The Marshland Wildlife Drive, Fishing Loop, Pine Ridge Nature

⁶¹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 66.



Trail and many interior roads within the refuge were all closed due to the fire. Governor Rick Snyder declared a state of disaster in Luce County on the 25th. The total cost of property lost and resources used to fight the fire was estimated to be approximately \$12 million.⁶²

Frequency & Probability

Michigan has between 8,000 and 10,000 wildfires per year, most of which are small in size burning between 5 and 50 acres. Most wildfires occur between March and May.⁶³ Michigan had 24 significant fires between 1995 and 2016, resulting in over \$19 million in property damage.

The National Climatic Data Center does not list any significant wildfires or forest fires for Oakland County between 1950 and 2016. Between 1981 and 2005, Oakland County had 54 (DNR jurisdiction only) wildfires. ⁶⁴ Oakland County has over 60,000 acres of parks, recreation lands and open space.

The Michigan Bureau of Fire Services does report some wildfires in Oakland County; however, those incidents are typically small.

Table 25: Forest, Woods, Wildland Fires in Oakland County

Year	Frequency	Fatalities	Casualties	Total Loss
				(Property and
				Content Loss)
2012	28	0	1	-
2013	9	0	0	0
2014	4	0	0	0
2015	14	0	1	0
2016	16	0	0	0

Source: Michigan Bureau of Fire Services

Health & Safety

Between 2012 and 2016 a total of 2 injuries were reported in Oakland County as a result of wildfires. Generally, heat exhaustion and smoke inhalation pose the greatest risk of injury. The risk to human life is low to moderate for wildfires.

Area Impacted

In Michigan, 7% of all wildfires are caused by lightning strikes and 83% are caused by human activity. Forests cover approximately 49% (18.2 million acres) of Michigan's total land base.⁶⁵ Approximately 11% of Oakland County is forest or other open space.⁶⁶

⁶² National Climatic Data Center, https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=379163, viewed June 20, 2017.

⁶³ Michigan State University, firewise.msu.edu, viewed June 20, 2017

⁶⁴ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 245.

⁶⁵ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March*, 2014), March 2014, page 232.

⁶⁶ SEMCOG, Land Use in Southeast Michigan 2000-2008, Specific to Oakland County, viewed June 20, 2017.



Populations adjacent to open space or undeveloped land may be affected by wildfire. The extent of the affected area depends greatly on response time, weather conditions, wind direction and fire control. Open spaces and undeveloped land are most at-risk for wildfires.

Economic Impacts

The risk rate for property damage resulting from a wildfire is moderate to high (very high for timber loss).⁶⁷

Total property loss due to wildfires for the 5 counties in Michigan's Metro region (Washtenaw, Wayne, Livingston, Oakland, & Macomb) between January 1996 and October 2013 was \$20,000.⁶⁸

Secondary effects of wildfires include infrastructure damage, timber loss, property loss, wildlife loss and loss of life or injury to persons.

Critical Facilities/Services

There are approximately 40 fire departments which respond to fires within Oakland County. Emergency response assistance is provided to fire departments through mutual aid agreements. For all types of fire department responses, mutual aid is provided amongst the fire departments in Oakland County an average of 100 times each year.

Wildfire Risk & Vulnerability Assessment

Michigan has between 8,000 and 10,000 wildfires per year, most of which are small in size burning between 5 and 50 acres. Michigan had 24 significant fires between 1995 and 2016, resulting in over \$19 million in property damage. Most wildfires occur between March and May. Woodlands, wetlands, grassland, shrub land, and areas near railroad right-of-ways are vulnerable to wildfires. Oakland County has over 60,000 acres of park, recreation, and open space.

Addison Township, Rose Township, and Springfield Township have the highest acreage of forest land use in the County. Addison Township, Rose Township and Groveland Township have the highest total acreage in the County for grassland and shrub land use.

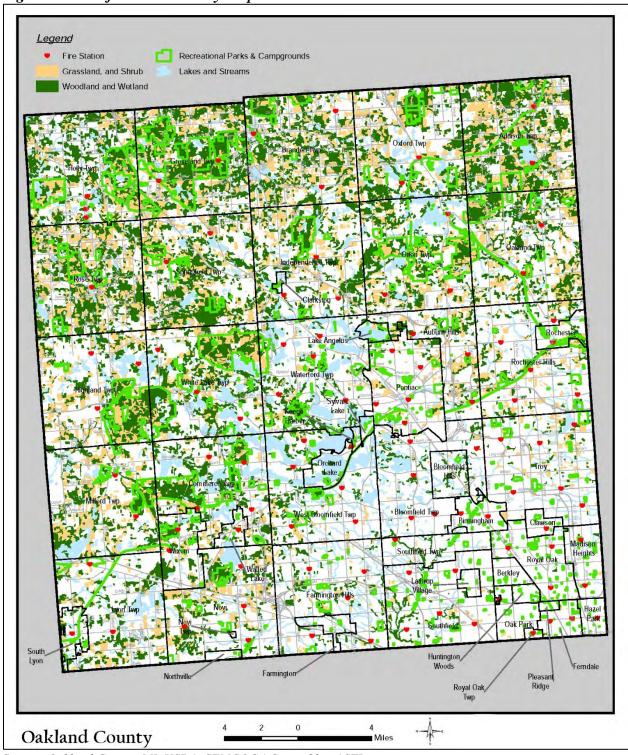
The fire departments in the County are a vulnerable critical asset in response to wildfires. Figure 19 indicates the coverage of forest woodland, grassland, and shrub land, railroad locations, and the location of fire stations in the County.

⁶⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 66-71.

⁶⁸ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March*, 2014), March 2014, page 242



Figure 19: Wildfire Vulnerability Map



Source: Oakland County, MI, USDA, SEMCOG | Created by: ASTI



Table 26: Wildfire Hazard Evaluation and Impact/Consequence Assessment

Tubic 20: Willight C Hazara Divariation and Impact Consequence Assessment					
Frequency & Probability ¹			13		
Potential I	Magnitude and Scale ¹		0		
Physical V	Julnerability Hazard Impag	ct ¹		53	
Social Vu	Inerability Hazard Impact ¹		48		
Communi	ty Conditions Hazard Impa	act ¹		24	
Overall Ca	apability and Capacity ²			79	
Mitigation	n^2		100		
Hazard Consequence & Impact Score ¹			29		
Overall Ri	isk Rating ³		19		
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Scrap Tire Fire

Definition

Scrap tire fires are large fires which occur at a location where scrap tires are being stored for processing, recycling or re-use.

Historical Events

Oakland County does not have an extensive history of scrap tire fires. Although no records of scrap tire fires were found, there was a tire fire at a retail tire store in Farmington in 1994.

The Michigan Department of Environmental Quality (MDEQ) requires a scrap tire collection site to be registered if it exceeds established tire storage thresholds. Scrap tire collection sites can include businesses such as scrap tire processors, new tire retailers, junkyards, farms and go kart tracks. In 2004, the U.S. EPA, Region 5, developed a program to reduce the number of scrap tire collection sites. The MDEQ has developed additional programs and grant funding to encourage the reduction of scrap tires. Oakland County has a regulated commercial scrap tire site in Pontiac. ⁶⁹

Frequency & Probability

There has been 1 tire fire at a retail tire store in Farmington. This fire occurred in 1994 at Farmington Auto Parts and was controlled by the local fire department. In Michigan there have been 16 major scrap tire fires since 1987.

⁶⁹ Michigan Department of Environmental Quality, http://www.michigan.gov/deq/0,4561,7-135-3312 4123 4122 4346-235851--0.0.html, June 20, 2017.

⁷⁰ Michigan Department of Environmental Quality, Scrap Tire Program, Staff Telephone Interview, August 30, 2004.

⁷¹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 313-314.



Health & Safety

Scrap tire facilities present significant environmental and fire hazards. In addition, scrap tires are known for providing breeding grounds for mosquitoes, thus contributing hazards to public health. Scrap tire fires are also capable of producing acrid smoke and an oily residue which can leach into the soil.

Area Impacted

Scrap tire fires can be difficult to contain and, aside from the fire hazard presented, inhaling the smoke produced from the fire can be hazardous to human health. As a result, scrap tire fires often require people in surrounding areas to evacuate or shelter-in-place.

The oily material produced by scrap tire fires can also negatively impact the soil, and possibly groundwater and surface water, in the area of the fire. If groundwater or surface water is impacted, the affects can potentially extend significantly beyond the boundaries of the fire.

Within Oakland County, there is one registered scrap tire facility: Warehouse Tire in Pontiac. No unregistered scrap tire facilities were found. The EPA and MDEQ have made a significant effort to reduce the number of scrap tire facilities in the region.⁷²

Economic Impact

A scrap tire fire will inevitably result in property damage and inventory loss to the collection site. In addition, environmental clean-up costs after the fire is extinguished can be significant.

Due to the amount of response required, extinguishing a scrap tire fire can be financially draining for local emergency response departments. For example, the largest scrap tire fire in recent Michigan history occurred in Osceola County in 1997. That fire burned over 1.5 million tires and cost approximately \$300,000 to extinguish. The State of Michigan paid \$100,000 to Osceola County as reimbursement for fighting that fire.

Critical Facilities/Services

Scrap tire fires can be very difficult to extinguish, often lasting for extended periods, and can require a substantial amount of resources from local emergency response departments. The response effort typically requires assistance from neighboring fire departments.

Scrap Tire Fire Risk & Vulnerability Assessment

In 2004, the EPA Region 5 put together a program to reduce the number of scrap collection sites. The MDEQ put together additional programs and grant funding to encourage the reduction of scrap tires. This initiative has significantly reduced the number of scrap tire facilities within Oakland County. Currently, the MDEQ has record of 2 registered and no unregistered scrap tire facilities. In the past 20 years, there has been 1 tire fire in Oakland County which was at a retail tire store in Farmington.

⁷² Michigan Department of Environmental Quality, http://www.michigan.gov/deq, viewed January 11, 2012



Due to the toxic smoke produced by tire fires and potential environmental impact, residents living near these facilities are considered vulnerable for impact. Figure 20 shows the location of the registered scrap tire facility with a 1-mile radius of census block groups. Also shown on Figure 20 are the locations of fire stations and air transportation facilities in the County.

Air transportation facilities are considered to be vulnerable, as the smoke produced by a fire may interrupt flight patterns. As shown on Figure 20, the Oakland County International Airport is approximately 2 miles from the registered scrap tire facility located in Waterford.

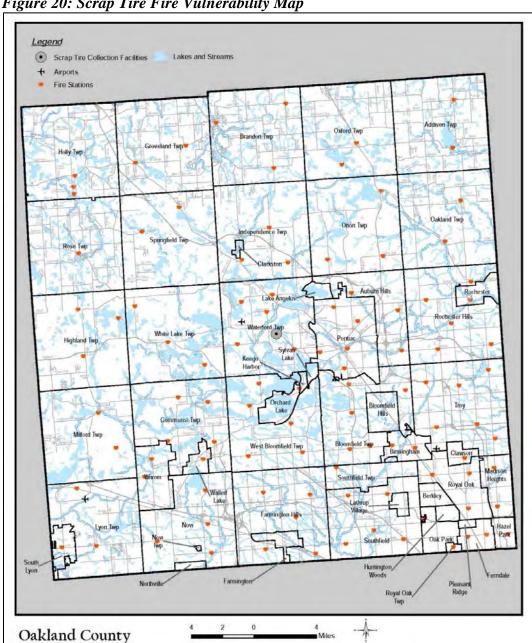


Figure 20: Scrap Tire Fire Vulnerability Map

Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI



Table 27: Scrap Tire Fire Hazard Evaluation and Impact/Consequence Assessment

<i>Table 27: 3</i>	ocrap 1 ire 1 ire mazara L)	vaiuaiion a	na 1mpaci/Consequen	ce Assessment	
Frequency & Probability ¹			13		
Potential 1	Magnitude and Scale ¹		5		
Physical V	Vulnerability Hazard Impa	ct ¹		28	
Social Vu	Inerability Hazard Impact ¹			40	
Communi	ty Conditions Hazard Imp	act ¹		24	
Overall C	apability and Capacity ²		79		
Mitigation ²			83		
Hazard Consequence & Impact Score ¹			24		
Overall Risk Rating ³			17		
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 – 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Applicable/Unknown		Not Applicable/Unknown	

Structural Fire

Definition

A structural fire is a fire of any origin which ignites 1 or more structures and causes loss of life and/or property.

Historical Events

Structural fires are commonly known as the "universal hazard" because they can occur anywhere.

In the last 5 years, there has been an average of 610 structural fires per year in Oakland County. Oakland County has experienced numerous structural fires throughout its history. One (1) of the most tragic structural fires in recent history occurred at a residence in Royal Oak Township during the early hours of April 7, 2000. The fire claimed the lives of 5 children and injured 4 others.

On August 24, 2004 a fire broke out in a Southfield apartment complex. Although the residents were safely evacuated, the facility was destroyed.

Table 28: Major Causes of Structural Fires in Oakland County

Fire Cause	% of Structural Fires Due to Cause
Unknown	27.89%
Cooking	24.45%
Heating Equipment	8.38%
Incendiary or Suspicious	6.06%
Other Equipment	5.14%
Appliances or Air Conditioning	4.33%



Other Heat, Flame or Spark	3.45%
Open Flame, Ember or Torch	3.24%
Electrical	3.04%
Smoking	2.34%
Natural	1.22%
Child Playing	0.28%
Exposure	0.09%

Source: NFIRS 5.0 National Reporting, Tally by Incident Type, January 1, 1998 through December 31, 2003, report generated on June 24, 2004, filtered for Oakland County reporting only. *Note: Access to NFIRS data is no longer available to the public. As of 2017, updated information could not be accessed

Frequency & Probability

In the last 5 years, there has been an average of 610 structural fires per year in Oakland County. The occurrence of structural fires within Oakland County has a well-established history. This hazard will continue to occur in the future.

Table 29: Building Fires in Oakland County

Year	Frequency	Fatalities	Casualties	Total Loss (Property and Content Loss)
2012	661	6	35	32,783,507
2013	607	3	44	29,351,057
2014	599	5	34	21,250,648
2015	572	3	32	23,901,481
2016	636	9	28	38,717,949

Source: Michigan Bureau of Fire Services

Health & Safety

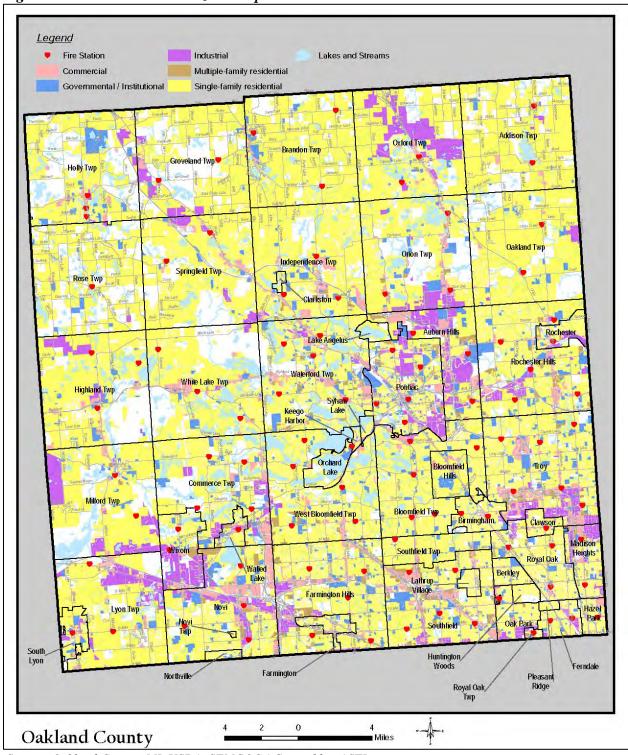
Structural fires in Oakland County account for 63% of deaths and nearly 72% of injuries from all fire types from 2012-2016. From 2012 through 2016, there were a total of 26 deaths and 173 injuries due to structural fires in Oakland County. This equates to an average of 5 deaths and nearly 35 injuries per year.

Area Impacted

Structural fires can occur on any parcel in which a structure is present. Structural development in Oakland County is more concentrated in the southern portion of the County. Therefore, a higher frequency of structural fires can be expected in southern Oakland County.



Figure 21: Structural Fire Hazard Map



Source: Oakland County, MI, USDA, SEMCOG | Created by: ASTI



Economic Impact

Property loss from structural fires can be very high. From 2012 through 2016, Oakland County experienced a total of \$146,004,642 in property and content loss from structural fires, an average of \$29,200,928 per year.

Critical Facilities/Services

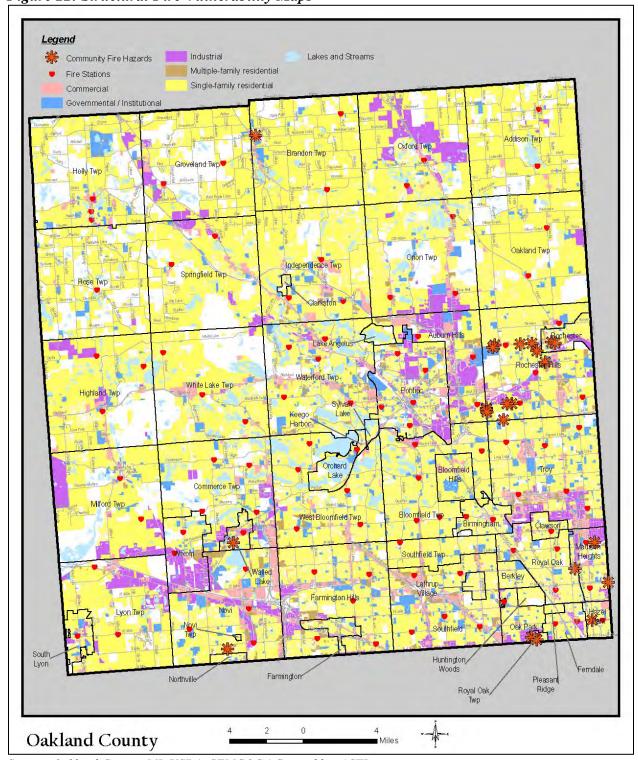
There are over 40 fire departments/fire stations which respond to structural fires within Oakland County. During 2012 through 2016, there were no firefighter deaths from structural fires; however, an average of nearly 21 firefighters are injured each year from responding to structural fires. Almost 90% of all firefighter injuries in Oakland County result from responding to structural fires. Emergency response assistance is provided to fire departments through mutual aid agreements. For all types of fire department responses, mutual aid is given amongst many of the fire departments in Oakland County an average of 100 times each year.

Structural Fire Risk & Vulnerability Assessment

Structural hazards are commonly known as the "universal hazard" because they can occur anywhere. There are over 600 structural fires per year in Oakland County. Historic sites and hirise structures present unique challenges as it relates to this hazard. Structural development in Oakland County is more concentrated in the southern portion of the County. The 40 fire stations in the County are a vulnerable asset in response to a structural fire. Almost 90% of all firefighter injuries in Oakland County result from responding to structural fires. The location of registered historic sites and fire stations are provided on Figure 22. Also shown are the areas of multiple-family residential development, industrial development, and commercial development.

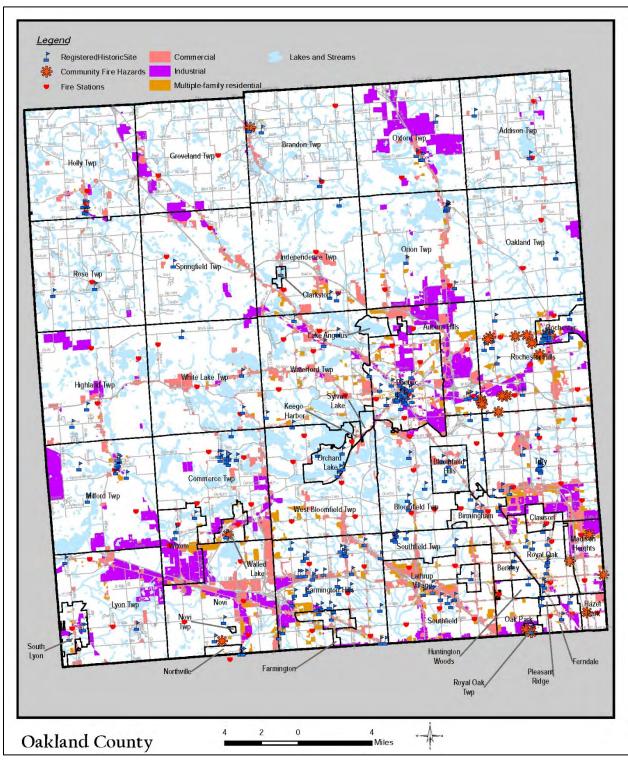


Figure 22: Structural Fire Vulnerability Maps



Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI





Source: Oakland County, MI, USDA, SEMCOG | Created by: ASTI



Table 30: Structural Fire Hazard Evaluation and Impact/Consequence Assessment

Tubic 30. Sit actural 1 if c Hagara Dramation and Impact Consequence Hissessment					
Frequency & Probability ¹			50		
Potential I	Magnitude and Scale ¹		31		
Physical V	Julnerability Hazard Impag	ct ¹		58	
Social Vul	Inerability Hazard Impact ¹			40	
Communi	ty Conditions Hazard Impa	act ¹		21	
Overall Ca	apability and Capacity ²		79		
Mitigation			100		
Hazard Co	onsequence & Impact Scor	·e ¹	34		
Overall Ri	isk Rating ³			41	
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 – 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Flooding

Dam Failure

Definition

The failure of an impoundment located in a river, stream, lake or other waterway resulting in downstream flooding.

Historical Events

Dam failure can result in loss of property, life and natural resources for miles downstream of a dam. Dam failures not only occur during flood events, but also can be caused by poor operation, lack of maintenance and vandalism.

Examples of significant dam failures in Michigan include: 1) Marquette in 2003 when an earthen dam failed causing over \$10 million in property damages and 2) in September 1986, an intense rainfall caused 11 dams to fail in the Lower Peninsula of Michigan. Currently, there are over 2,500 dams identified statewide. From 1988 to 2013 the Michigan Department of Environmental Quality (MDEQ) has documented approximately 287 dam failures (none catastrophic).⁷³

⁷³ Michigan Department of State Police, Emergency Management Division, *Michigan Hazard Mitigation Plan (Updated March*, 2014), March 2014, page 208.



Table 31: High and Significant Hazard Dams in Oakland County

Name	Hazard	Н8	Head
Clarkston	High	34	30
Clintonville	Significant	14	30
Loon Lake	Significant	8	6
Ford Dam #3 (Hubbell Pond)	Significant	25	15
Gehrke	Significant	18	10
Holly	Significant	12	9
Lake Louse	Significant	12	11
Lake Orion	Significant	18	13
Oxbow	High	15	8
Pontiac Lake	High	21	15
Quarton	Significant	19	15
Waterford Multi-Lakes Level	Significant	12	11
Wildwood Lake	High	22	6
Winkler Pond	Significant	13	9
Lake Neva	High	17	13
Lake Sherwood	Significant	22	15
Endicott	Significant	14	11
Heron	High	26	20
Davisburg Trout Farm	Significant	12	7
Dawson Millpond	High	9	8
Wolverine Lake	Significant	14	11
Pontiac Motor Division Detention Area	Significant	12	12
Wau-Me-Gah Lake	Significant	8	3

Source: State of Michigan Department of Environmental Quality Geological and Land Management Division.

Frequency & Probability

Oakland County has 8 high and 15 significant dam hazards.⁷⁴ Based on the number of high and significant dam hazards, it is very probable that a dam failure will occur in the future within the County. In 2017, piping at one of the "Significant" hazard dams was discovered, which is an indication that the probability of a dam-related incident is possible in Oakland County.

⁷⁴ Michigan Department of State Police, Emergency Management Division, *Michigan Hazard Analysis*, March 2006, page 80.



Figure 23: Dam in Oakland County



Health & Safety

No deaths or major injuries have been reported as a result of dam failure in the state.⁷⁵ The risk to human life as a result of dam hazards is moderate to high.⁷⁶

Area Impacted

Areas located downstream from a dam, within a floodplain, are at greatest risk for impact from a dam failure. Approximately 5,784 structures are located within FEMA-mapped 100-year floodplains in Oakland County.

Economic Impact

The risk for property damage as a result of dam hazards is moderate to high.⁷⁷ Property loss and content loss can be very high as a result of a dam failure. Variable costs to repair a damaged dam are anticipated.

Critical Facilities/Services

Flooding events can require a substantial amount of resources and assistance from multiple agencies and departments including local emergency response departments and state and federal departments such as the MDEQ Water Resources Division, Dam Safety Unit and FEMA. If flooding from a dam resulted in significant damage to homes, the American Red Cross may also provide assistance.

⁷⁵ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 79.

⁷⁶ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 77-81.

⁷⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 79.



Dam Failure Risk & Vulnerability Assessment

Oakland County currently has 8 high and 15 significant dam hazards.

Table 32: Dam Failure Hazard Evaluation and Impact/Consequence Assessment

Table 32. Dam Fallare Hazara Evaluation and Impact/Consequence Assessment					
Frequency & Probability ¹			13		
Potential I	Magnitude and Scale ¹		29		
Physical V	Julnerability Hazard Impag	ct ¹		65	
Social Vu	Inerability Hazard Impact ¹			66	
Communi	ty Conditions Hazard Impa	act ¹		60	
Overall Ca	apability and Capacity ²			68	
Mitigation	n^2		67		
Hazard Co	onsequence & Impact Scor	·e ¹	53		
Overall Ri	isk Rating ³			26	
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable		Capable	High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Riverine Flooding

Definition

The periodic occurrence of overbank flows of rivers, streams, drains, and lakes resulting in partial or complete inundation of the adjacent floodplain.

Historical Events

According to NOAA data, there were 23 flood/flash flood events in Oakland County from 1996 through 2016, resulting in 1 death and approximately \$402 million worth of damage. Some historical floods are listed below.

In September 2008, heavy rainfall led to flooding of roads and basements. Roads were closed, people were evacuated from their homes and a woman had to be rescued when her car became submerged on a flooded road.⁷⁸

A historic rainfall event unfolded over Southeast Michigan on August 11, 2014, leading to major flooding and road closures. This event was caused by a strengthening low pressure system moving over the area, focusing the tropical moisture which came up from the south. The hardest hit areas

⁷⁸ National Climatic Data Sponsored Website, https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=133285, Standard Query for Severe Weather, June 20, 2017.



included Metro Detroit and surrounding communities. Southern Oakland, Wayne, and Macomb counties saw the worst of the flooding as 4 to 6 inches of rain fell over a 4-hour period. Around 75,000 homes and businesses suffered damage, with over 3000 suffering major damage. There was also damage to the roads and bridges, along with the city sewer pumps which were overwhelmed by the torrential rainfall. Total estimated dollar loss from the Detroit Metro area was 1.8 billion dollars. Oakland County suffered an estimated 400 million in property damage.⁷⁹

In September 2016, Heavy rain fell across the Detroit Metro Area during the morning hours (2 to 5 inches). Widespread urban flooding was reported, with many roads and interstates closed. Many basements were also flooded. The flooding resulted in approximately 2 million dollars in damages in the Detroit Metro Area, with \$500,000 coming specifically from damages in Oakland County. ⁸⁰

Frequency & Probability

From 1975 through 2014, 14 major floods in Michigan resulted in Presidential Major Disaster Declarations.⁸¹ Two of Oakland County's major rivers, the Clinton and Rouge Rivers, are likely to flood again. Portions of the Huron River also exhibit flooding, but less frequently. Smaller tributaries of these river systems are also likely to flood in the future. It is highly probable that riverine flooding will continue to be a hazard in Oakland County.

Health & Safety

In Oakland County, there has been 1 death from riverine flooding since 1996. 82 The risk to human life is low. 83

Area Impacted

Riverine floods in Oakland County primarily affect streets and infrastructure located in or near floodplains and in areas with inadequate drainage. Approximately 6,000 structures are located within the FEMA 100-year floodplain within Oakland County.

⁷⁹ National Climatic Data Sponsored Website, https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=538946, Standard Query for Severe Weather, June 20, 2017.

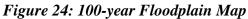
⁸⁰ National Climatic Data Sponsored Website, https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=660647, Standard Query for Severe Weather, June 20, 2017.

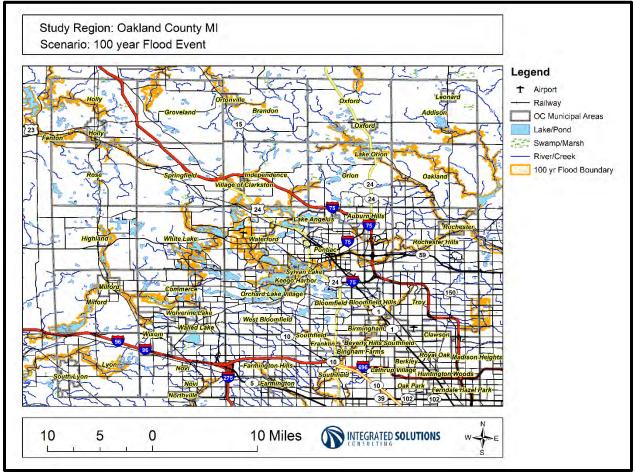
⁸¹ FEMA, https://www.fema.gov/disasters/, June 20, 2017.

⁸² National Climatic Data Sponsored Website, https://www.ncdc.noaa.gov/stormevents/listevents.jsp?, Standard Query for Severe Weather, June 20, 2017.

⁸³ Ibid

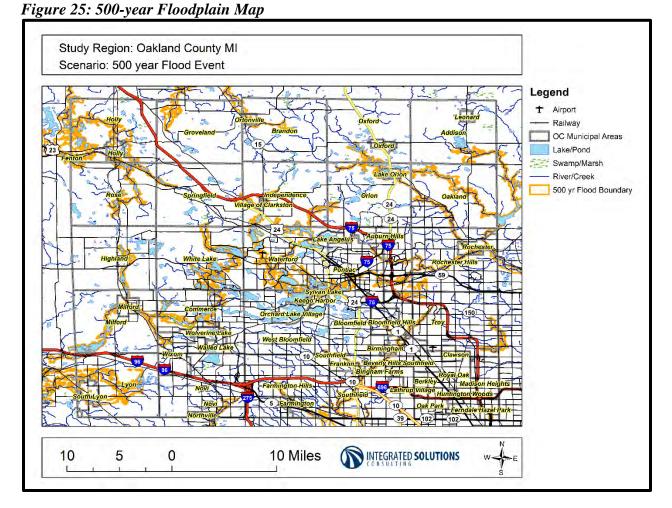












Economic Impact

Property loss from flood events can be very high. Property damage from flooding in Michigan is estimated at \$60 million to \$100 million annually. 84 Flood insurance coverage for Oakland County was estimated at \$335,119,600 in March 2017. The risk of property damage resulting from riverine flooding hazards is high. From 2012 to 2017, the number of active flood insurance policies dropped 14.0% nationally and 18.0% in the state of Michigan. In Oakland County, however, the number of people with flood insurance grew slightly.

Critical Facilities/Services

Flooding events can require a substantial amount of resources and assistance from multiple agencies and departments including local emergency response departments, as well as state, federal and nongovernmental agencies such as the American Red Cross. Significant crop yield losses may result from flood events. Agricultural services such as the U.S. Department of

⁸⁴ Michigan Department of State Police, Emergency Management Division, *Michigan Hazard Mitigation Plan (Updated March*, 2014), March 2014, page 168.



Agriculture may provide assistance. The National Weather Service issues flood watch and warnings to give advanced warning of potential flooding to areas.

National Flood Insurance Program (NFIP) Participation

The majority of Oakland County communities participate in the National Flood Insurance Program.

All 62 Oakland County communities, with the exceptions of the Cities of Berkley, Hazel Park and Lake Angelus are known to have adopted local ordinances and/or site plan review standards that regulate construction and land uses within designated floodplains.

In addition, Part 31, Water Resources Protection, Act 451 of 1994, as amended, regulates activities that result in occupation, fill or grade lands within floodplains along watercourses with a drainage area in excess of 2 square miles. Such activities require an application, review and permit issuance from the MDEQ prior to disturbance.

Policies In-Force

According to FEMA, Oakland County communities had 1,385 insurance policies in-force totaling \$330,694,100.

Table 33: NFIP Policies In-Force

Community Name	Policies In- Force	Insurance In-force Whole \$	Written Premium In- Force
AUBURN HILLS, CITY OF	9	3,077,900	18,439
BERKLEY, CITY OF	10	2,268,000	3,427
BEVERLY HILLS, VILLAGE OF	13	2,750,700	11,807
BINGHAM FARMS, VILLAGE OF	2	700,000	830
BIRMINGHAM, CITY OF	71	13,536,400	56,969
BLOOMFIELD HILLS, CITY OF	24	9,258,100	124,725
BLOOMFIELD, TOWNSHIP OF	82	25,919,500	63,624
BRANDON, TOWNSHIP OF	16	3,352,900	20,837
CLARKSTON, CITY OF	1	132,000	1,454
CLAWSON, CITY OF	7	2,128,000	2,647
COMMERCE, TOWNSHIP OF	30	8,509,000	19,479
FARMINGTON HILLS, CITY OF	203	31,926,700	156,115
FARMINGTON, CITY OF	97	15,619,000	46,570
FERNDALE, CITY OF	8	2,399,600	6,254
FRANKLIN, VILLAGE OF	13	3,955,000	4,964
GROVELAND, TOWNSHIP OF	2	485,000	1,753
HAZEL PARK, CITY OF	4	280,000	708
HIGHLAND, TOWNSHIP OF	6	1,840,000	5,206
HOLLY, TOWNSHIP OF	7	878,700	7,152
HOLLY, VILLAGE OF	8	1,203,900	6,974



HUNTINGTON WOODS, CITY OF	11	2,632,000	3,818
INDEPENDENCE, TOWNSHIP OF	23	5,910,100	19,329
KEEGO HARBOR, CITY OF	23	4,565,800	19,437
LAKE ANGELUS, CITY OF	2	292,000	779
LAKE ORION, VILLAGE OF	30	6,043,100	28,014
LATHRUP VILLAGE, CITY OF	5	1,440,000	1,786
LYON, TOWNSHIP OF	12	2,710,300	11,606
MADISON HEIGHTS, CITY OF	4	1,000,000	2,771
MILFORD, TOWNSHIP OF	1	105,000	256
MILFORD, VILLAGE OF	3	1,130,000	1,585
NORTHVILLE, CITY OF	35	8,576,700	67,361
NOVI, CITY OF	47	16,533,300	41,135
OAK PARK, CITY OF	14	2,434,000	4,179
OAKLAND, TOWNSHIP OF	21	5,431,400	17,342
ORCHARD LAKE VILLAGE, CITY OF	11	3,740,000	5,602
ORION, TOWNSHIP OF	12	2,910,000	7,790
ORTONVILLE, VILLAGE OF	3	486,000	2,583
PONTIAC, CITY OF	10	2,327,000	9,754
ROCHESTER HILLS, CITY OF	38	9,249,600	22,838
ROCHESTER, CITY OF	10	3,886,700	18,698
ROSE, TOWNSHIP OF	2	487,700	1,932
ROYAL OAK, CITY OF	36	7,840,000	11,623
SOUTHFIELD, CITY OF	61	14,716,800	51,053
SPRINGFIELD, TOWNSHIP OF	3	1,050,000	1,245
SYLVAN LAKE, CITY OF	3	1,050,000	1,203
TROY, CITY OF	136	40,422,900	184,552
WALLED LAKE, CITY OF	1	70,000	239
WATERFORD, CHARTER TOWNSHIP OF	77	20,235,500	65,738
WEST BLOOMFIELD, TOWNSHIP OF	110	27,222,900	90,711
WHITE LAKE, TOWNSHIP OF	21	4,261,900	11,409
WIXOM, CITY OF	5	1,083,000	2,361
WOLVERINE LAKE, VILLAGE OF	2	630,000	766
TOTAL	1,385	330,694,100	1,269,429

Source: FEMA as of 10/31/2017



Table 34: CRS Eligible Communities

Community Name	CRS Entry Date	Current Effective Date	Current Class	% Discount for SFHA	% Discount for Non- SFHA	Status
Commerce, Township of	05/1/03	10/1/14	9	5	5	С
Farmington Hills, City of	10/1/94	10/1/95	10	0	0	R
Novi, City of	10/1/99	10/1/99	7	15	5	С

Source: FEMA as of 10/1/2017

Oakland County has 18 properties that were designated as having suffered repetitive flood claims, according to an official list maintained by FEMA and the National Flood Insurance Program. Eleven of these eighteen properties are located within the City of Farmington Hills, four are in Waterford Township, two are in the City of Birmingham, and one is in the City of Troy. All of these properties are listed as not yet having fully benefited from flood mitigation activities, and they should be prioritized for future projects that might alleviate their flood risks. FEMA funds are available through HMGP, PDMP, and FMAP in order to help subsidize these types of flood mitigation activities. Although most of FEMA's hazard mitigation grants are provided with a 75/25 cost-share agreement, repetitive loss properties can enjoy an even more favorable cost-share ratio, with 90% and sometimes even 100% of the flood mitigation costs potentially able to be paid through these federal programs.

Of the eleven repetitive loss properties in the City of Farmington Hills, eight are of a single-family residential type, and three are classified as 'other residential' (i.e. not single-family occupancy). Although some of these properties have experienced 4 or 5 damaging events during the past several decades, others have only two or three events listed within the space of just a few years, before which or after which the property might not have been covered by insurance. For example, one property reported four insurance claims for flood damages throughout the 1980s and 1990s, and is currently still insured. A few other properties have four or five claims reported between the late 1990s and the present day, and are currently insured. But the remaining properties listed for the city all tend to have had just a couple of reported flood claims within the space of one decade, along with at least one reported lapse in their insurance coverage. In other words, additional damages are likely to have occurred to these homes, but were not reported during the periods in which no insurance was being carried under the NFIP. Average claim payments for some of these properties have even exceeded \$100,000, although the average damages per event tend to be in the \$10,000 to \$20,000 range, when all these listed properties in the city are being considered. These are more severe flood damages than has been documented for the other Oakland County communities, so these properties in the city seem to merit being heavily prioritized for flood mitigation activities.

Waterford Township's four identified repetitive loss properties are all of the single-family residential type. Their claim history shows a pattern similar to those described in Farmington Hills, in which only a couple of damaging events occur within a single decade, but some lapse in insurance coverage is also indicated in the records. The current list of Waterford's repetitive loss properties all had just two claims reported, with the longest accompanying time period ranging



from the years 2004 to 2013, while the shortest range of time involved a period of only a year and a half. Average damages to each property, per event, came out to less than \$10,000.

The City of Birmingham had two identified properties which were classified as 'other non-residential properties' and these were the only non-residential properties to appear in the Oakland County listings. One of the properties only had a couple of claims in 1997, followed by an uninsured period, while the other identified property reported four claims over a 15-year period, and hasn't had any listed flood events since 1996 although the property is designated as currently insured. The average claim amounts were a few thousand dollars lower, on average, than those reported for Waterford Township.

Finally, the City of Troy had one single-family residential property listed as suffering three damaging events during the early 1980s, followed by some lapse in insurance coverage, and an average damage amount that is comparable to that reported for Waterford Township. The prioritization of these properties may ultimately be determined at the household level, but this general planning analysis must protect the confidentiality of insurance and claim information for all specific addresses. Therefore, the general prioritization suggested here would be to emphasize the larger number of more heavily damaged properties found within Farmington Hills, then the moderately damaged properties located in Waterford Township and the City of Troy, and finally the properties listed for the City of Birmingham. Since the level of interest, activity, and motivation will naturally vary among individual property owners, however, any opportunity to implement flood mitigation activities at any of these properties should be sought and followed up on, as each property on this list has already been defined as meriting high priority. It is recommended that all of the NFIP-identified repetitive loss properties maintain flood insurance coverage, while funding is sought to alleviate their risks.

Another interesting pattern found within the information from the NFIP is that regarding the dates of damaging flood events. Sorting all reports by date reveals a total of some 21 events between April 1979 and September 2013, for which claims were paid. Ten of these 21 flood events only involved a single property from the county's list, but the following events affected multiple properties (the number of listed properties affected by each event is provided in parentheses): October 1, 1981 (5), March 13 to 16, 1982 (3), May 1 to 2, 1983 (5), June 20 to 21, 1989 (4), June 18 to 19, 1996 (3), July 2, 1997 (2), August 6 to 9, 1998 (5), June 24, 2000 (3), May 22 to 23, 2004 (3), September 13, 2008 (3), and September 3, 2013 (3). Some of the event dates correspond with declared flood disasters, such as an event on September 11, 2000 (affecting one of the listed properties), which was when widespread basement flooding occurred and eventually resulted in federal disaster 1346 being declared—Michigan's most damaging disaster to date.

Riverine Flooding Risk & Vulnerability Assessment

Riverine flooding is dependent on seasonal weather patterns. There is 1 major riverine flooding event in Michigan every 2 years.

Vulnerable areas to flooding are those locations and populations within floodplains and flood prone areas, primarily those downstream of an event. Vulnerabilities include Infrastructure

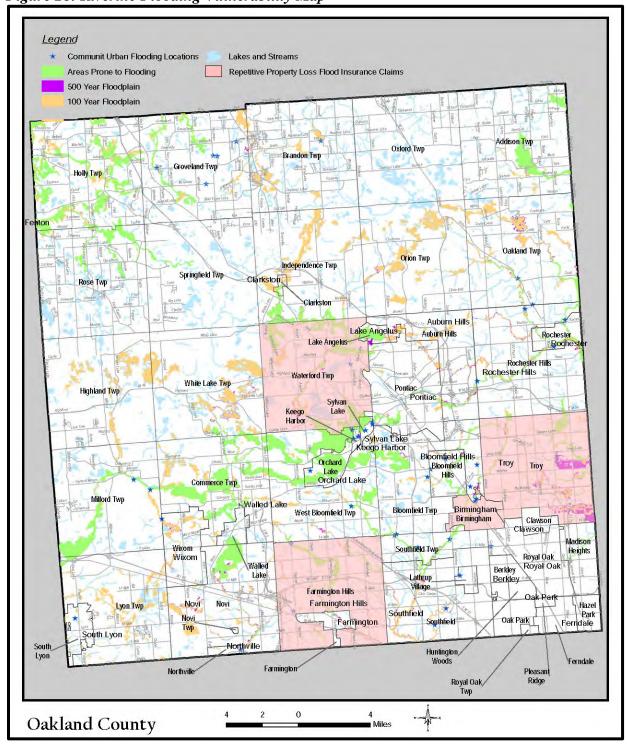


(bridges and structures) and populated areas. Approximately 5,784 structures are located within the FEMA 100-year floodplain in Oakland County. Figure 26 shows specific areas in the County which have a high occurrence of flooding.

Repetitive loss properties are those that have reported a certain number and amount of flood damages to the National Flood Insurance Program (NFIP), and therefore have been prioritized for flood mitigation activities because of the greater needs and cost-effectiveness that those properties seem to exhibit for potential flood mitigation projects. Oakland County has 18 properties that were designated as having suffered repetitive flood claims, according to an official list maintained by FEMA and the National Flood Insurance Program. Eleven of these eighteen properties are located within the City of Farmington Hills, four are in Waterford Township, two are in the City of Birmingham, and one is in the City of Troy. All of these properties are listed as not yet having fully benefited from flood mitigation activities, and they should be prioritized for future projects that might alleviate their flood risks. FEMA funds are available through HMGP, PDMP, and FMAP in order to help subsidize these types of flood mitigation activities. Although most of FEMA's hazard mitigation grants are provided with a 75/25 cost-share agreement, repetitive loss properties can enjoy an even more favorable cost-share ratio, with 90% and sometimes even 100% of the flood mitigation costs potentially able to be paid through these federal programs.



Figure 26: Riverine Flooding Vulnerability Map



Source: Oakland County, MI, USDA, SEMCOG | Created by: ASTI



HAZUS (100-year Flood)

HAZUS estimates that about 1,391 buildings will be at least moderately damaged. This is over 60% of the total number of buildings in the scenario. There are an estimated 0 buildings that will be completely destroyed.

Of the 55 fire stations analyzed, one will experience moderate damages. No hospitals will experience damages in this scenario, two of the 44 police stations will experience moderate damages, and seven of the 535 schools will experience moderate damages.

Building-Related Losses

The total building-related losses were 697.15 million dollars. 1% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 43.87% of the total loss.

HAZUS (500-year Flood)

HAZUS estimates that about 2,823 buildings will be at least moderately damaged. This is over 65% of the total number of buildings in the scenario. There are an estimated 40 buildings that will be completely destroyed.

Of the 55 fire stations analyzed, one will experience moderate damages and a total of two will experience loss of use. One hospital will experience moderate damages in this scenario; one of the 44 police stations will experience moderate damages and another will experience loss of use; and five of the 535 schools will experience moderate damages and another seven will experience loss of use.

Building-Related Losses

The total building-related losses were 1,056.16 million dollars. 1% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 46.60% of the total loss.

Table 35: Riverine Flooding Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹	44
Potential Magnitude and Scale ¹	41
Physical Vulnerability Hazard Impact ¹	73
Social Vulnerability Hazard Impact ¹	63
Community Conditions Hazard Impact ¹	53
Overall Capability and Capacity ²	68
Mitigation ²	61
Hazard Consequence & Impact Score ¹	55
Overall Risk Rating ³	49



Legend					
Score	1: Vulnerability Rating	2: Capability and Capacity Rating	3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable	Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable	Medium		
51 – 75	Vulnerable	Capable	High		
76 - 100	Very Vulnerable	Very Capable	Extreme		
N/A	Not Applicable/Unknown	Not Applicable/Unknown	Not Applicable/Unknown		

Urban Flooding

Definition

Urban flooding involves the overflow of storm sewer systems and is usually caused by inadequate drainage following heavy rainfall or rapid snowmelt.

Historical Events

Urban flooding is typically the result of intense rainfall, snowmelt, ice jams, dam failures (considered separately above) or a combination of these factors. Secondary hazards associated with urban flooding include infrastructure damage, dam failure, riverine flooding and shoreline flooding and erosion.

According to NOAA data, there were 23 flood/flash flood events in Oakland County from 1996 through 2016. Of these, 14 were flash flood events.⁸⁵

Between April 4 and 11, 1947, flooding resulted in significant damage in Northville, where floodwaters filled basements and inundated the first floors of numerous residences.⁸⁶

On August 6 1998, flooded roads impacted the morning commute in Southfield, Troy, Livonia, Novi and other cities. Parts of I-75, I-696 and Woodward Avenue were closed. Basements were flooded in Farmington and Royal Oak and several businesses in Farmington Hills experienced water damage. In Northville, a train derailed when it attempted to cross tracks that were washed out. Nineteen hundred (1,900) gallons of diesel fuel were spilled.⁸⁷

On June 28, 1999, runoff caused flash flooding in northern Oakland County with several gravel roads washed out in rural areas and some street flooding in the towns of Holly and Ortonville.⁸⁸

On June 25, 2000, flash flooding in Auburn Hills washed out the entrance ramp from southbound Lapeer Road to Interstate I-75 and a creek in Rochester Hills flooded a parking lot that damaged

⁸⁵ National Climatic Data Sponsored Website, <u>www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm</u>, *Standard Query for Severe Weather*, viewed June 20, 2017.

⁸⁶ Michigan Department of State Police, Emergency Management Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 171.

⁸⁷ National Climatic Data Sponsored Website, <u>www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm</u>, *Standard Query for Severe Weather*, viewed June 20, 2017.

 $^{^{88}}$ Ibid



5 cars. Some low-lying roads were closed for much of the day, including Walnut Lake Road in West Bloomfield and Halstead Road in Farmington Hills.⁸⁹

In September 2000, a Presidential Major Disaster Declaration was granted to Wayne and Oakland Counties for urban flooding and sewer backups caused by an intense rainfall on September 10 and 11, 2000. 90

One (1) man drowned in West Bloomfield Township on June 18, 1996, when he drove his car across a flooded parking lot into a pond that was obscured by the flood waters. ⁹¹

During July 2000, a stranded family was rescued by a boat in Novi after their car stalled in floodwaters. 92

In May 2004, portions of Dixie Highway were closed due to flooding from heavy rains that exceeded a foot of standing water. 93

A historic rainfall event unfolded over Southeast Michigan on August 11, 2014, leading to major flooding and road closures. This event was caused by a strengthening low-pressure system moving over the area, focusing the tropical moisture which came up from the south. The hardest hit areas included Metro Detroit and surrounding communities. Southern Oakland, Wayne, and Macomb counties saw the worst of the flooding as 4 to 6 inches of rain fell over a 4-hour period. Around 75,000 homes and businesses suffered damage, with over 3000 suffering major damage. There was also damage to the roads and bridges, along with the city sewer pumps which were overwhelmed by the torrential rainfall. Total estimated dollar loss from the Detroit Metro area was 1.8 billion dollars. Oakland County suffered an estimated 400 million in property damage.

In September 2016, Heavy rain fell across the Detroit Metro Area during the morning hours (2 to 5 inches). Widespread urban flooding was reported, with many roads and interstates closed. Many basements were also flooded. The flooding resulted in approximately 2 million dollars in damages in the Detroit Metro Area, with \$500,000 coming specifically from damages in Oakland County.

Frequency & Probability

There have been 14 flash flood events in Oakland County since 1996. The frequency of urban flooding is dependent on seasonal weather patterns. Urban flooding is usually caused by inadequate drainage following heavy rainfall or rapid snowmelt. Urban flooding is more likely to occur during the spring when thunderstorms and snow melt are more prominent. Many areas of Oakland County are moderately to heavily populated. Most of these areas are connected to a municipal sewer system (storm water and/or sanitary sewer), therefore, it is highly probable that

⁸⁹ Ibid

⁹⁰ National Climatic Data Sponsored Website, <u>www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm</u>, *Standard Query for Severe Weather*, viewed June 20, 2017.

⁹¹ Ibid

⁹² Ibid

⁹³ Ibid



urban flooding will occur in the future within the County. As development continues within the County, an increase in urban flooding may occur.

Health & Safety

Possible loss of life would be primarily from drowning incidents. Other potential health-related problems could be from sewer back-ups and increased pollutant concentrations.

Area Impacted

An urban flood in Oakland County would primarily affect streets and infrastructure located in and near floodplains and in areas with inadequate drainage.

Economic Impact

Current flood damages in Michigan are estimated between \$60 million to \$100 million per year. ⁹⁴ Twenty-three (23) flood events were reported in Oakland County between 1996 and 2016, resulting in property damage totaling an estimated \$402.236 million. ⁹⁵

From 1975 through 2014, 14 major floods in Michigan resulted in Presidential Major Disaster Declarations. These flood disasters have damaged homes, businesses, personal property and agriculture resulting in hundreds of millions of dollars' worth of damage. 96

Critical Facilities/Services

Flooding events can require a substantial amount of resources and assistance from multiple agencies and departments including local emergency response departments, as well as state, federal and nongovernmental agencies such as the American Red Cross.

Urban Flooding Risk & Vulnerability Assessment

Urban flooding is dependent on seasonal weather patterns. Urban flooding is normally restricted to areas with high volumes impervious materials. These would include major cities, industrial parks, and downtown districts.

Vulnerabilities include Infrastructure (bridges and structures) and populated areas (Commercial and Residential).

• See Infrastructure (Water/Sewer) Vulnerability Map in Appendix A

⁹⁴ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 82-101.

⁹⁵ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm, Standard Query for Severe Weather, viewed June 20, 2017.

⁹⁶ FEMA, Natural Disaster Reports, viewed June 20, 2017.



Table 36: Urban Flooding Hazard Evaluation and Impact/Consequence Assessment

14010 001 0	Tour I would Ingara L	,	ina impaca comseque.	tee 11bbebbiiteitt
Frequency & Probability ¹			38	
Potential Magnitude and Scale ¹			41	
Physical V	ulnerability Hazard Impag	ct ¹	68	
Social Vul	Inerability Hazard Impact ¹		71	
Communi	ty Conditions Hazard Impa	act ¹		53
Overall Ca	apability and Capacity ²			73
Mitigation	1^{2}		67	
Hazard Consequence & Impact Score ¹			55	
Overall Risk Rating ³				46
		end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	pplicable/Unknown	Not Applicable/Unknown

Shoreline Flooding & Erosion

Definition

Shoreline erosion hazards typically involve the loss of property as sand or soil is removed by water action and is carried away over time.

Historical Events

Shoreline flooding and erosion typically occurs along the Great Lakes shoreline and is caused by high water levels. A significant high water period in Michigan was in 1997 through 1998. During this period, the Great Lakes were at or near record levels set in the mid-1980s. In 1985 through 1986, record high lake levels resulted in a Governor's Disaster Declaration for 17 shoreline counties. During 1972 through 1973, high water levels caused flooding in 30 counties in Michigan.

Oakland County does not have any Great Lakes shoreline; therefore, this hazard is not included further within this Plan.



Fog

Definition

Fog is condensed water vapor in a cloudlike mass that is located close to the ground and limits visibility.

Historical Events

In 2005, up to 200 cars collided during a heavy fog in Ingham County. Two (2) people were killed, 37 were injured and both lanes of I-96 were closed for hours. ⁹⁷ In 1995, dense fog lasted for over 24 hours resulting in numerous traffic accidents and 4 fatalities. Schools were delayed and flights were delayed, cancelled or diverted. ⁹⁸

Frequency & Probability

Michigan has approximately one major fog event every two years. NOAA lists one major fog event for Oakland County since 1950.

Health & Safety

Low visibility can cause large multi-car accidents resulting in personal injury and death. No records of death or injury from fog events were found for Oakland County.

Area Impacted

Fog is usually limited to low lying areas and valleys; however, during significant events, large portions of the County may be affected. The areas of most concern would be highways, freeways, areas of high traffic volumes and airports.

Economic Impact

Fog is normally limited to the early morning hours which may delay the morning commute. Low visibility may lead to accidents, property damage and injury. The economic impacts are typically short term and localized.

Critical Facilities/Services

Critical facilities and services that depend on transportation are most affected by fog. School buses and emergency response vehicles may be significantly delayed. The affect should be temporary and limited to the duration of the fog event or shortly thereafter.

Fog Risk & Vulnerability Assessment

Michigan has approximately 1 major event every 2 years. NOAA had 1 major fog event listed for Oakland County since 1950. Fog is normally limited to the early morning hours and would therefore, be constrained to the early morning commute. The most dangerous accidents tend to be on highways/freeways, high traffic roads, airports, and railroad crossings. Heavy fog can lengthen

⁹⁷ Michigan Department of State Police, Emergency Management Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 161.

⁹⁸ Ibid.



the time it takes for emergency response vehicles to respond to an emergency. Heavy fog also puts school buses and other public buses at increased chance of accident.

Table 37: Fog Hazard Evaluation and Impact/Consequence Assessment

1 4010 37.1	Table 37. Fog Hazara Evaluation and Impact/Consequence Assessment					
Frequency & Probability ¹			25			
Potential Magnitude and Scale ¹			11			
Physical Vulnerability Hazard Impact ¹			28			
Social Vu	Inerability Hazard Impact ¹		29			
Communi	ty Conditions Hazard Impa	act ¹		16		
Overall Ca	apability and Capacity ²			79		
Mitigation	n^2		72			
Hazard Consequence & Impact Score ¹			21			
Overall Risk Rating ³				23		
	Legend					
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable		Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium		
51 – 75	Vulnerable	Capable		High		
76 - 100	Very Vulnerable	Very Capable		Extreme		
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown		

Gas/Oil Shortages or Supply Distribution

Definition

A gas/oil shortage is when demand for gas/oil exceeds the available supply.

Historical Events

In 2005, Hurricane Katrina disrupted oil refinery stations that affected Michigan's supply of fuel. Cold temperatures in 1976, 1977 and 2000 lead to a fall in propane inventories. The propane industry found it difficult to maintain deliveries causing the price of propane to hit record highs. During the 1970s, the Middle East Oil Embargo halted the flow of oil causing an energy crisis followed by the eruption of the Iranian Civil War this resulted in gas shortages and a significant increase in the cost of gasoline.

Frequency & Probability

Since 1965, there have been 7 major gas/oil shortages that impacted Oakland County. The conflicts in the Middle East as well as increased demand around the globe can be expected to lead to additional shortages in the future.

Health & Safety

Although no information could be found regarding specific injuries or deaths caused by gas/oil shortages, they are possible. Shortages in heating fuels and increased cost may lead some individuals to be unable to heat their homes and result in a number of health issues attributed to cold weather (e.g., hypothermia, chilblains, etc.) collectively referred to as cold stress. Long term



shortages in gasoline and fuel may lead to violent outburst. Overall the risk to health and safety is low.

Area Impacted

All of Oakland County would be impacted by a gas/oil shortage. Depending on the type of fuel, certain areas may be more impacted then others. Propane shortages would impact rural areas while gasoline shortages would have a larger impact on commuters and businesses.

Economic Impact

Economic impact includes increased prices of gas/oil, reduction in spending on other items and less driving. Long-term widespread shortages may lead to job loss, high inflation, recession and social unrest. Propane or natural gas shortages may affect the ability of people to heat their homes and may lead to damage to personal property.

Critical Facilities/Services

Critical facilities and services are impacted by gas/oil disruptions and shortages. Critical facilities such as emergency response and schools rely on transportation fleets with relatively poor mileage. Generators run on diesel fuel. Most critical facilities are limited to fixed finances such as schools, emergency response and nursing homes that find it difficult to make up the increased cost of heating and transportation.

Gas/Oil Shortage Risk & Vulnerability Assessment

Since 1965, there have been 7 major gas/oil shortages that impacted Oakland County. Gas and oil shortages cover a wide range of fuels used for different purposes from fueling vehicles to heating homes or making plastics. The type of gas/oil shortage will dictate what/who is most vulnerable. For example, gasoline shortages will affect commuters, which in turn will affect the businesses where they work (increase in absenteeism). Oakland County has limited public transportation available, without gasoline many residents would find it difficult to make it into work. If there was a shortage of propane or natural gas, that would affect the ability to heat homes, hospitals, and nursing homes. It would also affect some ability to cook. Shortages in diesel would affect commercial and industrial facilities, places with generators, emergency response, and schools.

Table 38: Gas/Oil Shortage Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹	13
	-
Potential Magnitude and Scale ¹	5
Physical Vulnerability Hazard Impact ¹	47
Social Vulnerability Hazard Impact ¹	66
Community Conditions Hazard Impact ¹	28
Overall Capability and Capacity ²	73
Mitigation ²	67
Hazard Consequence & Impact Score ¹	36
Overall Risk Rating ³	21



Legend					
Score	1: Vulnerability Rating	2: Capability and Capacity Rating	3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable	Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable	Medium		
51 – 75	Vulnerable	Capable	High		
76 - 100	Very Vulnerable	Very Capable	Extreme		
N/A	Not Applicable/Unknown	Not Applicable/Unknown	Not Applicable/Unknown		

Hazmat Incidents

Fixed Site

Definition

Hazardous Material (Hazmat) Incident – Fixed Site is defined as an uncontrolled release of a hazardous material originating from a building, structure or fixed equipment which is capable of posing a risk to life, health, safety, property or the environment.

Historical Events

According to Oakland County's 2015 SARA Title III reports, Oakland County had 225 Extremely Hazardous Substance (EHS) facilities and over 500 active hazardous substance facilities. 99 Oakland County has an average of 25 reported hazmat incidents per year. Although most hazmat incidents occur at industrial facilities, this is not always the case. For example, on May 29, 2004, a tank containing ethylene glycol for a refrigeration system ruptured at a fish market in Birmingham. Approximately 180 gallons of the material were released, with a portion entering the storm drain system. The spill required evacuation of the building and several people were exposed to the spilled material, 6 people required hospitalization. 100

Table 39: Fixed Site Hazmat Releases in Oakland County

Community Name	Number of Releases
Pontiac	59
New Hudson	15
Troy	46
Novi	11
Farmington Hills	28
Rochester and Rochester Hills	30
Waterford	21
Royal Oak	19
Southfield	27
Auburn Hills	11
Hazel Park	9

⁹⁹ Oakland County LEPC webpage, https://www.oakgov.com/homelandsecurity/Pages/program_service/lepc.aspx, June 21, 2017.

¹⁰⁰ U.S. Coast Guard, National Response Center website, www.nrc.uscg.mi./foia.html, Standard Query Report for Oakland County, Fixed Incidents, January 11, 2012.



Oxford	13
West Bloomfield	7
Birmingham	5
Bloomfield Hills	3
Clarkston	9
Clawson	6
Ferndale	13
Holly	11
Lake Orion	8
Leonard	3
Oak Park	11
Ortonville	1
South Lyon	7
Springfield	2
Farmington	8
Franklin Village	1
Keego Harbor	2
Madison H8s	18
Milford	23
Northville	1

Source: U.S. Coast Guard, National Response Center website, www.nrc.uscg.mi./foia.html, Standard Query Report for Oakland County, Fixed Incidents, January 1, 1990 through December 21, 2011.

Frequency & Probability

From 1990 through December 2011, there were a total of 547 reported fixed site hazmat incidents in Oakland County, an average of 25 incidents per year. ¹⁰¹ As the County continues to develop and attract new business and industry, it is anticipated that the probability of occurrence for this hazard will increase.

While recent fixed-site hazmat was not available, the following data demonstrates that hazmat issues, albeit many of them were small, occur often in Oakland County.

Table 40: All Hazmat-related Incidents in Oakland County

Year	Frequency	Fatalities	Casualties	Total Loss (Property and Content Loss)
2012	2,962	0	0	4,901
2013	4,102	0	0	33,730
2014	4,389	0	0	36,860
2015	3,227	0	0	107,988
2016	3,752	0	0	19,225

Source: Michigan Bureau of Fire Services

¹⁰¹ U.S. Coast Guard, National Response Center website, www.nrc.uscg.mi./foia.html, Standard Query Report for Oakland County, Fixed Incidents, January 11, 2012.



Table 41: Chemical Spill or Leaks in Oakland County

Year	Frequency	Fatalities	Casualties	Total Loss (Property and Content Loss)
2012	20	0	0	0
2013	13	0	0	0
2014	20	0	0	0
2015	18	0	0	0
2016	27	0	0	0

Source: Michigan Bureau of Fire Services

Health & Safety

Given the frequency of hazmat incidents in Oakland County, the number of deaths and injuries from this event is relatively low.

Area Impacted

In Oakland County, fixed site hazmat incidents have rarely required an evacuation. The majority of hazmat material releases in Oakland County are releases to water, followed by land/soil and air. ¹⁰² Environmental contamination which results from this hazard can extend to off-site locations.

Economic Impact

The economic impact due to this hazard can be highly variable, especially when including the costs of environmental remediation. According to the U.S. EPA Hazmat Response Team, costs for responding to a hazmat incident can range from \$1,000-\$100,000. Some property damage from this type of event can be expected, especially if the release results in a fire or explosion. Additional impact in the form of lost business revenue, can result if the incident causes a business to close.

Although major fixed site hazmat incidents are not common in Oakland County, there is a potential for such an incident. A significant incident would likely involve response efforts from multiple agencies and departments. Additional impact could result from environmental remediation and restoring public confidence in the environmental health of the County.

HAZMAT Fixed-Site Risk & Vulnerability Assessment

Vulnerable locations are the Superfund Amendments and Reauthorization Act (SARA) Title III sites (sites that store hazardous substances) in the County and those areas within an approximate 1-mile radius of these sites. In 2010, there were 195 Extremely Hazardous Substance (EHS) facilities and 502 Active Hazardous Substance facilities within the County.

About half of the County's 62 municipalities have had at least 1 fixed site hazmat release between 1999 and 2011. Police and fire stations are vulnerable assets in response to a hazmat fixed site release. Areas with greater population are more at risk for secondary health-related incidents

¹⁰² U.S. Coast Guard, National Response Center website, <u>www.nrc.uscg.mi./foia.html</u>, Standard Query Report for Oakland County, Fixed Incidents, January 11, 2012.



resulting from a fixed site hazmat release. The location of the listed SARA Title III sites, which include SARA Section 302 and Section 312 facilities, is shown on the HAZMAT Fixed-Facility Vulnerability Map, along with the locations of police and fire stations in the County. Also displayed on the map are the census blocks within a 1-mile radius of the listed sites. Approximately 1,442,426 people are located within 1 mile of at least 1 SARA Section 302 or Section 312 facility.

• See HAZMAT Fixed-Facility Vulnerability Map in Appendix A

Table 42: Hazardous Materials: Fixed Facility Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹			31		
Potential Magnitude and Scale ¹			16		
Physical V	Julnerability Hazard Impa	ct ¹	53		
Social Vu	Inerability Hazard Impact ¹		54		
Communi	ty Conditions Hazard Impa	act ¹		32	
Overall Ca	apability and Capacity ²			73	
Mitigation	n^2		67		
Hazard Consequence & Impact Score ¹			38		
Overall Risk Rating ³				38	
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	plicable/Unknown	Not Applicable/Unknown	

Transportation Incident

Definition

Hazardous Material (Hazmat) Incident – Transportation is defined as an uncontrolled release of a hazardous material during transport which is capable of posing a risk to life, health, safety, property or the environment.

Historical Events

One of the most significant responses required for a hazmat incident in Oakland County occurred on November 15, 2001. The incident involved the head-on collision of 2 trains near Clarkston. As a result of the collision, 2 of the rail crew members were killed and 2 more were injured. ¹⁰³ In addition, a car carrying 4,000 gallons of fuel oil was derailed. The derailment required the response of local fire departments and hazmat teams, the Michigan Department of Environmental Quality, Michigan Department of Natural Resources and the U.S. Environmental Protection Agency. A 1-mile radius around the incident site was evacuated, impacting approximately 719 people.

¹⁰³ Federal Railroad Administration, Safety Data Reports for 2001, http://safetydata.fra.gov, filtered for Oakland County, June 27, 2017.



Fortunately, after investigation by the hazmat team, it was determined that there was no release from the rail car. 104

Table 43: Transportation Related Hazmat Releases in Oakland County January 1, 1990 through 2011

Community Name	Number of Releases
Pontiac	18
Novi	5
Milford	5
Holly	1
Lake Orion	9
Sylvan Lake	2
Auburn Hills	4
Farmington Hills	4
Hazel Park	4
Highland	3
Northville	1
Rochester Hills	3
Sylvan Lake	2
Waterford	3
Wixom	3
Wood Lake	1

Source: U.S. Coast Guard, National Response Center website, www.nrc.uscg.mi./foia.html, Standard Query Report for Oakland County, Mobile and Transportation Incidents, January 1, 1990 through December 31, 2011

Frequency & Probability

Since 1978, there have been 4 significant hazardous material transportation incidents in Oakland County. Three involved train derailments and 1 involved a cargo van transporting radioactive materials. There have been 111 reported incidents involving mobile transport and 43 railroad incidents in Oakland County since 1992. The State of Michigan averages a reportable incident every 9.1 days. ¹⁰⁵ As the County continues to develop and attract new business and industry, it is anticipated that the probability of occurrence for this hazard will increase.

Health & Safety

Compared to fixed site hazmat incidents in Oakland County, transportation related incidents are more likely to result in death or injury. Oakland County experiences 1 death every 3 years and 1 injury each year, on average, as a result of transportation related hazmat accidents. Deaths and injuries are typically limited to the operators of the transportation vessel.

¹⁰⁴ U.S. Coast Guard, National Response Center website, <u>www.nrc.uscg.mi./foia.html</u>, Standard Query Report for Oakland County, Rail Incidents, January 11, 2012.

¹⁰⁵ U.S. Coast Guard, National Response Center website, <u>www.nrc.uscg.mi./foia.html</u>, Standard Query Report for Oakland County, Rail Incidents, January 11, 2012.

¹⁰⁶ U.S. Coast Guard, National Response Center website, www.nrc.uscg.mi./foia.html, Standard Query Report for Oakland County, Rail Incidents, January 11, 2012.



Area Impacted

There are 134 miles of freight railroads and approximately 62 miles of interstate and major state highway in Oakland County. Although large-scale, off-site impacts are not common with hazmat transportation incidents, they are certainly possible within Oakland County. Off-site impacts can include evacuation, closure of roadways and environmental contamination.

Economic Impact

The economic impact due to this hazard can be highly variable, especially when including the costs of environmental remediation. According to the U.S. EPA HazMat Response Team, costs for responding to a hazmat incident can range from \$1,000-\$100,000. Damage to transportation equipment is expected with this event, however, these costs are the responsibility of the transporter. Costs to the public can include response efforts, commuter delays and damage to transportation infrastructure.

Critical Facilities/Services

Although transportation related hazmat incidents are not common in Oakland County, such an incident is very possible. As demonstrated by the November 15, 2001, incident, a significant incident can involve response efforts from multiple agencies and departments. Additional impact could result from environmental remediation and restoring public confidence in the environmental health of the County.

HAZMAT Transportation Risk & Vulnerability Assessment

There have been 4 significant hazmat transportation incidents in Oakland County since 1978. There were a total of 111 automobile/truck accidents and 43 railroad accidents. Pontiac, Lake Orion, Novi, and Milford had the highest number of releases in the County; however, 16 communities had at least 1 incident reported.

Vulnerable locations to a transportation hazmat incident are the areas within a 1-mile radius of the railroads and major roadways, particularly I-75, I-696, I-96, I-275, and M-59. Areas of greater population are more vulnerable to these incidents. Police and fire stations are vulnerable assets in response to a hazmat fixed site release including activities such as evacuation assistant and cleanup assistance. The locations of the railroads, major highways, and police and fire station locations are included on Figure 27. Census block groups within a 1-mile radius of major highways and freight rail are also included on Figure 27. Approximately 767,222 people are located in these census blocks within 1 mile of the selected highways.



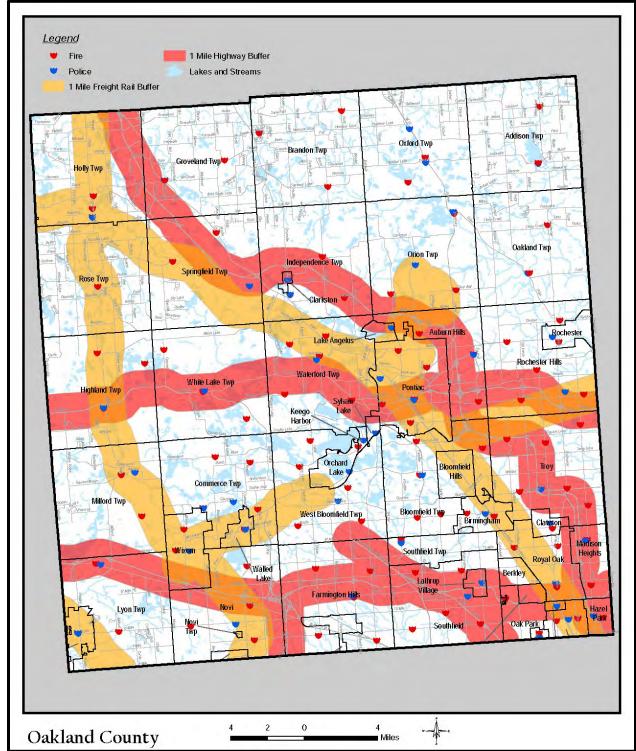


Figure 27: HAZMAT Transportation Vulnerability Map

Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI



Table 44: HAZMAT Transportation Incident Hazard Evaluation and Impact/Consequence Assessment

2135C55111C111	<i>y</i>			
Frequency & Probability ¹				38
Potential I	Magnitude and Scale ¹			14
Physical V	Julnerability Hazard Impag	ct ¹		53
Social Vu	Inerability Hazard Impact ¹			54
Communi	ty Conditions Hazard Impa	act ¹		35
Overall Ca	apability and Capacity ²			73
Mitigation	n^2		67	
Hazard Consequence & Impact Score ¹		38		
Overall Risk Rating ³			38	
		Leg	end	
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown

Infrastructure Disruption

Definition

An infrastructure disruption is the disruption of a critical public or private utility infrastructure which results in a short-term loss of service.

• See Infrastructure Map in Appendix A

Water System

Historical Events

On June 7, 1999, a water main break in the City of Auburn Hills resulted in a week-long loss of water service to over 44,000 households in Auburn Hills, Orion Township, Lake Orion and Rochester Hills. The break was caused when a drilling company accidentally struck a water main. The water emergency forced the temporary closures of hundreds of schools and businesses, including major industries within the affected area. Local officials estimated the water emergency resulted in economic losses in the tens of millions of dollars. ¹⁰⁷

On October 23, 2017, a 48-inch water main broke in Farmington Hills, causing at least 50,000 people to completely lose water service and impacting over 300,000 people. Impacted areas of the County were placed on a water boil until the break could be fixed and water pressure restored. The water boil lasted for up to nine days in the hardest hit areas.

¹⁰⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 137-148.



Frequency & Probability

Water system disruptions can be attributed to causes such as construction/excavation activities, underground freezing, power outages and system blockages. Two (2) significant water main breaks have occurred in Oakland County since 1999.

In 2003, there were 257 water line breaks, including service line breaks. The vast majority of water line breaks do not create a water crisis situation. It is estimated that this hazard will be somewhat more likely to occur in the future as the water system structures age and countywide development continues. ¹⁰⁸

Health & Safety

The availability of clean drinking water is crucial to the health and safety of the public. Water service interruptions can cause untreated or poorly treated drinking water to enter the water supply, resulting in boil water advisories.

Area Impacted

The Oakland County Water Resources Commissioner's Office (OCWRC) operates and maintains the water system for many of the communities of Oakland County. The OCWRC's water system has been designed to minimize the number of people impacted from service interruption. The goal of planning is to limit impacts to no more than 28 customers with each break. However, the impact of each line break is highly variable.

Economic Impact

Water is a vital component in operating schools, hospitals, businesses and in maintaining public health. Information regarding the economic impact of water system failures is not available. It is anticipated that an interruption in service can be extremely costly, depending upon the number of affected customers and duration of the event.

Critical Facilities/Services

Maintaining a functional water system is a critical service of the OCWRC in portions of Oakland County. Loss of water service can make it difficult to operate other critical facilities such as schools, hospitals, businesses and sport/entertainment venues.

Water Disruption Risk & Vulnerability Assessment

The Oakland County Water Resources Commissioner's Office (OCWRC) operates and maintains storm drains throughout the County. As shown on the Infrastructure (Water/Sewer) Vulnerability Map, the OCWRC operates and/or maintains portions of the water and sanitary sewer systems within the County. Interruptions in the water system are common; in 2003, for example, there were 257 water line breaks. The primary consequence of this hazard is potential public health impacts. As a result, schools, hospitals and elderly care facilities have been identified as the most vulnerable.

¹⁰⁸ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 137-148.



See Infrastructure (Water/Sewer) Vulnerability Map in Appendix A

Table 45: Infrastructure Disruption Hazard Evaluation and Impact/Consequence Assessment

Tavie 45: Infrastructure Disruption Hazara E			анианоп апа 1трась/С	Lonsequence Assessment	
Frequency & Probability ¹			25		
Potential I	Magnitude and Scale ¹			19	
Physical V	Julnerability Hazard Impag	ct ¹		62	
Social Vu	Inerability Hazard Impact ¹			59	
Communi	ty Conditions Hazard Impa	act ¹		45	
Overall Ca	apability and Capacity ²			73	
Mitigation	n^2			61	
Hazard Consequence & Impact Score ¹			45		
Overall Risk Rating ³				33	
Le			gend		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 – 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Electrical System

Historical Events

The largest, and arguably most infamous, electrical system failure in the United States occurred on August 14, 2003. This system failure started at 4:10 p.m. in southern Ohio and within seconds, 50 million people in North America were left without electricity. The blackout affected millions of customers in southeast Michigan, including Oakland County. In many ways, this event was a worst-case scenario electrical failure. ¹⁰⁹

About 1 million Michigan residents lost power on March 8, 2017. Gov. Rick Snyder, in a press briefing with officials from the state's two biggest utilities, called the windstorm "the largest combined statewide" power outage event in Michigan history. At one point, approximately one-third of Michigan residents were affected by the power outage. More than 800,000 DTE customers were affected by the storm and more than 4,000 wires were downed by falling trees. 320,000 Consumers Energy customers lost power because of the storm. The outages were caused by near-hurricane force winds, which pounded the area for more than 12 hours. A warmer than normal winter created softer ground, making it easier for trees to uproot and knock down more power lines.

Frequency & Probability

¹⁰⁹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March*, 2014), March 2014, page 383.



Electrical service for the majority of Oakland County is provided by DTE Energy, with the exception of a small area in the northwest portion of the County which is serviced by Consumers Energy. It is estimated that a significant power failure occurs in Oakland County once per year. Electrical failures, like the August 2003 blackout, although rare, can occur due to problems within the electrical system and from secondary causes such as weather and human/animal interference. Ice storms have an established history of causing electrical service interruptions. Electrical outages are often related to severe weather events, which occur 30-40 times per year within Oakland County.

Electrical service problem areas exist within the County. Problem areas are those areas that experience a power outage more than twice each year. When a problem area is identified, the cause is determined and remedied as quickly as possible. As a result, the identified problem areas are always changing. ¹¹⁰

As the County continues to grow and demand for electrical service increases, it is possible that this hazard will occur more frequently and with greater consequence.

Health & Safety

Electrical service is incredibly important in maintaining the health and safety of the public. Electricity is required to heat and cool homes, operate traffic signals and operate hospitals and emergency services. Power outages can be particularly dangerous during times of extreme heat or cold. In addition, power outages can have a negative impact on the infirm. The number of people impacted by a power outage is highly variable with each event.

Economic Impact

Electricity is a vital component to operating businesses and County services. Information regarding the economic impact of electrical outages is not available. It is anticipated that an outage can be extremely costly, depending of the number of affected customers and duration of the event.

Critical Facilities/Services

As demonstrated by the August 2003 blackout, electricity is an integral part of every service the County provides to it residents. The blackout caused traffic backups, loss of water service and gasoline shortages making it difficult to provide even the most common services. Fortunately, large-scale electrical failures are not common. However, the blackout was a good "test" for the County's systems to determine effectiveness under disaster conditions.

Electrical Disruption Risk & Vulnerability Assessment

Electrical service is provided to Oakland County by Consumers Energy and DTE Energy. Failures of the electrical system are also more likely to occur during severe storm events. Populations in schools, hospitals and elderly care facilities have been identified as being at increased vulnerability to this hazard. Locations of these facilities are shown in the Electrical/Communication System Vulnerability Map.

¹¹⁰ DTE Energy Media Relations, November 2011.



• See Electrical/Communication System Vulnerability Map in Appendix A

Table 46: Electrical System Infrastructure Failure Hazard Evaluation and

Impact/Consequence Assessment	t
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Frequency & Probability ¹				31	
Potential I	Magnitude and Scale ¹		12		
Physical V	Julnerability Hazard Impa	ct ¹		47	
Social Vu	Inerability Hazard Impact ¹			66	
Communi	ty Conditions Hazard Impa	act ¹		35	
Overall Ca	apability and Capacity ²			75	
Mitigation	n^2			61	
Hazard Consequence & Impact Score ¹		39			
Overall Risk Rating ³		35			
Leg			end		
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 – 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Communications System

Historical Events

Oakland County operates internal communications systems such as a 9-1-1 Public Safety, Answering Point (PSAP), and an emergency public radio system. There are an additional 29 PSAPs within the County that are operated by local cities, townships and villages. Telephone service for Oakland County residents is available from numerous service providers. In April 2003, a significant ice storm affected Oakland County. The ice downed phone lines cutting service to numerous customers throughout the County. Since 1987, construction projects within the County have caused at least 2 service interruptions in the 9-1-1 system.

Frequency & Probability

Communications failures are most frequently a result of severe weather events or other interferences that affect phone lines, such as animals or automobiles striking utility poles. Very rarely does a communications failure result from a problem with the communications system itself. Communications failures, both public and private systems, are possible with any major storm event such as ice storms, lightning or high winds which occur an average of 30-40 times each year. Power outages can also interrupt operation of the 9-1-1 PSAP. As the County continues to grow and demand for communications services increase, it is anticipated that this hazard will occur more frequently and which greater consequence.

¹¹¹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analys*is, March 2006, pages 137-148.

¹¹² Oakland County Homeland Security Division, November 2011.



Health & Safety

Communications systems are a vital link between the public and emergency response services. As a result, a failure of the system can have secondary impacts to the health and safety of the affected public. The number of people that experience a loss of service due to a communications failure is directly related to the severity of the event. However, people requiring emergency services during a failure are at greater risk for impact.

Area Impacted

A failure of private telephone communications is limited to the service area network. However, a failure of the emergency communications system can impact the entire County.

Economic Impact

The majority of economic impact from this hazard would result to loss of productivity for affected businesses.

Critical Facilities/Services

The 9-1-1 PSAP and emergency dispatch systems are vital services provided to Oakland County residents. Power outages and downed lines can greatly impact the County's ability to operate these systems. Backup generators are utilized to maintain emergency communications during power outages. If phone lines to the 9-1-1 PSAPs are downed, the calls are automatically re-routed to an alternate PSAP to maintain 9-1-1 phone services.

Communication Disruption Risk & Vulnerability Assessment

Private communications services are provided by a number of companies. With growing dependency on wireless networks, this specific asset represents a significant vulnerability. Oakland County also operates a 9-1-1/communications center. The public safety radio system currently in place in the County will be replaced with a system that allows for greater interoperability across multiple jurisdictions, including the State of Michigan.

Failures of the communication system are more likely to occur during severe storm events. Populations in schools, hospitals and elderly care facilities have been identified as being at increased vulnerability to this hazard. Locations of these facilities are shown in the Electrical/Communication System Vulnerability Map.

• See Electrical/Communication System Vulnerability Map in Appendix A



Table 47: Communication System Incidents Hazard Evaluation and Impact/Consequence Assessment

Assessment	V			
Frequency & Probability ¹				25
Potential I	Magnitude and Scale ¹			2
Physical V	Julnerability Hazard Impag	ct ¹		47
Social Vu	Inerability Hazard Impact ¹			59
Communi	ty Conditions Hazard Impa	act ¹		28
Overall Ca	apability and Capacity ²			76
Mitigation	n^2			72
Hazard Consequence & Impact Score ¹		33		
Overall Risk Rating ³			29	
Le			end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not A ₁	oplicable/Unknown	Not Applicable/Unknown

Storm Water System

Historical Events

In September 2000, extensive rains in southeast Michigan flooded municipal storm sewers causing sewer backups in thousands of Oakland County homes and businesses. The major cause of the sewer backups was a temporary loss of power at pumping stations and insufficient capacity of the storm sewer system due to the high rains, which exceeded the design capacity. The flooding caused extensive damage to affected homes and businesses and created a public health hazard due to potential exposure to untreated sewage. On October 27, 2000, Oakland County was granted a Presidential Disaster Declaration to provide disaster assistance to affected businesses and individuals. ¹¹³

A historic rainfall event unfolded over Southeast Michigan on August 11, 2014, leading to major flooding and road closures. This event was caused by a strengthening low-pressure system moving over the area, focusing the tropical moisture which came up from the south. The hardest hit areas included Metro Detroit and surrounding communities. Southern Oakland, Wayne, and Macomb counties saw the worst of the flooding as 4 to 6 inches of rain fell over a 4-hour period. Around 75,000 homes and businesses suffered damage, with over 3000 suffering major damage. There was also damage to the roads and bridges, along with the city sewer pumps which were overwhelmed by the torrential rainfall. Total estimated dollar loss from the Detroit Metro area was 1.8 billion dollars. Oakland County suffered an estimated 400 million in property damage.

¹¹³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 382.



In September 2016, Heavy rain fell across the Detroit Metro Area during the morning hours (2 to 5 inches). Widespread urban flooding was reported, with many roads and interstates closed. Many basements were also flooded. The flooding resulted in approximately 2 million dollars in damages in the Detroit Metro Area, with \$500,000 coming specifically from damages in Oakland County.

Frequency & Probability

There are 2 primary types of storm water systems in Oakland County – open drains and enclosed, underground systems. The primary problems associated with open drains are log jams, plugged drains and siltation and bank erosion. The major dilemma with the County's storm water systems, both open drains and enclosed systems, is that the County's drainage needs exceed system capacity when rainfall amounts exceed the design capacity. The open storm water system was originally designed to manage storm water for a specific design event. However, when the design event is exceeded flooding often occurs.

Capacity limitations of the storm water system are evident during periods of high rain or snowmelt. Some degree of storm water system flooding can be expected with any major rain or snowmelt event. It is anticipated that this hazard will become more frequent and more severe as future rainfall amounts increase as projected.

Health & Safety

The storm water system is of great importance to protecting human health and safety. Flooding which results during system failures, or capacity exceedances, can create safety problems and sewer backups in both combined storm water systems (sanitary and storm water flow) and separated storm water systems, presenting a health concern.

Area Impacted

County drains are found throughout Oakland County. The Oakland County Water Resources Commissioner's Office (OCWRC) is charged with the responsibility of maintaining the County storm water system's under their jurisdiction. The storm water systems for the remaining portions of Oakland County is operated and/or maintained by the Road Commission of Oakland County, the Michigan Department of Transportation and/or local municipalities. The area impacted by flooding is dependent upon the drainage area for the storm water system. Areas with combined storm water systems (sanitary and storm water flow) are more frequently found in the southern portions of the County. These areas can be at increased risk for sewer backups and basement flooding.

Economic Impact

As demonstrated by the September 2000 system failure, flooding can result in major property damage costs. Storm water system upgrades can also be very costly to implement. Funding is available for maintaining many Oakland County drains; however, maintenance funding is limited for approximately 200 County drains which were established under the 1956 Drain Code. Each year claims are filed with OCWRC for property damage due to flooding caused by system backups and capacity exceedances.

Critical Facilities/Services



Maintaining a functional storm water system is a critical service provided by the OCWRC to many Oakland County Communities. The storm water system is important to protect property, both public and private, and to maintain public health.

Storm Water System Disruption Risk & Vulnerability Assessment

Capacity limitations of the storm water system are evident during periods of high rain or snowmelt. Some degree of storm water system flooding can be expected with any major rain or snowmelt event. It is anticipated that this hazard will become more frequent and more severe as future rainfall amounts increase as projected.

• See Infrastructure (Water/Sewer) Vulnerability Map in Appendix A

Table 48: Storm Water System Incident Hazard Evaluation and Impact/Consequence Assessment

1 issessificit	·			
Frequency & Probability ¹				25
Potential I	Magnitude and Scale ¹			13
Physical V	Julnerability Hazard Impag	ct ¹		58
Social Vu	Inerability Hazard Impact ¹			54
Communi	ty Conditions Hazard Impa	act ¹		40
Overall Ca	apability and Capacity ²			73
Mitigation	n^2		61	
Hazard Consequence & Impact Score ¹			40	
Overall Risk Rating ³				32
		Leg	end	
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 - 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not A ₁	plicable/Unknown	Not Applicable/Unknown

Sewer System

Historical Events

Disruptions of the sanitary sewer system can result in significant risks to public health and safety. A system disruption can result in sewer backups in homes or businesses and discharges of untreated sewage to rivers and lakes.

In September 2010, a sanitary sewer pipe failed and resulted in a large sinkhole on a high traffic road. The sinkhole also affected nearby utilities such as gas and water. The sewer and sinkhole repairs caused road closures for an extended period of time. The road closures were a major disruption to residents, businesses and the general public for many months.



A historic rainfall event unfolded over Southeast Michigan on August 11, 2014, leading to major flooding and road closures. This event was caused by a strengthening low-pressure system moving over the area, focusing the tropical moisture which came up from the south. The hardest hit areas included Metro Detroit and surrounding communities. Southern Oakland, Wayne, and Macomb counties saw the worst of the flooding as 4 to 6 inches of rain fell over a 4-hour period. Around 75,000 homes and businesses suffered damage, with over 3000 suffering major damage. There was also damage to the roads and bridges, along with the city sewer pumps which were overwhelmed by the torrential rainfall. Total estimated dollar loss from the Detroit Metro area was 1.8 billion dollars. Oakland County suffered an estimated 400 million in property damage.

Frequency & Probability

A major system failure occurs within the County approximately once every 20 to 25 years. Smaller problems are more frequent. During major storm events, it is highly possible for a loss of power to occur at certain pump stations. This can create the potential for an overflow discharge to local rivers or lakes. It is expected that problems will become more frequent as the system structures age.

Health & Safety

Human exposure to untreated sewage presents a major health and safety threat. Discharges of untreated sewage to lakes or rivers can also significantly impact the environmental health of local waterways.

Area Impacted

OCWRC operates or maintains sanitary sewer systems most of the communities of Oakland County. Rural areas of the County have no municipal sewer service available. The sanitary sewer systems in the communities of Beverly Hills and Franklin Village have been identified as areas with the most frequent maintenance needs. The oldest parts of the system are in the Pontiac area, with the average construction date in the 1920's. The number of sewer users impacted by each failure is dependent upon the severity of the event. Lakes or rivers could also be impacted due to sewer overflow discharges, making them temporarily unsafe for recreational activity.

Economic Impact

Information regarding the economic impact of sanitary sewer system failures is not available. The sanitary sewer system is a vital part of the operations system for a wide range of businesses. It is anticipated that a failure could be extremely costly, depending upon the number of affected customers and duration of the event.

Critical Facilities/Services

Maintaining a functional sanitary sewer system is a critical service provided by the OCWRC to portions of Oakland County. It is OCWRC's policy to respond to all maintenance needs within 1 hour. Loss of sanitary sewer service can make it difficult to operate other critical facilities such as schools, hospitals, businesses and sport/entertainment venues.



Recent construction projects have increased the capacity of the system to decrease the likelihood of the system being overwhelmed. The improvements help protect against sewage backing up into homes and businesses or being discharged directly to lakes and streams during a major storm event.

Sewer System Disruption Risk & Vulnerability Assessment

A major system failure occurs within the County approximately once every 20 to 25 years. Smaller problems are more frequent. During major storm events, it is highly possible for a loss of power to occur at certain pump stations. This can create the potential for an overflow discharge to local rivers or lakes. It is expected that problems will become more frequent as the system structures age.

• See Infrastructure (Water/Sewer) Vulnerability Map in Appendix A

Table 49: Sewer System Incident Hazard Evaluation and Impact/Consequence Assessment

Table 49: Sewer System Inclaent Hazara Evaluation and Impact/Consequence Assessment					
Frequency & Probability ¹				19	
Potential I	Magnitude and Scale ¹			9	
Physical V	/ulnerability Hazard Impac	ct ¹		53	
Social Vu	Inerability Hazard Impact ¹			40	
Communi	ty Conditions Hazard Impa	act ¹		38	
Overall Ca	apability and Capacity ²			73	
Mitigation	n^2			61	
Hazard Consequence & Impact Score ¹		35			
Overall Risk Rating ³		25			
Le			end		
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Bridges, Roads, and Overpasses

Historical Events

There have been 85 significant bridge failures in the United States since 1940. 114 In 2009, a tanker explosion in Hazel Park caused a bridge to collapse onto I-75.

Frequency & Probability

Although there has only been 1 bridge collapse, it is possible for other bridge/overpass failures in the future. According to 2010 data from SEMCOG, Oakland County has 7,343 miles of public roads. Of these, 12% are in good condition, 42% are in fair condition and 46% are rated as being

¹¹⁴ Daniel Imhof. BridgeForum, *Bridge Collapse Database*, Accessed June, 2017



in poor condition. In 2010, there were 703 bridges in Oakland County; 670 of those are open, 32 are open with restrictions and 1 was closed. As of 2010, 22.9% (161) of the County's bridges were determined to be deficient. 115

Health & Safety

Hundreds of people have been killed or injured due to bridge failure in the United States. Falls, debris and drowning are the biggest threats from bridge failures. Sink holes rarely injure people, however.

Economic Impact

Economic impact is dependent on the size and type of failure. Significant failures can cost hundreds of millions of dollars to clean up and repair. Property damage to passing vehicles and nearby buildings may also result from failure. Re-routing of traffic can cause traffic congestion and reduce revenue for area businesses.

Critical Facilities/Services

Damage to roads and bridges can lead to congested roads or severely limit the ability of emergency personnel to respond to emergency situations. Depending on the severity of the failure and location of a transportation infrastructure failure, critical facilities such as hospitals, schools and nursing homes may be isolated.

Bridges, Roads, Overpasses Risk & Vulnerability Assessment

There have been 85 significant bridge failures in the U.S. since 1940; and one occurred in Michigan. In 2010, there were 703 bridges in Oakland County

Table 50: Structural Failure Infrastructure Failure Hazard Evaluation and Impact/Consequence Assessment

1mpaci/Coi	isequence Assessmeni			
Frequency & Probability ¹				13
Potential I	Magnitude and Scale ¹			13
Physical V	ulnerability Hazard Impa	ct ¹		53
Social Vu	Inerability Hazard Impact ¹			29
Communi	ty Conditions Hazard Impa	act ¹		35
Overall Ca	apability and Capacity ²			73
Mitigation	n^2		67	
Hazard Consequence & Impact Score ¹		32		
Overall Risk Rating ³		20		
Le			end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown

¹¹⁵ SEMCOG, http://www.semcog.org/Data/Apps/comprof/transportation.cfm?cpid=2999, June 17, 2017.



Invasive Species

Definition

An invasive species is a species that is not native to the ecosystem and whose introduction causes, or is likely to cause, harm to the economy, environment and/or human health.

Historical Events

Some of the most notable invasive species include emerald ash borer, Asian carp, gypsy moth, zebra mussels, Phragmite, and Japanese beetles. Each of these species have significantly impacted the environment and resulted in decreased revenue and profits.

Frequency & Probability

At least 200 high-impact invasive species occur in the United States. A new invasive species is established every 2 to 5 years. ¹¹⁶ The probability of new invasive species to become established in Oakland County is relatively high.

Health & Safety

While most invasive species do not pose a direct significant threat to a person's health or safety, they can make life less enjoyable. Certain plant species, such as glossy buckthorn and multiflorarose, have thorns that can cause injuries. Certain insects can bite and sting which can lead to allergic reactions. Certain diseases may affect herd populations such as deer or cattle. Diseases such as Chronic Wasting Disease and Foot and Mouth Disease are of most concern.

Economic Impact

The economic impact of invasive species can be rather high. It is estimated that the cost of invasive species is over 120 billion annually in the U.S. Invasive species can kill desirable plant and animal species, cause disease, reduce crop production, kill fish, decrease biodiversity, change hydrology, reduce aesthetic value and hurt tourism. Removal or control of invasive species is very costly and can be ineffective in certain species.

Critical Facilities/Services

Impact to critical facilities is relatively low. Invasive species tend to be located in natural areas and open spaces.

Invasive Species Risk & Vulnerability Assessment

New invasive species are introduced into the State of Michigan on average every 2 to 5 years. Invasive species threaten biodiversity, cause disease and death, diminish food supplies, and may alter the macro-climate and hydrology of an area. Parks, recreational lands, open spaces, area lakes and streams, and agricultural lands are the most vulnerable to invasive species. Oakland County has over 60,000 acres of parks, recreational land, and open space; Almost 30,000 acres of water; and approximately 20,000 acres of agricultural land.

¹¹⁶ Michigan State Police, *Michigan Hazard Analysis*, March 2006.



Table 51: Invasive Species Hazard Evaluation and Impact/Consequence Assessment

Table 31. Invasive Species Hazara Evaluation and Impact/Consequence Assessment					
Frequency & Probability ¹				31	
Potential I	Magnitude and Scale ¹			10	
Physical V	Julnerability Hazard Impa	ct ¹		28	
Social Vu	Inerability Hazard Impact ¹			29	
Communi	ty Conditions Hazard Impa	act ¹		24	
Overall Ca	apability and Capacity ²			73	
Mitigation	n^2		56		
Hazard Consequence & Impact Score ¹			24		
Overall Risk Rating ³				28	
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 – 75	Vulnerable		Capable	High	
76 - 100	Very Vulnerable	7	Very Capable	Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Nuclear Power Plant Accidents

Definition

A nuclear power plant accident would involve an actual or potential release of radioactive material at a nuclear facility in a quantity sufficient to constitute a threat to the health and safety of off-site populations.

Historic Events

In Michigan, there are 3 nuclear power plants in operation. The operation of these facilities is heavily regulated by the Federal Nuclear Regulatory Commission. There has never been an off-site release of radioactive material from a nuclear power plant in Michigan. However, an onsite release did occur on October 5, 1966, at the Enrico Fermi-1 Atomic Power Plant in Monroe County, Michigan. The release was a result of fuel meltdown; however, the radioactive material was contained within the reactor containment building. The Fermi-1 plant was shut down in 1972. In 1998, the Enrico Fermi-2 plant was opened next to the site of the Fermi-1.

Frequency & Probability

The southern portion of Oakland County is within the Secondary Emergency Planning Zone of the Fermi-2 Atomic Power Plant. The Secondary Emergency Planning Zone consists of a 50-mile radius around the plant. Although there has never been an off-site release from the plant, it is possible for a release from the plant to impact Oakland County.

Health & Safety

An accident at a nuclear power plant could result in radioactive materials becoming airborne or in direct impact to areas adjacent to the plant. The severity of radiological contamination from such



an event is directly proportionate to the type and amount of radioactive material released, weather conditions at the time of the release and the location relative to wind direction following the release. Although the southern portion of Oakland County is within the Secondary Emergency Planning Zone of the Fermi-2 Atomic Power Plant in Monroe County, prevailing wind patterns generally place the plant downwind of Oakland County. For areas within this zone, the primary concern is radiological contamination of food sources. Procedures have been developed by the plant and emergency response agencies to prevent radiation from contaminating food supplies and to prevent contaminated foods from being consumed, indicating that the risk to human health is considered low.

Area Impacted

Approximately 460 square miles in the southern portion of Oakland County is within the Secondary Emergency Planning Zone of the Enrico Fermi-2 plant. However, the actual area impacted by a release would depend greatly on the type and amount of radioactive material released, weather conditions at the time of the release and the location relative to wind direction following the release.

• See Nuclear Power Plant Map in Appendix A

Economic Impact

Due to the low frequency of this event in the United States, it is difficult to establish the economic impacts. It is anticipated that the impact could be very high, depending on the severity of the event.

Critical Facilities/Services

Nuclear power plant owners/operators work closely with emergency planners to develop response plans in the event of a release of radioactive materials. In Michigan, the responsibility to respond to such events is shared by the plant owner/operator and all levels of government. Response to an off-site release would likely involve multiple agencies and departments from all levels of government.

Nuclear Power Plant Accident Risk & Vulnerability Assessment

There are 3 nuclear power plants in Michigan. One active plant, Enrico Fermi-2 was opened in Monroe County in 1998, next to the Enrico Fermi-1 plant that was shut down in 1972. The southern portion of Oakland County is within the 50-mile radius Secondary Emergency Planning Zone of the Enrico Fermi-2 plant.

The primary vulnerability to a nuclear power plant incident is radiological contamination of food sources. Restaurants and grocery stores are most vulnerable, as well as active agricultural lands. Approximately 460 square miles in the southern portion of Oakland County is located within the Secondary Emergency Planning Zone and is shown in the Nuclear Power Plant Accident Vulnerability Map. Also shown on the map are areas of active agriculture land use in the County that are within the planning zone.

• See Nuclear Power Plant Accident Vulnerability Map in Appendix A



Table 52: Nuclear Power Plant Accidents Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹				13
Potential I	Magnitude and Scale ¹			13
Physical V	Julnerability Hazard Impac	ct ¹		53
Social Vu	Inerability Hazard Impact ¹			54
Communi	ty Conditions Hazard Impa	act ¹		40
Overall Ca	apability and Capacity ²			63
Mitigation	n^2		67	
Hazard Consequence & Impact Score ¹		40		
Overall Risk Rating ³			22	
Leg			end	
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown

Oil and Gas Well Accidents

Definition

An oil or gas well incident is an uncontrolled release of oil, natural gas or a release of hydrogen sulfide gas, a by-product of production wells.

Historic Events

As of 2012, there were 19 active or producing wells within Oakland County. ¹¹⁷ The last significant oil/gas well accident in Michigan was in 2013 in Jackson County. An explosion at an oil well placed a man in extremely critical condition and he was airlifted to University of Michigan hospital. Investigators believed that a truck had struck some piping in the oil well, causing an explosion and natural gas fire. ¹¹⁸

Table 53: Major Causes of Transmission Pipeline Accidents in the United States in 2016

Cause	% Of Total Accidents
Material/Weld/Equipment Failure	34%
Corrosion	20%
Excavation Damage	14%
Incorrect Operation	7%
Natural Force Damage	6%
Other Outside Force Damage	9%

¹¹⁷ Source: Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 369.

¹¹⁸ Source: Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 366.



All Other Causes 9%

Source: U.S. Department of Transportation, Office of Pipeline Safety, Transmission Pipeline, Incident Summary by Cause, June 21 2017

Frequency & Probability

Since 1973, there have been 11 significant oil or natural gas well accidents in Michigan. The probability of an accident in Oakland County is relatively low. According to the MDEQ, the most common problems associated with oil and gas wells in Oakland County are small spills and odor complaints.

Health & Safety

There are several hazards related to oil and gas wells. Producing wells can generate hydrogen sulfide gas as a by-product. Hydrogen sulfide gas is extremely poisonous and presents a number of chemical safety hazards to responders and adjacent populations. Accidental releases, fire and explosion can also result from such an event.

In Michigan, death and injury rates associated with oil and gas well accidents are very low. To date, there has been 1 death and 1 injury from accidents since 1973. In those cases, death and injury resulted to the employees servicing the wells. 120

Area Impacted

Lands with oil and gas wells and surrounding areas are most at risk for impact from well accidents. The location of wells is concentrated in the southwestern portion of the County.

Oil and gas well accidents often result in a release, or potential release, of hazardous gases. As a result, areas adjacent to the site of the incident may be evacuated as a precaution. In Michigan, there have been no oil or gas well accidents which have resulted in off-site property damage. However, areas of evacuation have been large enough to include residents within a one-half mile radius.

• See Oil and Gas Well Map in Appendix A

Economic Impact

Accidents of this nature are not common in Michigan and have not resulted in significant property damage or other loss. Therefore, information regarding the economic impact of oil and gas wells is limited and further investigation is not warranted at this time.

Critical Facilities/Services

Oil and gas wells in Oakland County are owned and operated by private companies; however, response to an accident would involve public agencies. The level of public response would depend

¹¹⁹ Source: Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 363.

¹²⁰ Source: Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 365.



upon the severity of the accident. Due to the possibility of evacuation with this type of accident, involvement from multiple emergency response agencies would likely be required.

Oil and Gas Well Accident Risk & Vulnerability Assessment

Residential areas, schools, churches, and hospitals are the most vulnerable areas for this type of event. Local fire and police departments would respond to an incident. Populations located within a 1-mile radius of a well are most vulnerable and urbanized areas are more vulnerable than rural areas based solely on population densities.

Census block groups within a 1-mile radius of the wells are included in the Pipeline and Well Vulnerability Map. The map also shows the locations of schools, hospitals, police stations, and fire stations in the County.

• See Pipeline and Well Vulnerability Map in Appendix A

Table 54: Oil and Gas Well Incident Hazard Evaluation and Impact/Consequence Assessment

Tubic 34. On and Ous Wen Incluent Hazara Evaluation and Impact Consequence Assessment					
Frequency & Probability ¹			13		
Potential Magnitude and Scale ¹			2		
Physical Vulnerability Hazard Impact ¹			47		
Social Vulnerability Hazard Impact ¹			54		
Community Conditions Hazard Impact ¹			32		
Overall Capability and Capacity ²			73		
Mitigation ²			67		
Hazard Consequence & Impact Score ¹			33		
Overall Risk Rating ³			20		
Legend					
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Ap	pplicable/Unknown	Not Applicable/Unknown	

Petroleum and Natural Gas Pipeline Accidents

Definition

A petroleum or natural gas pipeline incident would involve an uncontrolled release of petroleum, natural gas or hydrogen sulfide gas from a pipeline.

Historical Events

Michigan is a major producer and consumer of petroleum and natural gas products; therefore, transmission and distribution pipelines are commonly found throughout the State of Michigan. One of the most injurious pipeline accidents in Oakland County occurred on May 20, 1992, when



contractors were excavating a sidewalk and caused a service line to rupture. The gas ignited causing an explosion which killed 2 people and injured 17 others. 121

On November 20, 2017, a ruptured gas line caused an explosion and massive fire that left an 18-foot-deep crater in an area of Orion Township near the Great Lakes Crossing Outlets mall. The fire — which occurred in an area north of Brown Road near Joslyn Road, near the border with Auburn Hills — had flames 100- to 150-feet wide and up to 200-feet high. The flames could be seen from downtown Detroit, more than 30 miles away.





¹²¹ Source: Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 354.





Frequency & Probability

Since 1990, there have been 33 pipeline incidents in Oakland County. ¹²² Two of the accidents occurred to transmission lines, the remainder involved distribution lines which are more commonly found in the County. It is anticipated that this hazard will be more likely to occur in the future as the pipeline structures age.

Health & Safety

Pipeline accidents can pose a significant threat to the public due to the potential for fires, explosions and ruptures. Since 1990, 2 pipeline accident-related deaths and 14 injuries have occurred in Oakland County. 123

Area Impacted

There are over 110,000 miles of natural gas transmission pipelines in Michigan, with a large percentage centered in or around Oakland County. Additionally, there are approximately 1,300 miles of refined petroleum product pipeline in Michigan.¹²⁴

Oakland County has 4 pipeline terminals that could be impacted. In addition, natural gas processing plants and compression facilities can also be at risk of an incident. Smaller natural gas

¹²² Source: Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 354.

¹²³ U.S. Coast Guard, National Response Center, www.nrc.uscg.mil/foia.html, Standard Query Report, Pipelines, Oakland County Michigan, report generated on January 5, 2012.

¹²⁴ Watershed Council, *Pipelines in Michigan*, https://www.watershedcouncil.org/pipelines-in-michigan.html, viewed June 21, 2017.



distribution lines can be found throughout the County with Consumers Energy, DTE Gas, and SEMCO providing natural gas service to the majority the County.

Natural gas or petroleum pipelines can be found throughout the County, which means that pipeline accidents can occur anywhere. Typically, pipeline accidents only impact the immediate area. However, evacuations of adjacent buildings can be required as a precaution.

• See Natural Gas and Petroleum Pipeline Map in Appendix A

Economic Impact

In the United States since 1991, the property damage caused by transmission pipeline accidents is over \$1 billion. These costs are largely due to damage to the pipeline structures. ¹²⁵ Other impacts may result due to a decrease in product availability.

Critical Facilities/Services

Local fire and police departments would respond to pipeline accidents. This type of hazard may also require response from hazmat teams. Oakland County fire departments frequently respond to gas leaks in the County.

Petroleum and Natural Gas Pipeline Accident Risk & Vulnerability Assessment

There have been 6 natural gas explosions in Oakland County. From 1990 through 2017, there have been over 30 pipeline incidents in Oakland County, an average of over 1 event per year in Oakland County. Consumers Energy provides natural gas service to the majority of the County and DTE provides service to approximately 36 square miles.

Pipelines can pose a significant threat to the public due to the threat of fires, explosions, and ruptures. Residential areas, schools, churches, and hospitals are the most vulnerable areas for this type of event. Local fire and police departments would respond to a pipeline incident. Gas leaks are a frequent call for service for Oakland County fire departments. Populations located within a 1-mile radius of a well or pipeline are most vulnerable and urbanized areas are more vulnerable than rural areas based solely on population densities.

The locations of natural gas distribution pipelines, natural gas transmission lines, petroleum gas pipelines, oil/gas bottom wells, and oil/gas surface wells are shown on the Pipeline and Well Vulnerability Map. There are approximately 120 miles of natural gas distribution pipelines, 363 miles of natural gas transmission lines, and 107 miles of petroleum gas pipelines in the County. Census block groups within a 1-mile radius of the pipelines and wells are included on the map. Approximately 1,028,514 people are located within the census blocks identified. Also on the map are the locations of schools, hospitals, police stations, and fire stations in the County.

• See Pipeline and Well Vulnerability Map in Appendix A

¹²⁵ U.S. Department of Transportation, Office of Pipeline Safety, Incident Summary by Cause, January 25, 2012.



Table 55: Petroleum and Natural Gas Pipeline Accidents Hazard Evaluation and Impact/Consequence Assessment

Impact/Consequence Assessment						
Frequency & Probability ¹			38			
Potential Magnitude and Scale ¹			11			
Physical Vulnerability Hazard Impact ¹			53			
Social Vu	Inerability Hazard Impact ¹		54			
Communi	ty Conditions Hazard Impa	act ¹	43			
Overall Capability and Capacity ²			73			
Mitigation ²			67			
Hazard Consequence & Impact Score ¹			39			
Overall Risk Rating ³			38			
Legend						
Score	1: Vulnerability Rating	2: Capability and Capacity Ratin		3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable		Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium		
51 – 75	Vulnerable	Capable		High		
76 - 100	Very Vulnerable	Very Capable		Extreme		
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown		

Public Health Emergencies

Definition

A public health emergency is a widespread and/or severe epidemic, incident of contamination or other situation that presents a danger to, or otherwise negatively impacts, the general health and well-being of the public.

Historical Events

Public health emergencies can result from a number of causes such as food borne illness, waterborne pathogens, loss of sewer/water service and epidemics of communicable diseases. In recent years, the risk of a public health emergency resulting from an intentional release of a chemical, biological or radiological agent has become more apparent.

The largest botulism epidemic in U.S. history originated in Oakland County in March 1977. The cause was traced to home-canned peppers which were served at a Pontiac restaurant. The restaurant used home-canned peppers because of a shortage of commercially prepared peppers following a crop failure. Although no one died from the poisoning, 59 people became ill, many of which required intensive medical treatment. 126

In September 2002, a Legionnaire's Disease outbreak originated from an air conditioning unit at a Farmington grocery store. The Legionnaire's outbreak resulted in 4 deaths and 30 illnesses.

¹²⁶ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, pages 456 - 467.



Frequency & Probability

Public health emergencies can arise from a wide range of causes and may result in varying levels of severity, thus making it difficult to establish a frequency of occurrence. Since 1973, there have been 14 major public health emergencies in Michigan, an average of 1 emergency almost every 3 years. 127

It is important to note that some of the same causes of a public health emergency (i.e. food borne illness, etc.) do occur with regularity within Oakland County. However, these cases are isolated to a few individuals with limited impact to the general public.

It is anticipated that this hazard will become more likely to occur in the future as the County population ages and increases.

Health & Safety

Public health emergencies are an obvious threat to human health and safety. A public health emergency can take many forms and spread by various means. As a result, it is not feasible to determine a death or injury rate for this hazard.

Public health emergencies are of particular concern for populations with weakened or undeveloped immune systems. According to the 2010 Census, nearly 6% of the population within Oakland County is under the age of 5 and over 13% are over the age of 65. ¹²⁸ Collectively, almost 19% of the Oakland County population is at risk for greater impact from a public health emergency based solely upon age.

Area Impacted

Due to the nature of public health emergencies, impacts from this event tend to be more widespread rather than confined to a specific location. It is important to note that a public health emergency may originate outside of Oakland County, yet impact communities within the County.

Economic Impact

Economic impacts from this hazard can be severe if the source is infrastructure related (i.e., if improvements are needed to the public water supply system). However, it is more likely that economic impacts will result through lost wages and medical expenses for impacted persons. Additional impact may result if a business is determined to be the source of the emergency, (i.e., a restaurant must close). Due to the low frequency of this hazard, additional investigation of the economic impact is not recommended at this time.

Critical Facilities/Services

A major public health emergency would likely involve varying degrees of response from local, state and possibly federal public health agencies.

¹²⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 183-190.

¹²⁸ U.S. Census Bureau, Profile of General Demographic Characteristics: 2010, Oakland County, Michigan.



Table 56: Reportable Disease and Conditions in Michigan 2005-2009

Disease or Condition	Average Number of Cases (per year)
Amebiasis (Amoebiasis)	45.2
Campylobacteriosis	918.4
Cryptosporidiosis	209
Dengue Fever	9.2
E. Coli 0157:H7	88.6
Giardasis	677.2
Hepatitis A	12.4
Hepatitis C	89.6
HIV/AIDS	828.4
Influenza	200,000
Legonellosis	169
Listeriosis	23.6
Lyme Disease	73.4
Malaria	23.4
Pertussis	492.4
Q Fever	2.2
Salmonellosis	962.6
Shigellosis	188.4
Streptococcal Disease	195
Tuberculosis	28.8
Yersiniosis	22.6

Public Health Risk & Vulnerability Assessment

Public Health Emergencies can arise from a wide range of causes and can result in varying levels of severity. Persons most susceptible to public health emergencies are those persons with weakened or undeveloped immune systems. Almost 19% of the Oakland County population is highly vulnerable to a public health emergency, based solely on age. Therefore, adult care and day care are most vulnerable, as well as schools. The locations of public safety facilities, adult/child care facilities, day care facilities, and schools are shown on the Public Health Emergency Vulnerability Map.

Vulnerable assets involved with public health emergencies are medical service facilities and include the County's Health Division facilities, clinics, and hospitals. The Oakland County Health Division operates 2 locations within the County. The County's health facilities and hospitals are also shown on the map.

• See Public Health Emergency Vulnerability Map in Appendix A



Table 57: Public Health Emergencies Hazard Evaluation and Impact/Consequence Assessment

12000001110111	1 Abb Obbit Voice					
Frequency & Probability ¹			38			
Potential Magnitude and Scale ¹			24			
Physical Vulnerability Hazard Impact ¹			28			
Social Vulnerability Hazard Impact ¹			59			
Community Conditions Hazard Impact ¹			38			
Overall Capability and Capacity ²			68			
Mitigation ²			67			
Hazard Consequence & Impact Score ¹			37			
Overall Risk Rating ³			37			
Legend						
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating		
0 - 25	Minimally Vulnerable	Minimally Capable		Low		
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium		
51 – 75	Vulnerable	Capable		High		
76 - 100	Very Vulnerable	Very Capable		Extreme		
N/A	Not Applicable/Unknown	Not Applicable/Unknown		Not Applicable/Unknown		

Subsidence

Natural Subsidence

Definition

Lowering or collapse of the land surface due to loss of subsurface support.

Historical Events

No natural subsidence events are known to have been recorded in Oakland County. There are no natural subsidence hazards in Oakland County according to the Geological and Survey Division of the MDEO. 129

Frequency & Probability

No known natural subsidence events have been recorded in Oakland County. Therefore, the frequency of events cannot be adequately determined. The only known potential incident of natural subsidence in the County would be sink holes most likely caused from water main breaks. Based on the amount of underground utilities (specifically water mains) within in the County, there is probability that a sinkhole event can occur from this non-natural source. The probability of this occurrence increases as water systems age.

¹²⁹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, July 2012, page 175.



Health & Safety

In the event of a sinkhole, potential health and safety issues are dependent on the location and size of the sink hole. A sink hole occurring near or within a street or public assess area could potentially cause injury. Injury could also occur if a sink hole occurred beneath a building causing structural damage or, if severe enough, collapse. Following the event, the sink hole could pose a risk to the health and safety of people within the area if it is not properly marked and barricaded. Workers are at risk for cave-ins or confined space entry concerns if entering the sink hole is required to correct the problem.

Area Impacted

The area impacted would be the area immediately surrounding the sink hole.

Economic Impact

Economic impacts incurred from the occurrence of a sink hole could include a disturbance in transportation and costs incurred to fill the sink hole. If a sink hole were to occur beneath a building foundation, potential cost to stabilize, repair or rebuild could be substantial, dependent on the size of the sink hole.

Critical Facilities/Services

Response would be primarily localized police and fire departments, utility services and potentially road services such as the local road commission or MDOT.

Mining-related Subsidence

Definition

Lowering or collapse of the land surface due to loss of subsurface support in mining areas.

Historical Events

No known mining subsidence events are recorded for Oakland County. There are no mining subsidence hazards in Oakland County according to the Geological and Survey Division of the MDEQ. ¹³⁰

Subsidence Risk & Vulnerability Assessment

The only known potential for natural subsidence in the County is from sink holes, most likely caused from water main breaks. The probability of this occurrence increases with older water systems. The water system and sanitary sewer services areas are depicted in a map in Appendix A.

• See Infrastructure Systems (Water/Sewer) Vulnerability Map in Appendix A

¹³⁰ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, July 2012, page 179 - 180.



Table 58: Natural Subsidence Hazard Evaluation and Impact/Consequence Assessment

	tuma substactice Hazar		on and impact, conse	[terree 11 ssessification	
Frequency & Probability ¹			6		
Potential Magnitude and Scale ¹			0		
Physical Vulnerability Hazard Impact ¹			28		
Social Vulnerability Hazard Impact ¹			29		
Community Conditions Hazard Impact ¹			16		
Overall Capability and Capacity ²			79		
Mitigation ²			100		
Hazard Consequence & Impact Score ¹			17		
Overall Risk Rating ³			10		
Legend					
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Applicable/Unknown		Not Applicable/Unknown	

Thunderstorm Hazards

Hail

Definition

Conditions where atmospheric water particles from thunderstorms form into rounded or irregular lumps of ice that fall to the earth.

Historical Events

In Oakland County, 164 hail events have been reported since 1960. ¹³¹ In July 2014, a powerful upper-level low pressure system dropped southward into the Great Lakes, sparking a good deal of severe thunderstorms in the warm, moist, and unstable air in advance of the system. A particularly strong storm moved across Oakland County between around 4:30 and 5:15 pm, dropping hail up to 2.50-inch diameter (tennis ball size) near the Highland/White Lake area, with wind damage reported over central and eastern portions of the county. The storms produced heavy rainfall as well, with a swath of 1-2 inches recorded over southern Oakland County. Wyandotte, in southern Wayne County, picked up 2.67 inches in 4 hours. Total damage across Southeast Michigan was estimated to be 100 million dollars from the severe wind and hail. ¹³²

On June 24, 1998, 2 tracks of severe thunderstorms crossed the state moving east to west. One stretched across central Michigan, while the other moved across the southern portion of the state.

¹³¹ National Climatic Data Sponsored Website, <u>www.ncdc.noaa.gov</u>, *Standard Query for Severe Weather*, June 21, 2017.

¹³² Ibid



The more northerly thunderstorms produced large amounts of hail in several counties, ranging from dime-size to baseball-size hail. 133

On June 26, 1995, a severe thunderstorm caused nickel-sized hail and ground lightning that resulted in 3 injuries.

Frequency & Probability

In Michigan, there is 1 intense hailstorm every 2 to 3 years that causes significant damage to property. ¹³⁴ Hail events are highly likely to occur in the County.

Health & Safety

The human health and safety risk associated with hail is low. However, hail is often associated with tornado activity.

Area Impacted

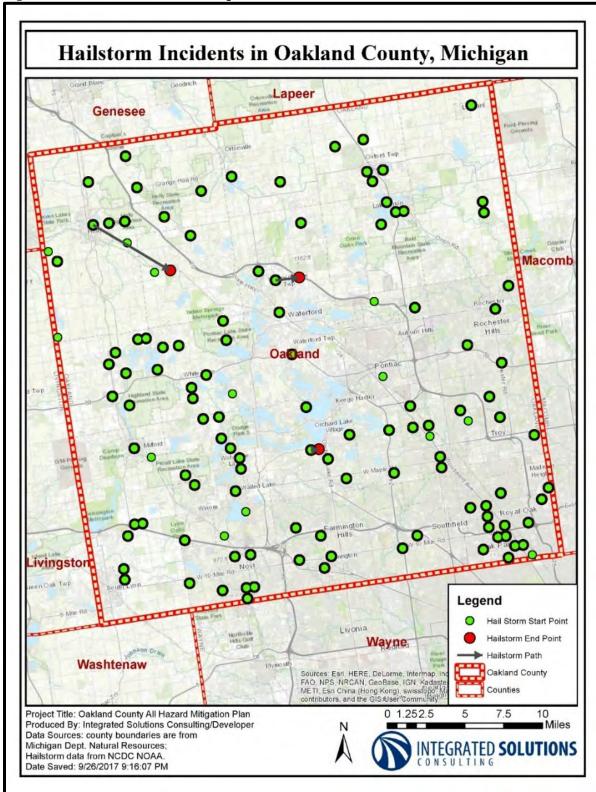
Hail storms are typically localized as they move through Michigan. The entire County could be affected; however, impacts will more likely be localized to residents directly under the center of the storm.

¹³³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 227-229

¹³⁴ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, July 2012, page 30.



Figure 29: Hailstorm Incident Map



Source: NCDC NOAA



Economic Impact

Nationally, property damage from hail exceeds \$3.1 million annually. Hail storms can impact infrastructure, power lines, roads, businesses and personal property. Property damage, loss of business revenues and response costs can result from hail events. Hail is especially damaging to crops, property and automobiles.

Critical Facilities/Services

Response to a hail related emergency would be localized. Utilities may require repair and maintenance resulting from hail.

The National Weather Service and local media can alert the public of severe storms capable of producing large hail, high winds and lightning. Storms are detected using radar, weather data, spotters and, in the event of high winds or tornadoes, outdoor warning sirens can alert those not near a radio or television of an approaching storm. There are 275 outdoor warning sirens located throughout the County.

Hail Risk & Vulnerability Assessment

Oakland County receives 30-40 thunderstorm events per year. Vulnerabilities associated with thunderstorm hazards (hail, lightning, and severe wind) and tornadoes are the warning siren systems, communications/electrical infrastructure, police and fire facilities, manufactured home sites, and people.

Oakland County has approximately 60,623 acres of transportation, communication, and utility land use. There is also over 13,000 manufactured homes. Southfield, Pontiac, and Orion Township are most vulnerable to communication, utility, and electrical transmission line failure based on total acreage for land use, respectively. Communication/utility land use and manufactured home park land use are shown on the Severe Weather (Thunderstorms, Severe Winds, Tornado) Vulnerability Map, which also includes the locations of the County's outdoor warning sirens and police and fire stations. Communications and electrical companies within the County include local utility companies, cable and satellite providers, local television networks, local radio networks and communication towers, including local emergency and cell phone towers.

Oakland County has a funded program in place to replace outdoor warning sirens that are in disrepair or outdated. Many of the old outdoor warning sirens in the County were recently replaced. Although the County has the most warning sirens of any county in Michigan, there is still a need to expand the outdoor warning siren coverage.

• See Severe Weather (Thunderstorms, Severe Winds, Tornado) Vulnerability Map in Appendix A



Table 59: Hail Hazard Evaluation and Impact/Consequence Assessment

Tubic 37. Hun Hazara Evanuation and Impact Consequence Assessment					
Frequency & Probability ¹			44		
Potential Magnitude and Scale ¹			23		
Physical Vulnerability Hazard Impact ¹			58		
Social Vulnerability Hazard Impact ¹			48		
Community Conditions Hazard Impact ¹			40		
Overall Capability and Capacity ²			75		
Mitigation ²			67		
Hazard Consequence & Impact Score ¹			41		
Overall Risk Rating ³			42		
Legend					
Score	1: Vulnerability Rating	2: Capability and Capacity Rating		3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 – 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	Very Capable		Extreme	
N/A	Not Applicable/Unknown	Not Applicable/Unknown		Not Applicable/Unknown	

Lightning

Definition

The discharge of electricity from within a thunderstorm.

Historical Events

On July 29, 1996, a 38-year old woman was struck by lightning and killed in Milford Township while standing near a tree on the patio of her parent's home. 135

On August 25, 1998, lightning struck an apartment building in Southfield causing a fire that destroyed 2 units and damaged the administrative office. 136

In July 2000, Oakland County suffered a lightning strike which affected the County's public safety radio system. 137

On September 11, 2000, the 9-1-1 phone system at the Milford Police Department was struck by lightning causing substantial damage to electronic equipment. ¹³⁸

¹³⁵ National Climatic Data Sponsored Website, www.ncdc.noaa.gov, Standard Query for Severe Weather, June 21, 2017.

¹³⁶ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 230-234.

¹³⁷ Oakland County Executive, Special Projects Staff, September 15, 2004.

¹³⁸ National Climatic Data Sponsored Website, www.ncdc.noaa.gov, Standard Query for Severe Weather, June 21, 2017.



On April 7, 2001, lightning struck a satellite dish outside a Brandon Township residence. The strike followed the outside wiring and entered the home. A fire resulted and the contents of the basement were lost. 139

On August 1, 2003, a boy in Troy was struck by lightning and was revived by CPR. ¹⁴⁰ Four days later on August 5, 2003, lightning struck the Oxford Village Dispatch Center's 110-foot tower causing widespread equipment failure and damage. ¹⁴¹

On April 6, 2010, a lightning strike caused a house fire causing extensive electrical and roof damage exceeding \$150,000.

Frequency & Probability

There have been 39 major lightning events (resulting in fire, injury, death, etc.) reported in Oakland County since 1996. 142 Over 50% of lightning casualties occur in the months of June and July, and another 22% of deaths occur in August. 143 Lightning occurrences happen every year; therefore, lightning events will continue to occur in the future within the County.

Location of Lightning Strikes

- 40% are at unspecified locations
- 27% occur in open fields and recreation areas (not golf courses)
- 14% occur to someone under a tree (not on golf course)
- 8% are water-related (boating, fishing, swimming, etc.)
- 5% are golf-related (on golf course or under tree at golf course)
- 3% are related to heavy equipment and machinery
- 2.4% are telephone-related
- 0.7% are radio, transmitter, and antenna-related

Months of Most Strikes

- July 30%
- August 22%
- June 21%

Time of Most Strikes

2:00 p.m. - 6:00 p.m.

Health & Safety

During the 39 storms, 1 death and 5 injuries were reported. 144 Lightning deaths are usually caused by the electrical force shocking the heart into cardiac arrest or throwing the heartbeat out of rhythm. Lightning can also cause severe skin burns that can lead to death if complications from

¹³⁹ National Climatic Data Sponsored Website, www.ncdc.noaa.gov, Standard Query for Severe Weather, June 21, 2017.

¹⁴⁰ Ibid

¹⁴¹ Ibid

¹⁴² Ibid

¹⁴³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated, 2014)*, March 2014, page 77.

¹⁴⁴ National Climatic Data Sponsored Website, www.ncdc.noaa.gov, Standard Query for Severe Weather, June 21, 2017.

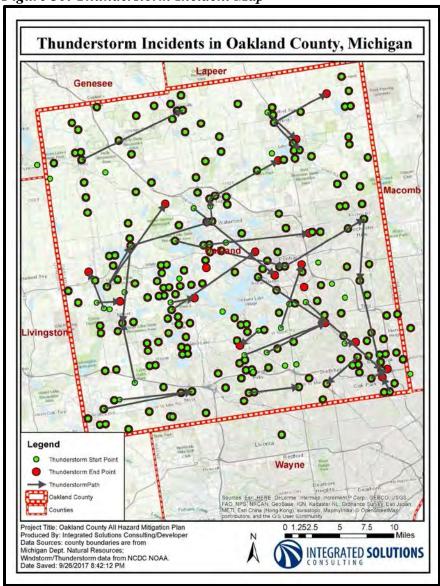


infections ensue. Lightning strikes impact 1 person 91% of the time and 2 or more victims 9% of the time. Approximately 20% of lightning strike victims die and 70% of survivors suffer serious long-term after effects, such as memory and attention deficits, sleep disturbance, fatigue, dizziness and numbness. 46

Area Impacted

The effects of lightning are very localized; however, thunderstorms can cover a large area.

Figure 30: Thunderstorm Incident Map



Source: NCDC NOAA

¹⁴⁵ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated, 2014)*, March 2014, page 78.

¹⁴⁶ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated, 2014)*, March 2014, page 78.



Economic Impact

Property damage estimates from lightning strikes in Oakland County since 1996 equal \$2.318 million. 147

On July 26, 1997, lightning started a fire that caused \$750,000 of damage to a 2-story apartment building in Farmington Hills. 148

Because lightning-related damage information is compiled by a number of different sources, it is difficult to accurately determine collective damage figures resulting from lightning strikes.

Critical Facilities/Services

Initial response to a lightning strike would be local emergency responders (fire, police, emergency medical care, etc.). Power outages as a result of a lightning strike may impede emergency response. Local utility companies across the County estimate as much as \$1 billion per year in damaged equipment and lost revenue from lightning. The Federal Aviation Administration (FAA) reports approximately \$2 billion per year in airline industry operating costs and passenger delays from lightning. ¹⁴⁹

Communication services can be damaged and destroyed (cell and communication towers, computer systems, phone services, etc.). Local utility companies and the services they offer are often affected from lightning strikes.

Lightning is associated directly with severe thunderstorms. The National Weather Service and local media can alert the public of the severe storms capable of producing large hail and lightning.

Lightning Risk & Vulnerability Assessment

Oakland County receives 30-40 thunderstorm events per year. Vulnerabilities associated with thunderstorm hazards (hail, lightning, and severe wind) and tornadoes are the warning siren systems, communications/electrical infrastructure, police and fire facilities, manufactured home sites, and people.

• See Severe Weather (Thunderstorms, Severe Winds, Tornado) Vulnerability Map in Appendix A

¹⁴⁷ National Climatic Data Sponsored Website, <u>www.ncdc.noaa.gov</u>, *Standard Query for Severe Weathe*r, June 21, 2017.

¹⁴⁸ National Climatic Data Sponsored Website, www.ncdc.noaa.gov, Standard Query for Severe Weather, June 21, 2017.

¹⁴⁹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated, 2014)*, March 2014, page 78.



Table 60: Lightning Hazard Evaluation and Impact/Consequence Assessment

14010 001 2	ngmming maxara mramai	ton with in	pueu, comsequence 11s	Bebbliteitt
Frequency & Probability ¹			50	
Potential N	Magnitude and Scale ¹			9
Physical V	Julnerability Hazard Impag	ct ¹		53
Social Vul	Inerability Hazard Impact ¹			40
Communi	ty Conditions Hazard Impa	act ¹		24
Overall Ca	apability and Capacity ²			79
Mitigation	n^2		89	
Hazard Co	onsequence & Impact Scor	·e ¹	30	
Overall Ri	isk Rating ³		39	
		Leg	end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable		Very Capable	Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown

Severe Wind

Definition

Winds greater than 50 miles per hour (mph), not including tornadoes, are classified as high winds.

Historical Events

From January, 2000, to April, 2017, there have been 108 days with a thunderstorm wind event and 131 days with both a thunderstorm and high wind event reported in Oakland County. 150

On March 13, 2006, a storm produced sustained winds of 30-40 mph with gusts to 50 mph. The high winds caused a tree to fall and land on a vehicle, killing 1 and injuring 2 others.¹⁵¹

On June 8, 2008, a thunderstorm with high winds resulted in over \$1.2 million in damages. Wind gusts exceeded 85 mph, downing trees and power lines and damaging roofs/siding and vehicles.

On August 19, 2010, a thunderstorm with high winds resulted in \$100,000 worth of damage in Oxford. The storm uprooted trees and damaged roofs and siding.

On March 8, 2017, high winds brought wind gusts in excess of 60 mph in Oakland County. The high winds took out power lines and trees, along with numerous reports of structural damage to buildings. There were also reports of brush fires and tractor-trailers flipped over around the area. Due to the extensive damage, many areas were without power for several days. Approximately 800,000 DTE customers and approximately 300,000 Consumers Energy customers were affected.

¹⁵⁰ National Climatic Data Sponsored Website, <u>www.ncdc.noaa.gov/</u>, *Standard Query for Severe Weather*, June 22, 2017.

¹⁵¹ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, June 22, 2017.



The highest wind gust reported across Southeast Michigan was 68 mph at both Saginaw and Detroit Metro Airport. Total property damage was 35 million. 152

Frequency & Probability

Oakland County receives 30-40 thunderstorms per year. ¹⁵³ On average, wind events can be expected 5-7 times a year in the southern Lower Peninsula. ¹⁵⁴ Therefore, it is probable that wind events will occur every year with in the County.

Health & Safety

From 2000 - 2016, there was 1 death and 3 injuries reported in Oakland County from high winds. ¹⁵⁵ The public is most at risk from falling trees and electrical lines, blowing debris and collapsed buildings or roofs. High winds can be a direct effect of tornadoes which are discussed in this section.

Area Impacted

High winds affect entire populations, but the greatest risk is to those housed in mobile homes.

Economic Impact

Since 2000, approximately \$57.7 million in property damage has resulted from high wind events in Oakland County. ¹⁵⁶ Property damage is the greatest contributor to economic loss. Power outages resulting from high winds can also have an economic impact due to costs to restore and repair power lines and loss of revenues from prolonged outages to businesses.

Critical Facilities/Services

The National Weather Service and local media can alert the public of severe storms capable of producing large hail, high winds and lightning. Outdoor warning sirens can alert those not near a radio or television of approaching high winds (>70 mph) or tornadoes. There are 275 outdoor warning sirens located throughout the County.

Initial response activities due to emergencies from high winds would primarily be associated with local response from police, fire and medical emergency services. Local utility companies are essential in repairing lines and shutting down power or gas services that represent a threat to safety. Private or governmental tree removal services (urban forestry services) are also essential in providing preventive measures and are often involved clearing downed trees from power lines, roadways and buildings following severe wind incidents. Following the initial response, regional, state and local agencies may assist in cleanup and aid.

The following table demonstrates the many instances when down power lines have been reported and necessitated a response.

¹⁵² Ibid

¹⁵³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated, 2014)*, March 2014, page 65.

¹⁵⁴ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated, 2014)*, March 2014, page 73.

¹⁵⁵ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, June 22, 2017.

¹⁵⁶ National Climatic Data Sponsored Website, www.ncdc.noaa.gov, Standard Query for Severe Weather, June 22, 2017.



Table 61: Down Power Line Incidents in Oakland County

Year	Frequency	Fatalities	Casualties	Total Loss (Property and Content Loss)
2012	1,401	0	0	1,226
2013	2,168	0	0	5,500
2014	2,382	0	0	0
2015	1,335	0	0	0
2016	1,344	0	0	6,000

Source: Michigan Bureau of Fire Services

Severe Wind Risk & Vulnerability Assessment

Oakland County receives 30-40 thunderstorm events per year. Vulnerabilities associated with thunderstorm hazards (hail, lightning, and severe wind) and tornadoes are the warning siren systems, communications/electrical infrastructure, police and fire facilities, manufactured home sites, and people. Also, private or public urban tree removal services are also vulnerable to wind hazards.

• See Severe Weather (Thunderstorms, Severe Winds, Tornado) Vulnerability Map in Appendix A

Table 62: Severe Wind Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹			44	
Potential I	Magnitude and Scale ¹			32
Physical V	Julnerability Hazard Impa	ct ¹		65
Social Vu	Inerability Hazard Impact ¹			59
Communi	ty Conditions Hazard Impa	act ¹		43
Overall Ca	apability and Capacity ²			73
Mitigation	n^2		39	
Hazard Co	onsequence & Impact Scor	·e ¹	49	
Overall Ri	isk Rating ³		46	
		Leg	end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Miı	nimally Capable	Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown



Tornadoes

Definition

A violently rotating column of air extending downward to the ground from a cumulonimbus cloud.

Historical Events

According to the National Weather Service, the first recorded tornado in Oakland County occurred on April 6, 1882. Since 1950, approximately 4% of tornadoes in Michigan have been classified as violent tornadoes (EF4 or EF5 intensity). However, these few violent tornadoes have been responsible for 88% of Michigan's tornado-related deaths. However, these few violent tornadoes have been responsible for 88% of Michigan's tornado-related deaths.

On March 20, 1976, a Category F4 tornado with winds in excess of 200 mph destroyed homes from Farmington Hills to West Bloomfield Township. Homes and businesses collapsed or were ripped off their foundations. A 15-year old girl died when the car she was in was hurled across Maple Road. Fifty-five injuries were reported and the cleanup afterward cost an estimated \$25 million. ¹⁶⁰

On July 2, 1997, a series of thunderstorms went through south-central and southeast Michigan spawning 16 tornadoes, 13 of which occurred in southeastern Michigan counties. 161

On September 21, 2014, an EF1 tornado touched down in Rochester Hills, Michigan. With a maximum wind speed of 90 mph, the twister cut a one and a quarter mile (1.25 mi.) path of destruction that was 150 yards wide (one and a half football fields) in just 2 minutes. The tornado formed at 5:57 am EST and was gone by 5:59 am EST. Trees were uprooted, large branches were knocked down, and significant roof damage occurred on homes on and near Grand View Drive. Thirty-seven homes were affected (minimal damage; mostly cosmetic); five homes had minor damage (<50% damaged; damaged windows and doors); and four homes suffered major damage (>50% damage; involves structural features affecting strength/safety). Overall, 46 homes were impacted by the storm.

Table 63: Tornado Magnitude in Oakland County

Magnitude	Number	Deaths/Injuries	Property Damage
F0	6	0/0	\$82,000
F1	14	1/10	\$10.32 Million
F2	7	1/7	\$3.52 Million
F3	3	0/4	\$7.5 Million
F4	2	1/57	\$25.25 Million

Source: National Climatic Data Center, www.ncdc.noaa.gov, Oakland County, January 1, 1950 through 2016

¹⁵⁷ Oakland County Michigan Emergency Management, *Hazard Study*, August 1998, page 20.

¹⁵⁸ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, July 2012, page 60.

¹⁵⁹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 121.

¹⁶⁰ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, June 22, 2017

¹⁶¹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 244-256.



Frequency & Probability

The months of April through June have historically been the period of greatest tornado frequency. ¹⁶² Tornadoes in Michigan are most frequent in the spring and early summer when warm, moist air from the Gulf of Mexico collides with cold air from the Polar Regions to generate severe thunderstorms. ¹⁶³ Most tornadoes in Michigan occur in the southern Lower Peninsula.

Oakland County has had 7 tornadoes from 1996 to 2017.¹⁶⁴ It is very probable that tornadoes will continue to represent a hazard to the County.

Health & Safety

Michigan's tornadoes have resulted in more deaths than in many other tornado-prone states. Michigan ranks in the top 10 states for single killer tornadoes, deaths per 10,000 square miles, and killer tornadoes as a percent of all tornadoes. Between 1950 and 2017, 3 tornado-related deaths and 78 injuries have occurred in Oakland County. ¹⁶⁵

Area Impacted

A tornado would affect an entire population in the tornado's path. The most vulnerable populations would be mobile home residents. According to the 2016 5-year American Community Survey, there are approximately 13,000 mobile home/manufactured housing units in the County. ¹⁶⁶ Novi and White Lake Township have the highest number of mobile home establishments, with approximately 300 acres each.

¹⁶² Oakland County Michigan Emergency Management, Hazard Study, August 1998, page 20.

¹⁶³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, pages 244-256.

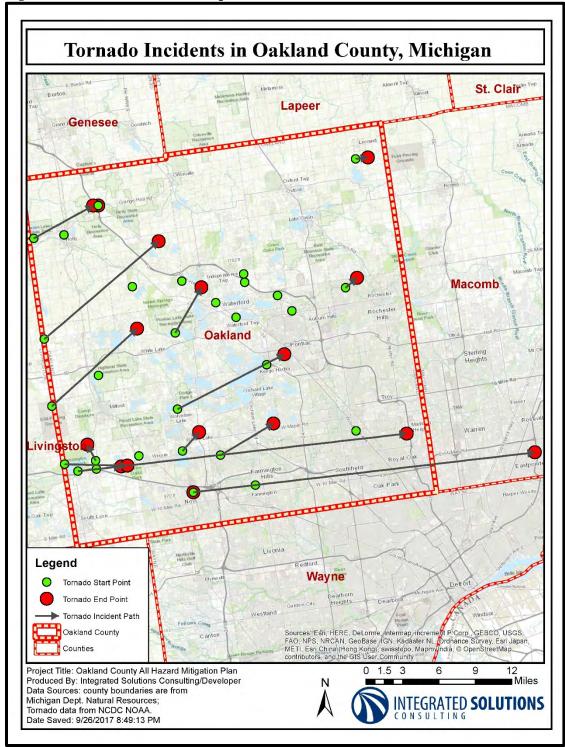
¹⁶⁴ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, June 22, 2017.

¹⁶⁵ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, June 22, 2017.

¹⁶⁶ SEMCOG, Community Profiles, Land Use in Oakland County according to 2010 5 year American Community Survey, viewed June 22, 2017.



Figure 31: Tornado Incident Map



Source: NCDC NOAA



The average tornado track is 16 miles long. The longest tracks have been reported at 200 miles long. 167 The tornado path width is typically less than one-quarter mile, but can be over 1 mile.

Economic Impact

Property damage is the greatest contributor to economic loss. The amount of damage varies greatly with the severity of the tornado. Also, damage or destruction to utility lines (primarily overhead) can result in the loss of power and other utilities lasting a few moments to several days. Tornadoes can also destroy or damage agricultural fields, trees and other flora and disrupt transportation services due to debris and/or downed power lines.

Since 1950, Michigan has averaged over \$15 million per year in tornado-related damage. 168 Between January 1, 1950 and 2011, property damage by tornadoes totaled over \$46.6 million in Oakland County. 169

A series of 13 tornadoes that swept through southeast Michigan on July 2, 1997, resulted in 2,900 damaged or destroyed homes, 200 damaged or destroyed businesses, over \$25 million in public damage and nearly \$30 million in private damage. Two deaths were caused directly by tornadoes and 120 injuries were reported. Approximately 350,000 electrical customers lost electrical power as a result. 170

A tornado that occurred on May 21, 2001, resulted in \$5.5 million in property damages and \$400,000 in agricultural damages primarily in Kalamazoo, Livingston and Oakland Counties. 171

Critical Facilities/Services

Tornado warnings systems play a major role in limiting the number of deaths and injuries related to tornadoes. Outdoor warning sirens are located throughout the County. The National Weather Service and local television and radio also provide advanced warning notice to communities. Outdoor warning sirens can be heard in most areas throughout the County.

Initial response activities due to tornadoes would primarily be associated with local response from fire, police and emergency medical care.

Local utility companies would be essential in repairing lines and shutting down power or gas services that represent a threat to safety. Following the initial response, regional, state and local agencies may also assist in cleanup and aid.

¹⁶⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, Michigan Hazard Analysis, July 2012, page 59.

¹⁶⁸ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, July 2012, page 62.

¹⁶⁹ National Climatic Data Sponsored Website, <u>www.ncdc.noaa.gov/</u>, Standard Query for Severe Weather, June 22, 2017.

¹⁷⁰ Michigan Department of State Police Emergency Management and Homeland Security Division, Michigan Hazard Analysis, March 2006, pages 244-256.

¹⁷¹ Ibid.



Tornado Risk & Vulnerability Assessment

Vulnerabilities associated with tornadoes are the warning siren systems, communications/electrical infrastructure, police and fire facilities, manufactured home sites, and people. Also, private or public urban tree removal services are also vulnerable to tornadoes.

Oakland County has approximately 60,623 acres of transportation, communication, and utility land use. There are over 13,000 manufactured homes. Southfield, Pontiac, and Orion Township are most vulnerable to communication, utility, and electrical transmission line failure based on total acreage for land use, respectively. Novi has the highest total acreage for manufactured home park land use. Communication/utility land use and manufactured home park land use are shown on the Severe Weather (Thunderstorms, Severe Winds, Tornado) Vulnerability Map, which also includes the locations of the County's outdoor warning sirens and police and fire stations. Communications and electrical companies within the County include local utility companies, cable and satellite providers, local television networks, local radio networks and communication towers, including local emergency and cell phone towers.

• See Severe Weather (Thunderstorms, Severe Winds, Tornado) Vulnerability Map in Appendix A

Table 64: Tornadoes Hazard Evaluation and Impact/Consequence Assessment

Table 64: Tornaaoes Hazara Evaluation and Impact/Consequence Assessment				
Frequency & Probability ¹			31	
Potential I	Magnitude and Scale ¹			50
Physical V	Julnerability Hazard Impac	ct ¹		65
Social Vu	Inerability Hazard Impact ¹			59
Communi	ty Conditions Hazard Impa	act ¹		43
Overall Ca	apability and Capacity ²			72
Mitigation	n^2		56	
Hazard Co	onsequence & Impact Scor	e ¹	52	
Overall Ri	isk Rating ³		40	
		Leg	end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Son	newhat Capable	Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown

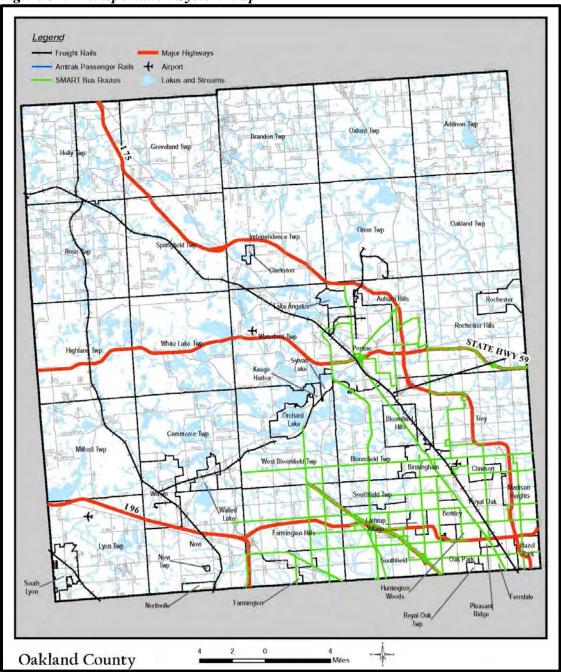


Transportation Accidents

Definition

A transportation accident is a crash or other accident involving an air, land or water-based passenger carrier. (Note: Transportation accidents involving hazardous materials are addressed in Hazmat Incidents – Transportation.)

Figure 32: Transportation System Map



Source: Oakland County, MI, USDA, SEMCOG / Created by: ASTI



Air

There are 3 public airports, 3 private airports, 1 sea plane base, and 20 private heliports in Oakland County. Air transportation accidents result from 4 major causes.

- In-air collision between 2 aircraft.
- A crash during in-air cruising due to mechanical failure, sabotage, etc.
- A crash during takeoff or landing.
- A collision between 2 aircraft during taxi or staging.

The majority of air transportation accidents occur during takeoff or landing and, therefore, impacted areas that are typically located near airports or runways. Response to air transportation accidents may involve fire control, survivor rescue/first aid, site security and crowd/traffic control.

Historical Events

The deadliest airplane accident in Oakland County history occurred on March 2, 1973, in Pontiac, when a small, private aircraft stalled in flight and crashed, killing all 4 people on board. The National Transportation Safety Board determined the probable cause of the crash was pilot error.

The deadliest single-survivor air transportation accident in U.S. aviation history occurred nearby in Romulus, Michigan (Wayne County). Northwest Airlines Flight 255 crashed after takeoff on August 16, 1987, killing 6 crew members and 149 passengers, except for a 4-year-old girl who sustained serious injuries. The crash killed 2 others on the ground.

In September 2009, a plane was forced to make an emergency landing in a store parking lot resulting in minor injuries to the pilot.

Frequency & Probability

There are 3 public airports within Oakland County. In addition, there are 20 private heliports, 3 private airports and a private seaplane base within Oakland County. The airports provide facilities for smaller, private aircraft such as corporate jets and charter planes.

All 3 of the public airports (Oakland County International, Oakland Troy, and Oakland Southwest Airport) are owned by Oakland County. The 3 private airports within the County are Ed Schultes Place Airport and Willie Run Airport in Ortonville and Handleman Sky Ranch Airport in Oxford. Of the 20 heliports, 3 are owned by hospitals (William Beaumont, Huron Valley Sinai, and Providence Hospitals), 8 are owned by private corporations and 9 are owned by private citizens. The seaplane base is located in Pontiac. Since 2010, 9 reportable air transportation incidents have occurred in the County. The aircraft involved in these incidents were all small aircraft with a limited number of passengers.

 $^{^{172}\} National\ Transportation\ Safety\ Board,\ \underline{www.ntsb.gov},\ Aviation\ Database\ Query,\ Michigan,\ report\ generated\ June\ 22,\ 2017.$

¹⁷³ National Transportation Safety Board, www.ntsb.gov, Aviation Database Query, Michigan, report generated June 22, 2017.



To date, there have been no air incidents involving large, commercial passenger aircraft in Oakland County. Commercial passenger air transportation is available through airports in Wayne and Genesee Counties and at Oakland County International Airport in Waterford.

Air transportation accidents in Oakland County will continue to occur in the future. It is anticipated that the probability for air transportation accidents to occur will fluctuate with air traffic volume.

Health & Safety

Aircraft accidents can be deadly to passengers. However, given the type of aircraft most common in Oakland County, death and injury are limited. Since 2010, there have been five (5) deaths from air transportation incidents in Oakland County. 174

Area Impacted

Due to the fact that the majority of aircraft accidents occur during landing or takeoff, the area most at risk for impact is the airport (or heliport) and immediately adjacent areas.

Economic Impact

Economic impact would result from damage to the aircraft and to any structures or improvements on the ground at the site of the accident. Damages to aircraft would typically be the responsibility of the private owner. Because the airports are owned by Oakland County, any damages to the airport infrastructure may be the responsibility of the County. Additional economic impact to the County may result if an accident causes disruption of services at the airport.

Reportable airplane crashes result in substantial damage to the aircraft including damage to the prop, nose, wings, fuselage, landing gear, tail and engine.

Critical Facilities/Services

Response to air transportation accidents is provided by local fire and police departments. Emergency response assistance is available through mutual aid agreements.

Airports within Oakland County provide an important service to area businesses. A significant accident at an airport could temporarily impede the County's ability to provide this service.

Air Transportation Risk & Vulnerability Assessment

There are 3 public airports, 3 private airports, a sea plane base, and 20 private heliports within Oakland County. Since 2010, 9 reportable air transportation incidents have occurred in the County. The aircraft involved in these incidents were all small aircraft with a limited number of passengers. The majority of transportation accidents occur during takeoff or landing, and therefore, impacted areas are typically those areas located near the airports or runways. The locations of the airports within the County are provided on the Transportation System Vulnerability Map, along with census blocks within a 5-mile radius of the airports. There are approximately 362,749 people located within 5 miles of at least 1 airport in the County.

¹⁷⁴ National Transportation Safety Board, <u>www.ntsb.gov</u>, Aviation Database Query, Michigan, report generated June 22, 2017.



• See Transportation System Vulnerability Map in Appendix A

Table 65: Air Transportation Accidents Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹				13
Potential I	Magnitude and Scale ¹			22
Physical V	Julnerability Hazard Impa	ct ¹		58
Social Vu	Inerability Hazard Impact ¹			29
Communi	ty Conditions Hazard Impa	act ¹		32
Overall Ca	apability and Capacity ²			79
Mitigation	n^2		67	
Hazard Co	onsequence & Impact Scor	·e ¹	34	
Overall Ri	isk Rating ³		21	
		Leg	end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Minimally Capable		Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown

Highway

Historical Events

Vehicle accidents are common to all communities and can happen along any roadway. Most accidents are due to driver error and/or inclement weather conditions. Accidents involving modes of mass public transportation are of particular concern due to the high number of passengers which could be impacted.

An accident in Wixom on September 14, 2000, involved a collision between a Northville High School bus and an automobile. The school bus was carrying 48 students and several coaches. The accident killed the driver of the car and injured 1 car passenger and 10 bus passengers. ¹⁷⁵

Frequency & Probability

Automobile accidents occur several times daily in Oakland County. In 2016, there were 42,660 reported crashes in Oakland County, of those 78 were fatal and 8,218 resulted in injuries. Alcohol was involved in 33.3% of the fatal crashes. However, the impact to the public from private automobile accidents is limited. Therefore, the analysis of highway hazards is limited to public highway transportation such as mass transit buses and school buses.

¹⁷⁵ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan*, July 2014, page 411.

¹⁷⁶ State of Michigan, Office of Highway Safety Planning, 2016 Michigan Traffic accident Facts, Oakland County.



In 2016, there were 1,492 truck/bus over 10,000 lbs. accidents in Oakland County according to the Michigan State Police. 177

Bus accidents will continue to occur in Oakland County. The frequency of this hazard will likely increase with increased motor traffic.

Based on the 2011 - 2015 annual average crash statistics from the Southeast Michigan Council of Governments, the following intersections have the highest frequency of crashes in Oakland County:

- 1. Southfield Road at 11 Mile Road W
- 2. 12 Mile Road W at Orchard Lake Road
- 3. Maple Road W at Orchard Lake Road
- 4. 12 Mile Road W at Telegraph Road
- 5. N M 5 at Pontiac Trl N
- 6. 12 Mile Road at Dequindre Road
- 7. Commerce Road at Commerce Road
- 8. Highland Road at Airport Road
- 9. Southfield Road at 10 Mile Road W
- 10. 12 Mile Road W at Southfield Road

Health & Safety

Automobile accidents occur several times daily in Oakland County. In 2016, there were 42,660 reported crashes in Oakland County, of those 78 were fatal and 8,218 resulted in injuries. ¹⁷⁸

Economic Impact

The National Highway Traffic Safety Administration estimated the total economic cost of traffic accidents in Michigan at approximately \$9.5 billion for the year 2010. This total includes all types of accidents and accounts for costs associated with lost productivity, medical costs, legal costs, emergency services costs, insurance costs, travel delays, property damage, workplace losses and human capital losses.

For the U.S. in 2016, the average auto liability claim for property damage was \$3,683; the average auto liability claim for bodily injury was \$16,110.¹⁸⁰ It is anticipated that this rate of economic loss would be higher for public passenger transportation given that more passengers are present and the higher cost of a bus versus a private automobile.

¹⁷⁷ Ibid

¹⁷⁸ State of Michigan, Office of Highway Safety Planning, 2016 Michigan Traffic accident Facts, Oakland County.

¹⁷⁹ U.S. Department of Transportation, National Highway Traffic Safety Administration, <u>www.nhtsa.dot.gov</u>, The Economic and Societal Impact of Motor Vehicle Crashes 2010, State Costs, viewed June 22, 2017.

¹⁸⁰ Rocky Mountain Insurance Information Association, Cost of Auto Crashes and Statistics. viewed June 22, 2017.



Critical Facilities/Service

The highway transportation system in Oakland County plays a vital part in the County's ability to provide services to the public. Traffic accidents are notorious for causing temporary traffic delays which complicate the County's ability to maintain a well operating transportation network.

Highway Transportation Risk & Vulnerability Assessment

Automobile accidents occur several times daily in the County and can occur anywhere in the County. The impact to the public from private automobile accidents is limited; therefore, vulnerabilities were assessed based on analysis of public highway transportation.

From 2001 through 2003, there were 469 school bus accidents in Oakland County. Therefore, bus stations and bus routes, such as the SMART bus routes are vulnerabilities to highway transportation accidents. Also vulnerable are those locations identified as having frequent accidents, which are also provided on the Transportation System Vulnerability Map, along with SMART bus routes and schools.

• See Transportation System Vulnerability Map in Appendix A

Table 66: Highway Transportation Accidents Hazard Evaluation and Impact/Consequence Assessment

1 LDD CDD III CIT	<u></u>				
Frequency & Probability ¹				63	
Potential I	Magnitude and Scale ¹			23	
Physical V	Julnerability Hazard Impag	ct ¹		28	
Social Vu	Inerability Hazard Impact ¹			29	
Communi	ty Conditions Hazard Impa	act ¹		24	
Overall Ca	apability and Capacity ²			79	
Mitigation	n^2		72		
Hazard Co	onsequence & Impact Scor	·e ¹	26		
Overall Ri	isk Rating ³			40	
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	7	Very Capable	Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Rail

Historical Events

Passenger rail accidents are typically associated with derailments or collision with motor vehicles attempting to cross railroad tracks. On January 13, 2004, in Bloomfield Hills, a school bus driver ignored the warning signals at a railroad crossing and attempted to cross the tracks. An approaching



passenger train struck the school bus at a speed of 22 miles per hour causing injury to the driver of the bus.

Frequency & Probability

There are 109 miles of freight rail lines and 62 miles of passenger rail lines in Oakland County. Passenger rail service is provided by Amtrak with service between Pontiac and Detroit.

From 2008 through 2016, there were 68 railroad accidents/incidents in Oakland County, an average of 7.5 accidents/incidents each year. ¹⁸¹ Seventeen of these incidents occurred at public railroad crossings. It is anticipated that the likelihood of occurrence for this hazard will fluctuate with the rate of rail traffic within the County.

Health & Safety

Death and injury to passengers involved in railroad accidents/incidents are rare in Oakland County. From 2008 through 2016, there were 4 deaths and 45 nonfatal conditions as a result of train accidents/incidents in Oakland County. There was 2 highway railroad death and 6 highway railroad injuries in Oakland County during that same time frame.

Area Impacted

Areas adjacent to a railroad are most at risk for impact from this hazard due to the potential for derailment. The majority of accidents occur at public railroad crossings. Secondary impact may result if railroad crossings are blocked resulting in traffic delays. If the train is transporting hazardous materials, an evacuation zone may need to be implemented. If an accident or derailment leads to the release of hazardous materials, the area may need to be evacuated for an extended period of time while environmental cleanup is performed.

Economic Impact

The greatest economic loss is property damage to the train equipment and railroad tracks. This loss is the responsibility of the owner/operator of the equipment and railroad.

Critical Facilities/Services

Given the frequency of this event, it is not anticipated that County services or facilities will be greatly impacted. Impact to County services may result if an accident blocks a railroad crossing, thus causing traffic problems. If the train is transporting hazardous materials, an evacuation area may need to be implemented. Police and fire services would be required to direct traffic and establish an exclusion zone.

Rail Transportation Risk & Vulnerability Assessment

From 2008 through 2016, there were 68 railroad accidents/incidents in Oakland County, an average of 7.5 accidents/incidents each year. Seventeen of these incidents occurred at public railroad crossings. Areas adjacent to railroads are most vulnerable to a railroad accident. The

¹⁸¹ Federal Railroad Administration, http://safetydata.fra.dot.gov, all reports for all railroads in Oakland County, 2008 through 2016, reports generated in June, 2017.

¹⁸² Ibid.



locations of railroads, police stations, fire stations, and critical vulnerable assets in the County are included on the Transportation System Vulnerability Map.

• See Transportation System Vulnerability Map in Appendix A

Table 67: Rail Transportation Accident/Incident Hazard Evaluation and Impact/Consequence Assessment

Frequency & Probability ¹				38	
Potential I	Magnitude and Scale ¹		15		
Physical V	Julnerability Hazard Impag	ct ¹		39	
Social Vu	Inerability Hazard Impact ¹			29	
Communi	ty Conditions Hazard Impa	act ¹		24	
Overall Ca	apability and Capacity ²			75	
Mitigation	1^2		67		
Hazard Co	onsequence & Impact Scor	·e ¹	27		
Overall Ri	isk Rating ³			32	
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 - 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable		Very Capable	Extreme	
N/A	Not Applicable/Unknown	Not A ₁	oplicable/Unknown	Not Applicable/Unknown	

Marine

Historical Events

Twenty routes of ferry service operate in Michigan's waterways. Public marine passenger ferries are heavily regulated and inspected by the U.S. Coast Guard to ensure public safety. To date, no significant accidents involving public marine transportation have been recorded in Michigan. Response to marine accidents differ significantly from air and land transportation accidents in that they can require an underwater search and rescue. There is no marine transportation service operating in Oakland County. As such, marine transportation accidents do not present a hazard to the County.

Marine Transportation Risk & Vulnerability Assessment

There is no marine transportation service operating in Oakland County. As such, marine transportation accidents do not present a hazard to the County.



Winter Hazards

Ice and Sleet Storms

Definition

Freezing rain is rain that freezes on contact with surfaces causing a coating of ice on exposed surfaces.

Historical Events

From March 1, 1950 through March 31, 2017, 5 ice storm events have been recorded in Oakland County. 183

On February 24, 2001, a wintry mix of precipitation broke out north of a warm front, with freezing rain being the dominant precipitation type. One power line in Waterford was damaged. 184

In April 2003, Oakland County had an intense ice storm, Thick Ice accumulations led to considerable damage and widespread power outages across the entire area. Tree damage was so severe that dozens of roads were blocked by trees and damage occurred to hundreds of homes, businesses and automobiles as tree limbs, or in many cases large trees themselves, were brought to the ground under the weight of the ice. It was estimated that 450,000 homes and businesses lost power during the storm. Nearly 50,000 people were without power for up to a week as persistent cold temperatures keep the heavy ice on the trees for 4 days after the storm. A 74-year old man in Troy was killed when he was struck in the head by a falling tree branch. Three other people died due to carbon monoxide poisoning as a result of poorly ventilated generators. Two woman were injured in Orion when a large tree fell onto the car they were in. Five house fires were said to have started by electrical lines being brought down onto the homes. Hundreds of traffic accidents were reported during the storm as well. Total damage in Oakland County was approximately 100 million. 185

On February 20, 2011, a winter storm impacted southeast Michigan, with 5 to 10 inches of snow falling across the majority of the area. Snow turned to ice leading to downed trees and power lines (most of which occurred over Lenawee and Monroe Counties). Power outages lasted 4 to 5 days. The resulting damage was estimated at \$1.5 million. ¹⁸⁶

In late December 2013, an anticyclone over Ontario provided a supply of low-level cold air, causing the surface temperature to be near or below freezing for much of southeast Michigan. The

¹⁸³ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm, Standard Query for Severe Weather, June 22, 2017.

¹⁸⁴ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm, Standard Query for Severe Weather, June 22, 2017.

¹⁸⁵ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm, Standard Query for Severe Weather, June 22, 2017.

¹⁸⁶ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm, Standard Query for Severe Weather, June 22, 2017.



result was a swath of freezing rain roughly between M-59 to M-46 which continued into Saturday night and early Sunday. The I-69 corridor was especially hard-hit, with ice accumulations of half an inch to three quarters of an inch, causing over 200,000 homes and businesses to lose power. Numerous trees and wires were downed, and a state of emergency was declared in Shiawassee County due to unsafe traveling conditions. South of M-59, much of the precipitation occurred as rain, with some locations receiving over 1.50 rain. North of M-46, much of the precipitation occurred as snow, with up to 4 inches reported. Total property damage in Oakland County was approximately 3 million. ¹⁸⁷

Frequency & Probability

Michigan averages 15 significant storm events per year. The majority of sleet and ice storms occur during the months of January through April. ¹⁸⁸ The probability for ice and sleet storms to occur in Oakland County is high.

Health & Safety

Deaths and injury caused directly from an ice or sleet storm are difficult to determine. Deaths and injury are usually caused by secondary effects such as auto accidents, downed power lines and heart attacks from overexertion. According to the National Weather Service, 1 death and 2 injuries have been attributed to ice storms in Oakland County since 1993. These occurred during a storm in 2003 and were the result of falling tree limbs.

Area Impacted

Due to the widespread nature of ice and sleet storms, the entire population could be impacted either directly or secondarily (i.e. power outages, etc.). According to 2008 SEMCOG Land Use Data, Oakland County has approximately 60,623 acres of transportation, communication and utility land use. ¹⁸⁹

Economic Impact

Economic loss would include property damage and costs of response (clearing roadways, downed power lines or trees, etc.).

From 2000 to 2016, ice storms have caused approximately \$103.45 million in property damage in Oakland County.

Critical Facilities/Services

Response to an ice and/or sleet storm related emergency would primarily be localized. Initial response activities due to emergencies from ice and sleet would primarily be associated with local response from police, fire and medical emergency services.

¹⁸⁷ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm, Standard Query for Severe Weather, June 22, 2017.

¹⁸⁸ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 90.

¹⁸⁹ SEMCOG, Community Profiles, Land Use in Oakland County, viewed June 22, 2017.



Utilities (power lines, telephone lines, cable, etc.) may require repair and maintenance resulting from ice and sleet. Regional or out-of-state services may be required to assist in cleanup and repair activities. Also, private or governmental tree removal services are often involved following ice and sleet incidents in order to remove trees from roadways, yards and away from power lines.

The National Weather Service and local media can alert the public of severe storms capable of producing ice and sleet.

Ice and Sleet Storm Risk & Vulnerability Assessment

Oakland County has had 5 major ice storm events since 1990. Communications and utilities are vulnerable to winter hazard events. Bridges and major roadways are vulnerable in that most incidents related to winter hazards are secondary effects such as auto accidents. Public facilities such as road yards (road commission and MDOT) are vulnerable assets in snow removal and road salt services. During major events, schools are likely to close and hospitals are likely to see an increase in patients with ailments such as heart attacks from overexertion and auto accident injuries. Over 85% of deaths related to ice storms are traffic related.

Police and fire stations are vulnerable to emergency response activities related to winter hazard incidents. The locations of major highways, schools, hospitals, and police and fire stations, are included on the Winter Hazard Vulnerability Map, along with transportation, communication, and utility land use locations.

• See Winter Hazard Vulnerability Map in Appendix A

Table 68: Ice and/or Sleet Storm Hazard Evaluation and Impact/Consequence Assessment

	& Probability ¹		25	
Potential Magnitude and Scale ¹			26	
Physical V	Julnerability Hazard Impa	ct ¹		53
Social Vu	Inerability Hazard Impact ¹			54
Communi	ty Conditions Hazard Impa	act ¹		43
Overall Ca	apability and Capacity ²			73
Mitigation	n^2			67
Hazard Co	onsequence & Impact Scor	e ¹	42	
Overall R	isk Rating ³		33	
		Leg	end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Mir	nimally Capable	Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 - 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown



Snow Storms

Definition

A period of rapid accumulation of snow accompanied by high winds and cold temperatures.

Historical Events

According to the NOAA, Oakland County has had 19 significant winter storm events from 1950 to 2016. In 2011, Oakland County had 1 blizzard warning. 190

From 1950 through 2016, 23 heavy snow events were reported in Oakland County. 191

On January 26, 1977, a Presidential Disaster Declaration was issued for 15 counties in the southern part of the state. Many residents were isolated in rural residences or stranded in public shelters. 192

On March 12 through 14, 1993, a snowstorm, now called "The Storm of the Century," struck the Eastern U.S. dumping 56 inches of snow in some areas and causing \$2 billion in property damage. The storm impacted 26 states and approximately 50% on the nation's population. A total of 270 deaths and over 600 injuries were attributed to the storm. 193

On January 2 and 3, 1999, heavy snow produced 15 inches in Royal Oak; 14 inches in Ferndale; 13 inches in South Lyon; 12 inches in Milford, Clarkston and White Lake; 11 inches in West Bloomfield; 10 inches in Rochester Hills, Farmington and Waterford and 8 inches in Holly and Oxford. The weight of the snow tore a gash in the roof of the Pontiac Silverdome. Full operations at Detroit Metropolitan Airport did not resume until January 6, 1999.

On December 11, 2000, a heavy snow event over several counties produced 12 inches in Royal Oak; 12 to 14 inches in Oxford; 14 inches in White Lake; 11 to 12 inches in Farmington and Farmington Hills; 11 inches in West Bloomfield, 8.8 inches in Milford and 11 to 12 inches in South Lyon. Many schools were closed for two to four days after the storm. Mail delivery the next day was spotty at best, and many businesses and government offices were closed. Several communities declared snow emergencies, forbidding all non-emergency travel until crews could clear roads. Presidential Emergency Declarations were made for all counties in southeast Michigan except Wayne, Lenawee, and Monroe. 195

Frequency & Probability

Oakland County has had 49 snow storm events (all snow related categories) from 1996 - 2017. The annual average snowfall in Michigan is 60.66 inches of snow per year. The annual average

¹⁹⁰ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm, Standard Query for Severe Weather, June 22, 2017.

¹⁹¹ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, January 5, 2012.

¹⁹² Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)*, March 2014, page 90.

¹⁹³ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, July 2012, page 48.

¹⁹⁴ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, June 23, 2017.

¹⁹⁵ National Climatic Data Sponsored Website, www.ncdc.noaa.gov/, Standard Query for Severe Weather, June 23, 2017.



snowfall in Oakland County is 36.02 inches. 196 It is probable that snow storms will occur in the future in Oakland County.

Health & Safety

Deaths caused directly from the event are difficult to determine. Deaths related to snowstorms are usually caused by secondary effects such as delays in emergency vehicle response, auto accidents, downed power lines and heart attacks from overexertion. The direct risk to human life from snowstorms is low.¹⁹⁷

Area Impacted

Blizzards are the most dramatic of all snowstorms, bearing strong winds and an enormous amount of snowfall. Snowstorms can impact a large area of a community, especially if it results in heavy accumulations of snow. Due to the widespread nature of snow storms, the entire population could be impacted either directly or indirectly (i.e. power outages, etc.). Oakland County has approximately 7,343 miles of public roadway that could be affected. ¹⁹⁸

Economic Impact

Primary costs would include property damage and snow removal. Economic losses are dependent upon the degree of storm severity. Schools and businesses may be closed if snowfall is heavy, deep or if a snow emergency is declared that prohibits traffic on roadways. From 1996 through 2016, Oakland County has recorded \$400,000 in damages as a result of snow storm events.

Critical Facilities/Services

Response to a snow related emergency would primarily be localized. Initial response activities due to emergencies from snow storms would primarily be associated with local response from emergency medical services, public works departments and facilities such as MDOT. Municipalities would have increased costs in snow removal activities.

Transportation would be effected as roads and airports could see delays or short-term to long-term closures. Schools and businesses may be closed for a day to several days.

The National Weather Service and local media are critical in alerting the public of severe storms capable of producing snow storms and blizzard conditions.

Snow Storm Risk & Vulnerability Assessment

Oakland County has had multiple significant winter snow storm incidents. Communications and utilities are vulnerable to winter hazard events. Bridges and major roadways are vulnerable in that most incidents related to winter hazards are secondary effects such as auto accidents. Public facilities such as road yards (road commission and MDOT) are vulnerable assets in snow removal.

¹⁹⁶ USA Travel Website Oakland County Data, http://www.usa.com/oakland-county-mi-weather.htm, viewed June 23, 2017.

¹⁹⁷ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Analysis*, March 2006, page 280.

¹⁹⁸ SEMCOG, Land Use in Southeast Michigan 2010, Community Profiles, Transportation. Specific to Oakland County, June 23, 2017.



During major events, schools are likely to close and hospitals are likely to see an increase in patients with ailments such as heart attacks from overexertion and auto accident injuries.

Police and fire stations are vulnerable to emergency response activities related to winter hazard incidents. Private or governmental tree removal services are also vulnerable to winter hazards. The locations of major highways, schools, hospitals, and police and fire stations, are included on the Winter Hazard Vulnerability Map, along with transportation, communication, and utility land use locations.

• See Winter Hazard Vulnerability Map in Appendix A

Table 69: Winter Hazard Evaluation and Impact/Consequence Assessment

Table 07. Willer Hazara Evaluation and Impact/Consequence Assessment					
Frequency & Probability ¹			56		
Potential 1	Magnitude and Scale ¹			41	
Physical V	Julnerability Hazard Impa	ct ¹		58	
Social Vu	Inerability Hazard Impact ¹			59	
Communi	ty Conditions Hazard Impa	act ¹		45	
Overall C	apability and Capacity ²			73	
Mitigation	n^2		67		
Hazard Co	onsequence & Impact Scor	e^1	48		
Overall R	isk Rating ³		52		
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Miı	nimally Capable	Low	
26 - 50	Somewhat Vulnerable	Sor	newhat Capable	Medium	
51 – 75	Vulnerable		Capable	High	
76 - 100	Very Vulnerable	7	Very Capable	Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	

Terrorism and Sabotage

Definition

An intentional, unlawful use of force, violence or subversion against persons or property to intimidate or coerce a government, the civilian population or any segment thereof, in furtherance of political, social or religious objectives.

Historical Events

The most recognized forms of terrorism include assassination, bombings and extortion. These acts are often identified with particular groups or organizations. The Middle East and portions of Europe, South America and Asia have been greatly impacted for many years by acts of terrorism and sabotage. In more recent years, the United States has been victim to acts of terrorism.



Of increasing concern, is sabotage of computer systems also known as hacking. Organized hacking groups, such as "Anonymous," target specific organizations, corporations and governmental agencies to bring down websites for a stated purpose. Other groups hack into and retrieve sensitive and confidential information to make a profit or expose it on the internet. Individual hackers may steal identities or personal credit card information. Other forms of sabotage to computer systems include the introduction of viruses, malware or spyware that can cripple a computer network or steal private information.

Unfortunately, Oakland County has experienced acts of terrorism. On August 30, 1971, members of the Ku Klux Klan gained access to the school bus depot in Pontiac and used dynamite to bomb the buses. The crime was carried out in response to court actions requiring a busing plan to integrate local schools.¹⁹⁹

Frequency & Probability

It is difficult to establish a frequency for terrorist activity in Oakland County based on historical events. Acts of terrorism in Michigan have included bombings, shootings, and arson. From 1970 - 2015, there have been 48 significant terrorist attacks in the State of Michigan. ²⁰⁰ This has been at a rate of roughly one every 2 - 3 years. Despite the unpredictable nature of this hazard, it is likely to occur in the future.

Sabotage of computer systems is a growing trend in the world. Governmental sites and private corporations have been targeted. The increased use and dependency on computer systems, technology and networks will lead to an increase in these types of crimes.

Health & Safety

Due to the nature of terrorist of attacks, it is difficult to establish a death or injury rate from historical events. Not all acts of terrorism are intended to cause death or injury, as demonstrated in the 1971 bus bombings. However, terrorist events in Michigan from 1970 to 2015 have resulted in 5 deaths and 7 injuries. ²⁰¹

While sabotage to computer systems normally would not lead to harm to health and safety, it is possible. As technology becomes more integrated into society, the more access hackers will have to sensitive systems. Integration of systems such as electrical grids, nuclear power plants, air traffic control centers, traffic lights, etc., can leave these systems vulnerable to attack. If these systems are compromised, it is possible that people may be injured or killed.

Area Impacted

Terrorism can take many forms and the aim of terrorist attacks can vary from destruction of property to harming people to disrupting quality of life. Depending on the type of terrorist attack, property damage can be extensive.

¹⁹⁹ Michigan Department of State Police Emergency Management and Homeland Security Division, *Michigan Hazard Mitigation Plan (Updated March, 2014)* March 2014, page 480.

²⁰⁰ Global Terrorism Database. <u>Search Query for Michigan</u>. viewed June 23, 2017.

²⁰¹ Global Terrorism Database. <u>Search Query for Michigan</u>. viewed June 23, 2017.



Any information on this matter is law enforcement and homeland security sensitive and, therefore, is not available to the general public.

Economic Impact

It is difficult to determine the economic impact of terrorist acts. Given that terrorism can take many forms and have widely different consequences, there is the potential for terrorist acts to cause great economic damage.

Critical Facilities/Services

Terrorist acts carried out on public infrastructure can directly impact the County's ability to operate essential facilities and provide services. Significant terrorist acts would require large-scale response from all levels of government.

Special Consideration

Homeland security is addressed under a separate needs and threat assessment, therefore, terrorist acts are not considered in this Plan.

Terrorism and Sabotage Risk & Vulnerability Assessment

These hazards and vulnerabilities thereof are confidential in nature and are addressed in a separate plan that is available to view for those that are deemed necessary.

Table 70: Terrorism and Sabotage Hazard Evaluation and Impact/Consequence Assessment

	& Probability ¹	-	25	
Potential I	Magnitude and Scale ¹			9
Physical V	Julnerability Hazard Impa	ct ¹		62
Social Vu	Inerability Hazard Impact ¹			63
Communi	ty Conditions Hazard Impa	act ¹		47
Overall Ca	apability and Capacity ²			73
Mitigation	n^2		67	
Hazard Co	onsequence & Impact Scor	·e ¹	44	
Overall Ri	isk Rating ³		33	
		Leg	end	
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating
0 - 25	Minimally Vulnerable	Mir	nimally Capable	Low
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium
51 – 75	Vulnerable	Capable		High
76 - 100	Very Vulnerable	Very Capable		Extreme
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown



Weapons of Mass Destruction

Definition

Weapons intended to cause widespread damage and high number of casualties.

Historical Events

Weapons of mass destruction typically fall into 4 categories: 1) missiles. 2) biological weapons, 3) nuclear weapons or 4) chemical weapons. In 2008, 9 countries were known to possess, or be able to obtain 1 one more types of weapons of mass destruction. 202 There are 9 countries known to have nuclear weapons as of June 2017.

Frequency & Probability

Weapons of mass destruction have never been used to carry out an attack in Oakland County. Globally, there have been approximately 25 known WMD attacks from 1985 - November, 2016.²⁰³ Although Oakland County does not have a history of attacks from weapons of mass destruction, the possibility of such an event does exist.

Although the actual number of nuclear weapons a country has is classified, there are estimates based on leaked information. It is estimated that there are currently approximately 14,900 nuclear weapons in the world. Of those, roughly 3,960 are deployed strategic missiles (ready to fire on short notice). This number does not include retired warheads waiting to be dismantled. 204

Health & Safety

On March 8, 2016, Islamic State militants struck the town of Taza, Kirkuk, Iraq with a blistering agent – killing a 3-year-old child and injuring 600 others. ²⁰⁵

Given the nature of weapons of mass destruction, a successful use of these weapons would cause great loss of life and injury. Death and injury rates are highly variable with each attack and the form of weapon used. The greatest loss of life from such an attack occurred in Iraq on February 16, 1988, when Iraqi warplanes attacked a Kurdish city with mustard gas and nerve agents, killing up to 5.000 people, mostly civilians. 206

In March 1995, a Japanese cult released sarin nerve gas within the Tokyo subway system during morning rush hour, killing 12, severely injuring 50, and inflicting more limited health effects on over 1,000 people.²⁰⁷

Depending on the type of weapon used, the effects on human health can linger for years, continuing to present a hazard.

²⁰² James Martin Center for Nonproliferation Studies (CNS), *Chemical and Biological Weapons: Possession and Programs Past* <u>and Present.</u> Last updated March, 2008. viewed on June 23, 2017.

203 Johnstonsarchive.net. <u>Summary of Historical Attacks Using Chemical or Biological Weapons.</u> Accessed June 23, 2017.

²⁰⁴ Federation of American Scientists, http://www.fas.org/programs/ssp/nukes/nuclearweapons/nukestatus.html, June 23, 2017.

²⁰⁵ Johnstonsarchive.net. <u>Summary of Historical Attacks Using Chemical or Biological Weapons</u>. Accessed June 23, 2017.

²⁰⁷ Michigan State Police, *Michigan Hazard Analysis*, July 2012, page 371.



Area Impacted

Any information on this matter is law enforcement and homeland security sensitive and, therefore, not available to the general public.

Economic Impact

It is difficult to estimate the economic impact of a successful attack using weapons of mass destruction. It is anticipated that such an event would be incredibly damaging to life, property and infrastructure, as well as the local, state and possibly federal economy.

Critical Facilities/Services

An attack using weapons of mass destruction against public infrastructure can directly impact the County's ability to operate essential facilities and provide services. Successful attacks would require large-scale response from all levels of government. As stated above, the County has identified and evaluated locations within the County which are potential targets for weapons of mass destruction.

Special Consideration

Homeland security is addressed under a separate needs and threat assessment. Therefore, weapons of mass destruction may have a separate assessment.

Weapons of Mass Destruction Risk & Vulnerability Assessment

These hazards and vulnerabilities thereof are confidential in nature and are addressed in a separate plan that is available to view for those that are deemed necessary.

Table 71: Weapons of Mass Destruction Hazard Evaluation and Impact/Consequence Assessment

1 LDB CBB III CIT	isossitetti				
Frequency & Probability ¹				6	
Potential I	Magnitude and Scale ¹			40	
Physical V	Julnerability Hazard Impag	ct ¹		73	
Social Vu	Inerability Hazard Impact ¹			66	
Communi	ty Conditions Hazard Impa	act ¹		55	
Overall Ca	apability and Capacity ²			63	
Mitigation	n^2		61		
Hazard Co	onsequence & Impact Scor	·e ¹	56		
Overall Ri	isk Rating ³		19		
		Leg	end		
Score	1: Vulnerability Rating	2: Capabil	ity and Capacity Rating	3: Overall Risk Rating	
0 - 25	Minimally Vulnerable	Minimally Capable		Low	
26 - 50	Somewhat Vulnerable	Somewhat Capable		Medium	
51 – 75	Vulnerable	Capable		High	
76 - 100	Very Vulnerable	7	Very Capable	Extreme	
N/A	Not Applicable/Unknown	Not Ap	oplicable/Unknown	Not Applicable/Unknown	



Hazard Assessment

Oakland County recognizes that a community's All Hazard Risk Assessment is the fundamental building block of the four core functions of emergency management: prepare, respond, recover, and mitigate. In today's hazard environment, emergency management is the crux of solving the complex challenges that face our communities during an emergency or following a disaster. The disaster activity over the past several years has re-emphasized the importance for communities to invest in creating thorough strategies to develop comprehensive emergency plans and to test, train, and exercise all emergency operations.

Hazard Assessment Methodology

The objective of the risk methodology is to devise a process to compare and evaluate which hazards are the greatest threats to the County and where mitigation actions should be focused to provide the best value to County. The All-Hazard Risk Assessment describes, analyzes, and assesses the risks facing the County from four categories of hazards: Natural, Technological/Manmade, Political, and Public Health. Natural hazards are those events that are a result of our surrounding environment, such as tornadoes and flooding. Technological hazards are events that are a result of the failure of infrastructure and systems that we have become dependent on for daily activities, such as transportation networks or utilities. Politically-motivated hazards are those events that are a result of local, national, or international societal interactions, such as terrorism.

Disasters Are Not Isolated Events

Past disaster events, both natural and manmade, indicate that disasters cannot be viewed or solved as isolated instances. In other words, the rising number of disasters and ensuing damages, including human losses, can be viewed as "symptoms of broader and more basic problems". These problems stem from the intricate relationships society shares with both the natural and constructed environments.

According to Dr. Denis Mileti:

"Many disaster losses – rather than stemming from unexpected events – are the predictable result of interactions among three major systems: the physical environment, which includes hazardous events; the social and demographic characteristics of the communities that experience them; and the buildings, roads, bridges, and other components of the constructed environment".

Source: Mileti, Denis (1999). Disasters by Design. Joseph Henry Press: Washington DC.

Dr. Mileti's findings demonstrate that these destructive events must be understood and assessed from a holistic point of view, and that current and future solutions for reducing damages and human losses must acknowledge that disasters occur at the intersection between the physical environment, social community characteristics, and the constructed environment. While the escalating losses from disasters will continue to result in part from the continuing expansion of the constructed



environment, it can also be attributed to the fact that "all these systems – and their interactions – are becoming more complex with each passing year".

Therefore, the County All Hazard Risk Assessment update assumed that hazard events exacerbate pre-existing conditions of a community, and that a community's hazard risk is a function of its vulnerability and potential hazard impact. To mitigate against these risks and hazards, capacities and capabilities of managing potential impacts are evaluated as well as a disaster's cascading impacts on communities, residents, essential services, and critical assets. The figure below provides a general illustration of this relationship between the pre-existing conditions in a community (i.e. pre-disaster vulnerability and efforts to mitigate and build capabilities) and the potential impact from various hazards.

Community
Conditions

Vulnerabilities

Community

Community

Community

Community

Capacity

Capacity

Community

Capacity

Figure 33: Community Conditions, Vulnerabilities and Hazard Impacts

Source: Integrated Solutions Consulting

Although incorporating vulnerability, capability, and cascading impacts in a risk assessment is complex, it is imperative to include these relationships in the methodology to the best ability possible to ensure the usefulness of the outputs. Understanding these interdependent relationships can assist in operational, hazard, agency, and community planning.

Many of the hazards in the Risk Assessment do not pose a significant risk because of their low-probability of occurring or minimal impact; however, these hazards are still addressed in this Plan. Hazards that were determined to not occur in Michigan were removed from the Risk Assessment.

Community Vulnerability Risk and Resiliency (CVR2)

Using the CVR2 process, each hazard is evaluated based on the probability of a hazard occurring, the potential magnitude of the hazard, and potential impacts. The CVR2 hazard assessment also provides consideration to the community's efforts to mitigate and build capacity to manage each hazard threat. The CVR2 hazard risk analysis incorporates the outputs provided by the vulnerability and capability/capacity indices to provide an overall hazard risk score that can be prioritized. The following table identifies the indicators and measurements, describes why these are important, and presents the key used to evaluate each indicator.

Building off the theoretical finding that disasters are not isolated events, the CVR2 process analyzes a series of vulnerability indices to evaluate the different types of impacts that may be possible by the hazard. Categories are areas of potential vulnerability (example: social



vulnerability). This is further evaluated based on a series of scientific indicators such as special population types such as the elderly. Each indicator is assessed to provide a complete picture of the potential impact that each hazard poses on the community. The following table identifies the indicators and measurements, describes why these are important, and presents the key used to evaluate each indicator.

Table 72: Hazard Assessment

Indicators & Measurements	Description	Rating Key
Hazard-Specific Frequency & Probability	Frequency of past occurrences and probability of future occurrences based on predictive modeling or scientific research.	Extreme High Medium Low
Hazard-Specific Magnitude & Scale	The potential magnitude of the hazard and scale or size of the hazard.	Extreme High Medium Low
Capability & Capacity	The community's capability and capacity to manage the hazard, such as floodplain management programs or anti-terrorism surveillance	Very Capable Capable Somewhat Capable Minimally Capable
Mitigation Assessment	The community's efforts to mitigate the hazard such as a buying out flood-prone properties, building codes, etc.	Very Capable Capable Somewhat Capable Minimally Capable
Consequence & Impact Assessment	The potential severity of the impacts and consequences of the event. This assessment provides consideration to the Hazard Impact Analysis.	Extreme High Medium Low

Table 73: Hazard Impact Analysis

Categories and Indicators	Description	Rating Key
Physical Vulnerabilities Hazard Impact Analysis Critical Infrastructure Key Resources Building Stock	The built environment provides the setting for human activity, ranging in scale from personal residential structures and buildings to neighborhoods and cities that often includes supporting infrastructure, such as transportation networks, energy and water systems. The CVR2's Physical Vulnerability Index (PVI) evaluates critical infrastructure, key resource assets, and building stock risk exposure to hazards using a series of indicators and measurements.	Very Vulnerable Vulnerable Somewhat Vulnerable Minimally Vulnerable
Social Vulnerabilities Index (SVI) Hazard Impact Analysis • Special Populations	Social vulnerability can be broadly viewed as the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recovery from the impact of a hazard or threat. Social vulnerability can also be	Very Vulnerable Vulnerable



Categories and Indicators	Description	Rating Key
 Cultural Conditions Socio-Economic Conditions 	looked at as the susceptibility of community groups (elderly, children, etc.) to the impacts of hazards, as well as their resiliency or ability to adequately recover from them. It should be noted that susceptibility is not only a function of demographic characteristics, but also more complex factors such as health care provision, social capital, and access to lifelines. The CVR2's Social Vulnerability Index (SVI) evaluates the hazard risk exposure of special population types, socio-economic conditions, and cultural conditions using a series of open-source data measurements. There are a number of potential special populations that may be used in the descriptions below including: Children: Those under 18 years' old Dialysis Patients: Patients who are reliant on dialysis to survive Disabled: Those who have a mental or cognitive disability Elderly: Those over 65 Low-Income/Poor: Those who do not make a living wage or are below the poverty line Pet Owners: Those who live with and/or take care of animals Transient: Tourists, commuters, and homeless University Students: Those who attend a college or university, often between ages 18 & 23 Vehicle Ownership: Those who do not have access to a vehicle	Somewhat Vulnerable Minimally Vulnerable
Community Conditions Vulnerability Index (CVI) Hazard Impact Analysis Community Organizations Economic Conditions Environmental Conditions Government Conditions Special Properties	Community-level indicators are measures of conditions that consider how the area may be impacted during a hazard event. A community is a complex system of many interconnected components. This assessment is not meant to capture this system in its entirety, but rather to focus on specific categories of indicators. The CVR2's Community Conditions Vulnerability Index focuses specifically on four broad categories (economic, environmental, community organizations, governmental conditions), comprised of a series of evidence-based indicators and measurements of community vulnerability.	Very Vulnerable Vulnerable Somewhat Vulnerable Minimally Vulnerable

The true value of the CVR2 assessment is the ability to compare a wide variety of hazards and threats, from floods to acts of terrorism, using the same format for each hazard type. The scoring mechanism enables the community to identify areas of strength and weakness, as well as support the case for further mitigation and planning projects to build up the resilience of the area.

Limitations

The analysis of hazards is complicated by a number of factors including laws, customs, ethics, values, attitudes, political preferences, complex infrastructures and the built environment. The



hazard analysis developed for the County's Hazard Mitigation Plan should be considered an initial step to evaluate the community's hazards. A hazard analysis, however, does provide a wealth of valuable information that is essential for identifying goals, prioritizing actions, planning and preparedness, and recovering and mitigating future hazards.

The assessment of data and identifying the risk to a community is not a hard science. It is not possible to predict hazards or their impacts. Hazard analysis data and conclusions are not absolute. The perception of what constitutes a risk and a judgment of its impact can differ from individual to individual. The changing natural, built, or societal environments can have a significant effect on each hazard assessment. For this reason, it is important to periodically update this document. A hazard risk assessment does provide a guide to evaluate Oakland County's risks and guide the mission of protecting their members and interests.

Hazard Risk Determination

The determination of the risks associated with each hazard were not based on empirical values, but instead based on a function of the probability of the event occurring and its potential impact. This approach was necessary due to the complexities of a uniformed all-hazard approach and the numerous direct and indirect factors for a unique community like Oakland County.

At the most fundamental level, both DHS and FEMA recognize that risk is equal to frequency (and/or probability) multiplied by consequence ($R = F \times C$). More specifically, in order to have a certain level of risk, there must be a probability or likelihood for that event to occur. Likewise, if the event does occur but there is no impact or consequence, the level of risk is negated or substantially reduced.

Whereas measuring frequency/probability of a hazard is often straightforward, defining and measuring the consequence is more complex. At the most basic level, consequence is an assessment of the potential impact(s) if the attack or hazard incident actually occurs. In this assessment, the consequence of an event (or the impact) will be interdependent on the following factors: vulnerabilities (i.e. social, physical, and community conditions), capabilities and capacities, mitigation, and the characteristics (i.e. magnitude, scale, etc.) of the hazard event or attack itself. Again, the frequency/probability of the hazard is not included in assessing the consequence because without the event, there is no consequence or impact.

The algebraic conceptual framework that drives the CVR2 tool is based on the overarching premise that the impacts of a disaster are a direct correlation to the pre-existing conditions and vulnerabilities of the community; and secondly, although risk exposure can be reduced, a community can never completely eliminate disaster impacts by implementing mitigation projects or by building capabilities and capacities.

It is important to recognize that the greater the rigor used in the methodology, the more reliable the output and the more effective the jurisdiction's preparedness efforts will be. For this reason, the CVR2 relies on a large spectrum of evidence-based categories, indicators and measurements all of which are important in understanding a community's hazard risk potential. The algorithm of



the CVR2 allows for the systematic analysis of these categories, indicators and measurements and provides the consistency needed to uniformly evaluate the hazard risk potential across all hazards.

Figure 34: Risk Assessment Methodology and Formula



The algorithm above recognizes that the potential impact from a hazard is a function of the preexisting vulnerabilities in a community. Additionally, the algorithm recognizes that although you can reduce your potential impact and vulnerability to hazards by increasing your capability and implementing mitigation, vulnerability cannot be eliminated. Communities cannot achieve absolute resiliency to any hazard.

More specifically, the variable fV represents the numeric relationship that although there is a direct correlation between a community's vulnerability and potential impacts; the extent of the vulnerability exposure varies from hazard to hazard. Similarly, fX represents the numeric relationship that recognizes that capabilities, capacities and ability to mitigate cannot eliminate a threat and, therefore, cannot be absolute. In simple terms, vulnerability, capability and mitigation will never be more than 100% or less than 0% (both of which would be practically and theoretically impossible).

Finally, the algorithm recognizes that communities can have vulnerabilities, capabilities, capacities, and ability to mitigate that are specific to the community and therefore should be considered all hazards. This is represented in the fVI and fXI variables. An example of this would be a community's overall level of preparedness or trust in government. Additionally, communities may also have hazard-specific vulnerabilities or taken hazard specific measures to mitigate or build capabilities to manage a specific hazard. This is represented by the fV2 and fX2 variables. An example of this would be a community participating in FEMA's National Flood Insurance Program.



Hazard Ranking

Table 74: Oakland County Hazard Ranking

Table 74: Oakland County Hazard Ranking Natural Hazards Section 1.		
1	Winter Storm and Blizzards	Score 52
2	Riverine Flooding	
3	Urban Flooding Urban Flooding	
4	High Winds/Severe Winds	
5	Hail	
6	Tornadoes	
7	Extreme Cold	40
8		39
9	Thunderstorms (Lightning) Ice and/or Sleet Storms	
10		
11	Drought Drought	
12	Fog	25 23
13	Earthquake	21
14	Wildfire	19
15	Natural Subsidence	10
	nmade/Technological Hazards	Score
1	Structural Fire	41
2	Transportation Accidents: Highway	
3	Hazardous Materials Incidents: Transportation	
4	Hazardous Materials Incidents: Fixed Facility	
5	Petroleum and Natural Gas Pipeline Accidents	
6	Infrastructure Failure: Electrical System Failure Incident	
7	Infrastructure Failure: Water System Disruption	
8	Transportation Accidents: Rail	
9	Criminal Acts: Vandalism	
10		
11	7	
12		
13	·	
14	Dam Failure	26
15	Criminal Acts: Mass Shootings/Active Assailant	25
16	Infrastructure Failure: Sewer System Incident	25
17	Nuclear Power Plant Accidents	22
18	Transportation Accidents: Air	21
19	Gas/Oil Shortage	21
20	Oil and Gas Well Incident	20
21	Infrastructure Failure: Transportation (Bridges, Roads, Overpasses) Infrastructure	20
	System Failure Incident	
22	22 Scrap Tire Fire	
Poli	Political Hazards S	



1	Terrorism and Sabotage	
2	2 Civil Disturbances	
3	Weapons of Mass Destruction	19
Public Health Hazards		Score
1 Public Health Emergencies		37

Mitigation Goals and Objectives

Mitigation goals describe the broad direction that Oakland County and participating jurisdictions and school districts will take to select mitigating projects which are designed specifically to address risks posed by natural and manmade hazards. The goals are stepping-stones between the mission statement and the specific objectives developed for the individual mitigation projects.

As stated in this Plan, the purpose of the hazard mitigation planning process is to identify hazard areas, to assess the risks, to analyze the potential for mitigation and to recommend mitigation strategies, where appropriate. Potential mitigation projects will be reviewed using criteria that stress the intrinsic value of the increased safety for people and property in relation to the monetary costs to achieve this (i.e., a cost-benefit analysis). With that in mind, the planning goals for this entire Plan were reassessed and updated.

The analysis of the Risk Assessment identified areas where mitigation improvements could be made, providing the framework for the committee to readdress and formulate planning goals.

Goals and Objectives

During the 2017 update process, the 2012 goals were reviewed and updated according to the Advisory Committee's feedback. The Advisory Committee agreed that the 2012 goals provided a concise set of parameters to guide the hazard mitigation process, and that no changes were warranted. Therefore, the 2017 Plan goals are:

- Protection of public health and safety and prevention and reduction of loss of life and injury due to all hazards.
- Improve and support public and private organizational response capabilities.
- Prevention and reduction of damage to public and private property and infrastructure.
- Protection of critical assets, including, but not limited to: hospitals, nursing homes, and schools.
- Increasing awareness, education and preparedness of public, business, non-profit, government, etc. about hazards.
- Encourage personal responsibility.



Mitigation Strategies and Actions

The heart of the mitigation plan is the mitigation strategy, which serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process. In this section, mitigation actions/projects were updated/amended, identified, evaluated, and prioritized.

Plan participants assessed over 300 hazard mitigation strategies, including strategies from FEMA documents, strategies from the 2012 Oakland County Plan and suggestions from the communities, Advisory Committee members and school districts. These strategies were evaluated by the Advisory Committee during the third meeting held on November 3, 2017, resulting in a prioritized list of 147 new strategies, in addition to 229 ongoing/updated mitigation strategies from the 2012 Plan, and 126 completed strategies. Fifteen were removed or considered not relevant.

Major categories that represented the identified mitigation strategies, included (in order of priority as identified by the Advisory Committee):

- 1. Emergency Planning
- 2. Emergency Training for First Responders
- 3. Infrastructure work
- 4. Culverts/General Flood/Water System
- 5. Personal Preparedness Encouragement
- 6. Radio/Communication/Notification System
- 7. Security Improvements
- 8. Emergency Supplies/Small Equipment
- 9. Generator
- 10. Warning Sirens/Loud Speakers
- 11. Hire/Train Staff
- 12. Large Response Equipment or Construction Project
- 13. Emergency Shelters

The Mitigation Actions and Projects from the County, Municipalities and School Districts are included in the following Volumes:

Volume II:

- County Mitigation Actions (County Departments and Mitigation Actions that Apply to the County and All Participating Municipalities)
- Municipal Mitigation Actions (Cities, Townships, and Villages)

Volume III:

• School District-Level Mitigation Actions



Each entities' Mitigation Actions are organized as follows:

- New Mitigation Actions New actions identified during this 2017 update process
- Ongoing Mitigation Actions These ongoing actions were included in the previous update, and have yet to be completed. Some of these actions have no definitive end. During the 2017 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed, to better define the action/project.
- Completed Mitigation Actions Completed actions since 2012

The Action Plan for each mitigation project is presented in a table format. The table is designed to capture important details intended to support the implementation of the project. It is also designed to facilitate and encourage the annual review and maintenance of each mitigation action by allowing the Lead Agency/Organization to document the yearly status of the project prior to and/or during the Annual Advisory Committee meeting.

Table 75: Action Plan

Table 75: Action Flan	
1. (INSERT MITIGATION	ACTION TITLE)
(INSERT DESCRIPTION)	
Year Initiated	
Applicable Jurisdiction	
Lead Agency/	
Organization	
Supporting Agencies/	
Organizations	
Applicable Goal(s)	
Potential Funding Source	
Estimated Cost	
Benefits (Loss Avoided)	
Projected Completion	
Date	
Actual Completion Date	
Priority	
2017	
2018	
Status 2019	
2020	
2021	
Applicable Hazards	

The parameters for the timeline (Projected Completion Date) are as follows:

- Short Term = to be completed in 1 to 5 years
- Long Term = to be completed in greater than 5 years
- Ongoing = currently being funded and implemented under existing programs.



Prioritization Process

The mitigation action must be prioritized according to a benefit/cost analysis of the proposed projects and their associated costs (44 CFR, Section 201.6(c)(3)(iii)). The benefits of proposed projects were weighed against estimated costs as part of the project prioritization process. The benefit/cost analysis was not of the detailed variety required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) grant program. A less formal approach was used because some projects may not be implemented for up to 10 years, and associated costs and benefits could change dramatically in that time. The projects were prioritized and evaluated as shown on the individual worksheets for each recommended mitigation initiative.

The estimated costs for the mitigation initiatives were identified as high, medium, or low, using the following ranges:

- Low less than \$10,000
- Medium from \$10,000 to \$100,000
- High greater than \$100,000

Furthermore, prioritization was based on a scale of High, Medium and Low. The contributing prioritization factors for the Advisory Committee were:

- Technical Feasibility
- Cost Effectiveness
- Ability to Accomplish, Fund, Measure, and Sustain
- Protection of Critical Resources
- Community and Public Acceptance socially equitable, etc.
- Environmentally Sound

Priority was assessed by requesting that every new mitigation action submitted by County departments, municipalities and school districts go through a ranking process (for each of the aforementioned prioritization factors), which was a numbering system from 1 to 5 with 1 being much less important and 5 being much more important.

Municipalities and School Districts were also asked to consider the following when identifying mitigation strategies: 1) benefit to the County or City/School in relation to the hazards mitigated and 2) number of hazards that would be mitigated.

The following form "New Mitigation Action Projects Form" and the online equivalent (https://integratedsolutions.wufoo.com/forms/qo0ndg617ys5lw/) was created to facilitate the prioritization process described above.



Figure 35: New Mitigation Action Projects Form

Hamilton	of Symmetry	How (vol.to)	elXiomle1			
Name:						
Organization/Department:						
E-mail:						
Phone:						
New Mitigation Action (Please Desc	ribe):					
Year Initiated	2017 (New N	Mitigation Ac	tion)			
Applicable Jurisdiction or School District						
Lead Agency/Organization						
Supporting Agencies/Organization	ıs					- 1
Potential Funding Source						
Estimated Cost						1
Benefits (loss avoided)						
Projected Completion Date						
PRIORITY (High, Medium, Low)	1					
Please indicate if the mitigation goa That Apply. Protection of public health and safe Improve and support public and pr Prevention and reduction of damage	ety and prevention ivate organizations	and reduction	of loss of I	ife and inju		eck All
 □ Protect critical assets (example: ho □ Increase awareness and prepared 	ospitals, nursing ho ness of public, bus	mes, schools			bout ha	zards.
 □ Protect critical assets (example: hold increase awareness and prepared □ Encourage personal responsibility. This mitigation action:	ospitals, nursing ho ness of public, bus	omes, schools siness, non-pro). fit, governi	ment, etc. a		
 □ Protect critical assets (example: hold increase awareness and prepared □ Encourage personal responsibility. This mitigation action:	ospitals, nursing ho ness of public, bus	omes, schools, siness, non-pro Strongly Disagree	fit, governi Disagree	Neither Agree or Disagree	Agree	Strongi Agree
 □ Protect critical assets (example: hold increase awareness and prepared increase awareness and prepared increase increase awareness and prepared increase awareness and prepared increase increase awareness and prepared increase incr	ospitals, nursing ho ness of public, bus	omes, schools, iness, non-pro). fit, governi	nent, etc. a		Strongl
☐ Protect critical assets (example: ho Increase awareness and prepared Encourage personal responsibility. This mitigation action: Instructions: Circle the best option Is technically feasible Is cost effective	ospitals, nursing ho ness of public, bus	Strongly Disagree	Disagree	Neither Agree or Disagree (3)	Agree	Strongl Agree
☐ Protect critical assets (example: ho☐ Increase awareness and prepared ☐ Encourage personal responsibility. This mitigation action: Instructions: Circle the best option Is technically feasible Is cost effective Can be easily accomplished, funded,	ospitals, nursing ho ness of public, bus	Strongly Disagree (1)	Disagree	Neither Agree or Disagree (3)	Agree	Strongl Agree (5)
☐ Protect critical assets (example: ho☐ Increase awareness and prepared ☐ Encourage personal responsibility. This mitigation action: Instructions: Circle the best option Is technically feasible Is cost effective Can be easily accomplished, funded, sustained	ospitals, nursing ho ness of public, bus	Strongly Disagree (1)	Disagree	Neither Agree or Disagree (3) 3	(4) 4	Strongl Agree (5) 5
☐ Protect critical assets (example: ho☐ Increase awareness and prepared ☐ Encourage personal responsibility. This mitigation action: Instructions: Circle the best option Is technically feasible Is cost effective Can be easily accomplished, funded,	ospitals, nursing ho ness of public, bus measured, and	Strongly Disagree (1)	Disagree	Neither Agree or Disagree (3)	(4) 4 4	Strongl Agree (5) 5

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Harmon They Million on rolling (Caldeni Condition)

Mitigated Hazards
All Hazard
Natural Hazards
Drought
Earthquake
Extreme Cold
Extreme Heat
Fog
Hailstorm
High Winds
Ice/Sleet Storms
Flood (Riverine)
Flood (Shoreline Flooding and Erosion)
Flood (Urban/Flash Flooding)
Subsidence
Thunderstorm and Lightning
Tornado
Wildfire
Winter storm/Blizzard
Technological Hazards
Criminal Acts: Arson
Criminal Acts; Mass Shootings/Active Assailant
Criminal Acts: Vandalism
Dam Failure
Gas/Oil Shortages or Supply Disruption
Hazardous Materials Incidents: Fixed Site
Hazardous Materials Incidents: Transportation Incident
Infrastructure Failure: Communication System Failure Incident
Infrastructure Failure: Electrical System Failure Incident
Infrastructure Failure: Sewer System Failure Incident
Infrastructure Failure: Storm Water System Failure Incident
Infrastructure Failure: Transportation (Bridges, Roads, Overpasses) Infrastructure System Failure Incide
Infrastructure Failure. Water System Failure Incident
Invasive Species
Nuclear Power Plant Accidents
Oil and Gas Well Accidents
Petroleum and Natural Gas Pipeline Accidents
Scrap Tire Fire
Structural Fire
Transportation Accidents: Air
Transportation Accidents: Highway
Transportation Accidents: Marine
Transportation Accidents: Rail
Civil Disturbances
Structural Fire
Terrorism and Sabotage
Weapons of Mass Destruction
Pandemic/Epidemic

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Plan Maintenance Process

The Oakland County Hazard Mitigation Plan (Plan) maintenance process includes a schedule for annual monitoring and evaluation of the programmatic outcomes established in the Plan and for producing a formal Plan revision every five years.

Formal Review Process

The Plan may be reviewed on an annual basis by Oakland County Homeland Security and reviewed and revised every five years by the committee to determine the effectiveness of programs and to reflect changes that may affect mitigation priorities. Oakland County Homeland Security will be responsible for contacting the Mitigation Advisory Committee members (LEPC) and organizing the review. Committee members will be responsible for monitoring and evaluating the progress of the mitigation strategies in the Plan. The Committee will review the goals and action items to determine their relevance to changing situations in the County as well as changes in Federal policy, and to ensure they are addressing current and expected conditions. The Committee will also review the risk assessment portion of the Plan to determine if this information should be updated or modified, given any new available data. The organizations responsible for the various action items will report on the status of the projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised or removed.

Oakland County Homeland Security will be responsible for ensuring the updating of the Plan. Oakland County Homeland Security will also notify all holders of the Plan and affected stakeholders when changes have been made. Every five years the updated Plan will be submitted to the Michigan State Police, Emergency Management and Homeland Security Division's (MSP/EMHSD) Mitigation Program and to the Federal Emergency Management Agency for review.

Continued Public Involvement

Oakland County Homeland Security is dedicated to involving the public directly in the review and updates of the Plan. The public will also have the opportunity to provide input into Plan revisions and updates. Copies of the Plan will be kept by appropriate County departments, municipalities, school districts, and outside agencies, as appropriate.

Public meeting(s) will be held when deemed necessary by Oakland County Homeland Security. The meetings will provide a forum where the public can express concerns, opinions, or new alternatives that can then be included in the Plan. Oakland County Homeland Security will be responsible for using County resources to publicize the public meetings and maintain public involvement.

To further facilitate continued public involvement in the planning process, Oakland County will ensure that:

• Oakland County Homeland Security will keep a copy of the plan on hand at their office for review and comment by the public.



- Oakland County Homeland Security will conduct outreach after a disaster event to remind members of the importance of mitigation and to solicit mitigation ideas to be included in the plan.
- A public meeting will be held annually to provide the public with a forum for discussing concerns, opinions, and ideas with the Mitigation Advisory Committee (LEPC).

Monitoring, Evaluation, and Updating the Plan

To ensure the Plan continues to provide an appropriate path for risk reduction throughout the County, it is necessary to regularly evaluate and update it. Oakland County Homeland Security will be responsible for monitoring the status of the Plan and gathering appropriate parties to report of the status of Mitigation Actions. The County Mitigation Advisory Committee (LEPC) will convene on an annual basis to determine the progress of the identified mitigation actions. The Mitigation Advisory Committee will also be an active participant in the next plan update. As the Plan matures, new stakeholders will be identified and encouraged to join the existing Mitigation Advisory Committee.

Oakland County Homeland Security is responsible for contacting committee members and organizing the annual meeting. The Committee's responsibilities include:

- Annually reviewing each goal and objective to determine its relevance and appropriateness.
- Monitor and evaluate the mitigation strategies in this Plan to ensure the document reflects current hazard analyses, development trends, code changes and risk analyses and perceptions.
- Ensure the appropriate implementation of annual status reports and regular maintenance of the Plan. The committee will hear progress reports from the parties responsible for the various implementation actions to monitor progress.
- Create future action plans and mitigation strategies. These should be carefully assessed and prioritized using benefit-cost analysis (BCA) methodology that FEMA has developed.
- Ensure the public is invited to comment and be involved in mitigation plan updates.
- Ensure that the County complies with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR.
- Reassess the Plan in light of any major hazard event. The committee will convene within 90 days of any major event to review all applicable data and to consider the risk assessment, plan goals, objectives, and action items given the impact of the hazard event.
- Review the hazard mitigation plan in connection to other plans, projects, developments, and other significant initiatives.
- Coordinate with appropriate municipalities and authorities to incorporate regional initiatives that transcend the boundaries of the County.
- Update the plan every five years and submit for FEMA approval.
- Amend the plan whenever necessary to reflect changes in State or Federal laws and statutes required in 44 CFR.



Five-Year Action Plan

This section outlines the implementation agenda that the Mitigation Advisory Committee should follow five years following adoption of this plan, and then every five years thereafter. The Mitigation Advisory Committee, led by Oakland County Homeland Security, is responsible to ensure the Plan is updated every five years.

The Committee will consider the following an action plan for the first 5-year planning cycle. It should be noted that the schedule below can be modified as necessary and does not include any meetings and/or activities that would be necessary following a disaster event (which would include reconvening the Mitigation Advisory Committee within 90 days of a disaster or emergency to determine what mitigation projects should be prioritized during the community recovery). If an emergency meeting of the Mitigation Advisory Committee occurs, this proposed schedule may be altered to fit any new needs.

Year 0:

- 2017: Update Hazard Mitigation Plan, including a series of Mitigation Advisory Committee meetings & Public meetings. Submit Hazard Mitigation Plan for FEMA approval.
- **January 2018 July 2018:** Work on Mitigation Actions, Oakland County Homeland Security to stay in contact with lead departments/municipalities to keep tabs on project status.

Year 1:

- **June July 2018:** Prepare for and promote first annual Plan Review and Public meetings.
- August 2018: Reconvene Committee for first annual Mitigation Advisory Committee meeting. Introduce the concept of Mitigation Plan Integration with other planning documents. Host first annual Public meeting.
- **September 2018 July 2019:** Work on Mitigation Actions, Oakland County Homeland Security to stay in contact with lead departments/municipalities to keep tabs on project status. Encourage plan integration efforts.

Year 2:

- **June July 2019:** Prepare for and promote second annual Plan Review and Public meetings.
- **August 2019:** Reconvene Committee for second annual Mitigation Advisory Committee meeting. Review plan integration efforts. Host second annual Public meeting.
- **September 2019 July 2020:** Work on Mitigation Actions, Oakland County Homeland Security to stay in contact with lead departments/municipalities to keep tabs on project status. Encourage plan integration efforts.

Year 3:

• June – July 2020: Prepare for and promote third annual Plan Review and Public meetings.



- **August 2020:** Reconvene Committee for third annual Mitigation Advisory Committee meeting. Review plan integration efforts. Host second annual Public meeting.
- **September 2020 July 2021:** Work on Mitigation Actions, Oakland County Homeland Security to stay in contact with lead departments/municipalities to keep tabs on project status. Encourage plan integration efforts.

Year 4:

- **June July 2021:** Prepare for and promote fourth annual Plan Review and Public meetings.
- **August 2021:** Reconvene Committee for fourth annual Mitigation Advisory Committee meeting. Review plan integration efforts. Host fourth annual Public meeting.
- **September 2021 July 2022:** Work on Mitigation Actions, Oakland County Homeland Security to stay in contact with lead departments/municipalities to keep tabs on project status. Encourage plan integration efforts.

Year 5:

- **January December 2022:** Update 2017 Hazard Mitigation Plan, including a series of Mitigation Advisory Committee meetings & Public meetings.
- January 2023: Submit 2023 Hazards Mitigation Plan for FEMA approval. Repeat.

Annual Mitigation Advisory Committee Meetings

During each annual Mitigation Advisory Committee meeting, the Committee will be responsible for a brief evaluation of the 2017 Hazard Mitigation Plan and to review the progress on Mitigation Actions.

Plan Evaluation

To evaluate the plan, the Mitigation Advisory Committee should answer the following questions:

- Are the goals and objectives still relevant?
- Is the risk assessment still appropriate, or has the nature of the hazard and/or vulnerability changed over time?
- Are current resources appropriate for implementing this plan?
- Have lead agencies participated as originally proposed?
- Has the public been adequately involved in the process? Are their comments being heard?
- Have departments/municipalities been integrating mitigation into their planning documents?



If the answer to each of the above questions is "yes," the plan evaluation is complete. If any questions are answered with a "no," the identified gap must be addressed.

Review of Mitigation Actions

Once the plan evaluation is complete, the Committee must review the status of the Mitigation Actions. To do so, the Mitigation Advisory Committee should answer the following questions:

- Have the Mitigation Actions been implemented as planned?
- Have outcomes been adequate?
- What problems have occurred in the implementation process?

Meeting Documentation

Each annual Mitigation Advisory Committee meeting must be documented, including the plan evaluation and review of Mitigation Actions. Mitigation Actions have been formatted to facilitate the annual review process.

Implementation through Existing Programs

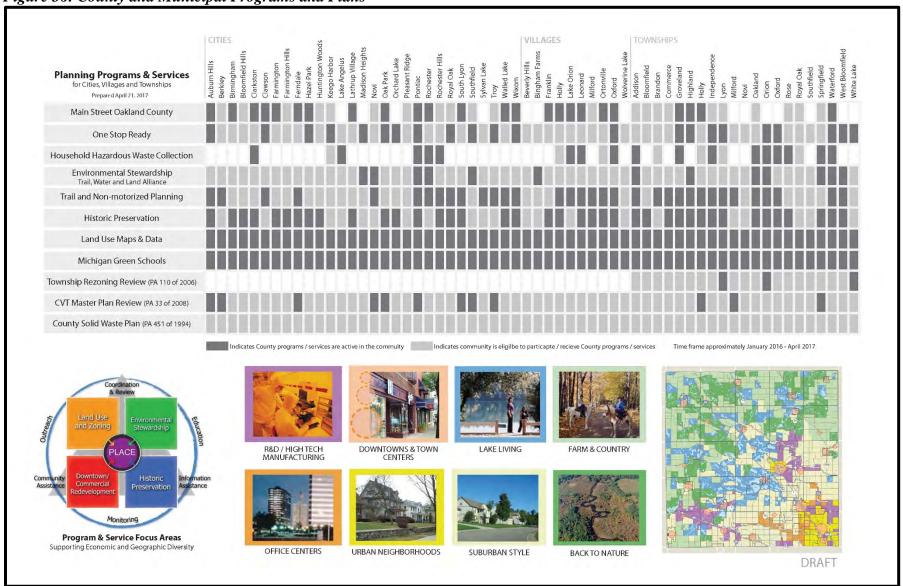
Hazard mitigation practices must be incorporated within existing plans, projects and programs. Therefore, the involvement of all departments, private non-profits, private industry, and appropriate jurisdictions is necessary in order to find mitigation opportunities within existing or planned projects and programs. To execute this, Oakland County Homeland Security will assist and coordinate resources for the mitigation actions and provide strategic outreach to implement mitigation actions that meet the goals and objectives identified in this plan.

Oakland County Planning and Economic Development Services will also incorporate the hazard mitigation plan and its concepts when formally reviewing municipal-level comprehensive plans to ensure goals and strategies are aligned and integrated. Mitigation actions were identified to promote plan integration in future revisions (See Volume II and III).

The following programs have been identified as having mitigation implications:



Figure 36: County and Municipal Programs and Plans





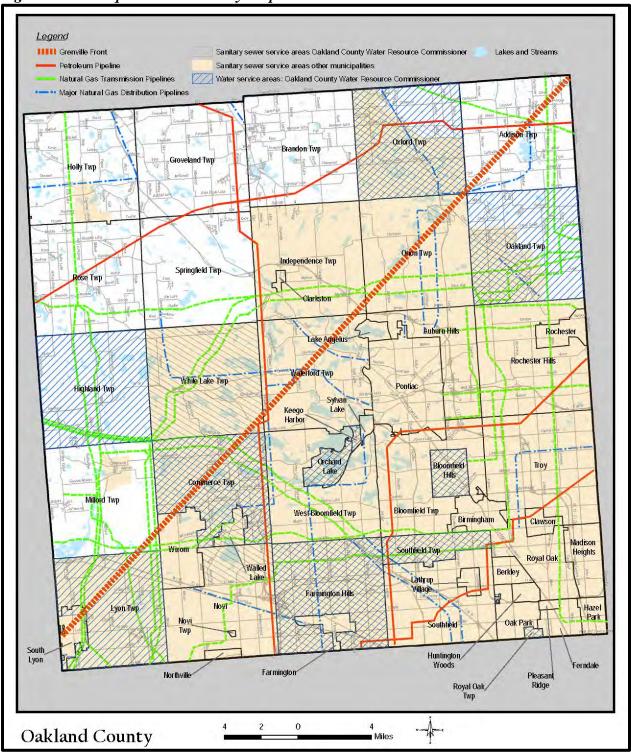
Appendices



Appendix A: Figures (Not included in Public Version - FOUO)

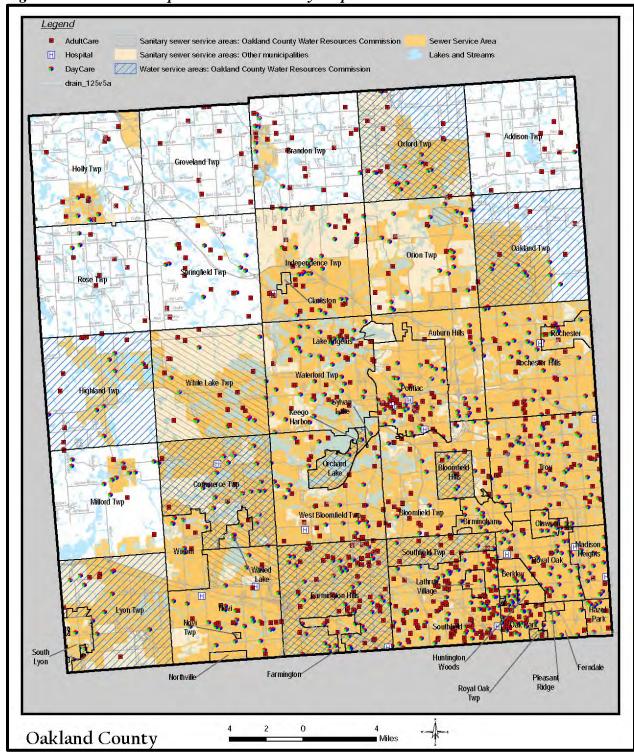


Figure 37: Earthquake Vulnerability Map

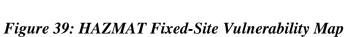












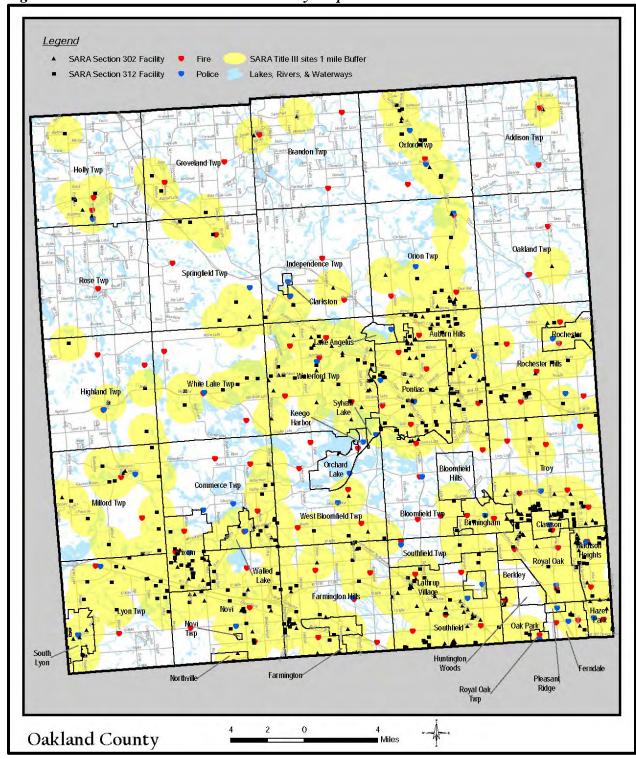
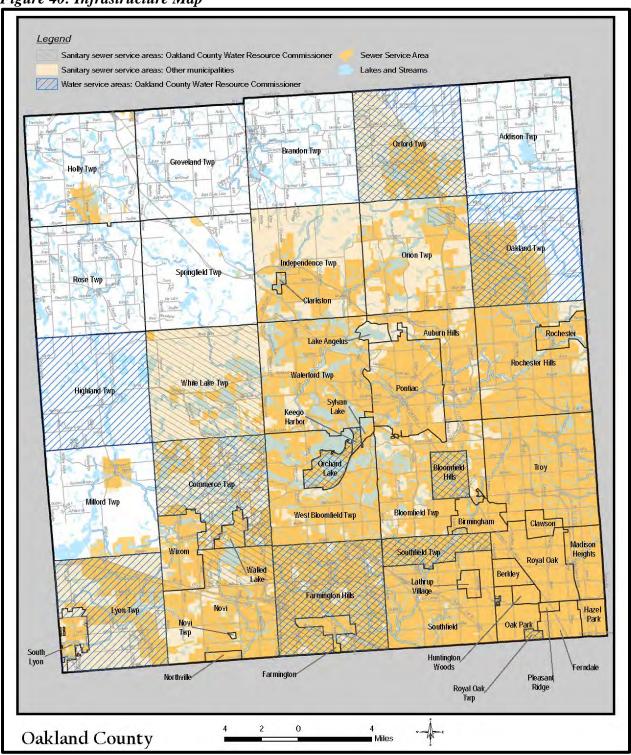
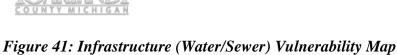


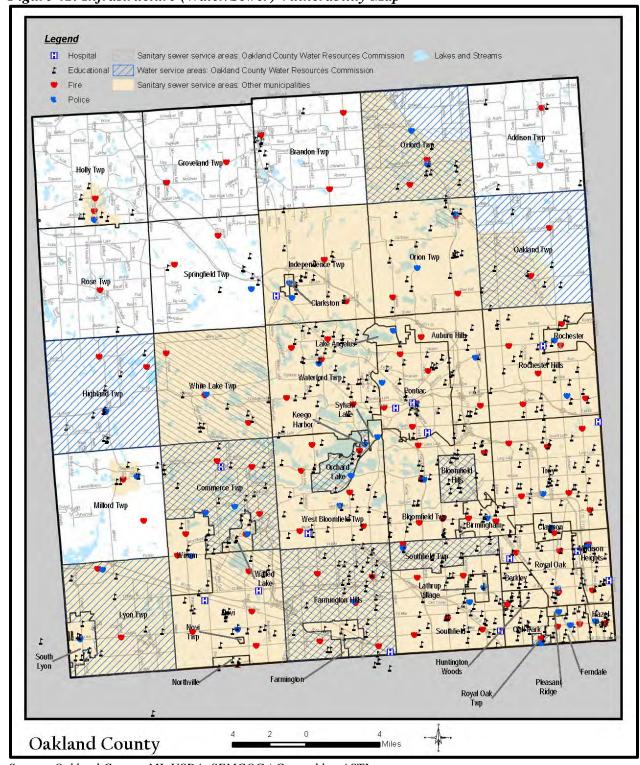


Figure 40: Infrastructure Map











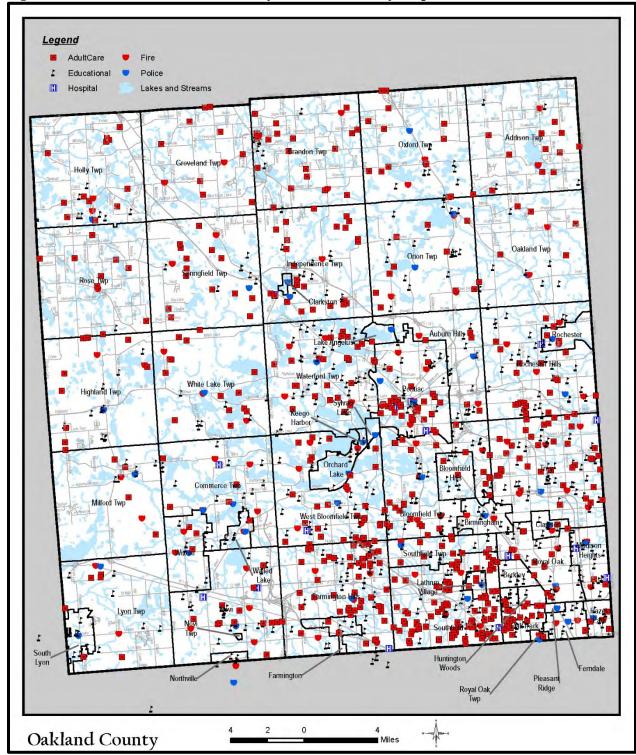


Figure 42: Electrical/Communication System Vulnerability Map





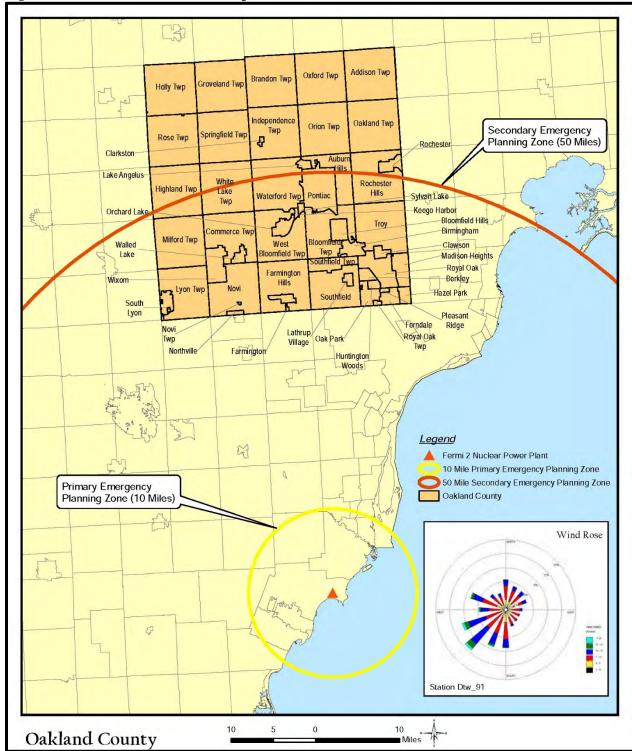




Figure 44: Nuclear Power Plant Accident Vulnerability Map

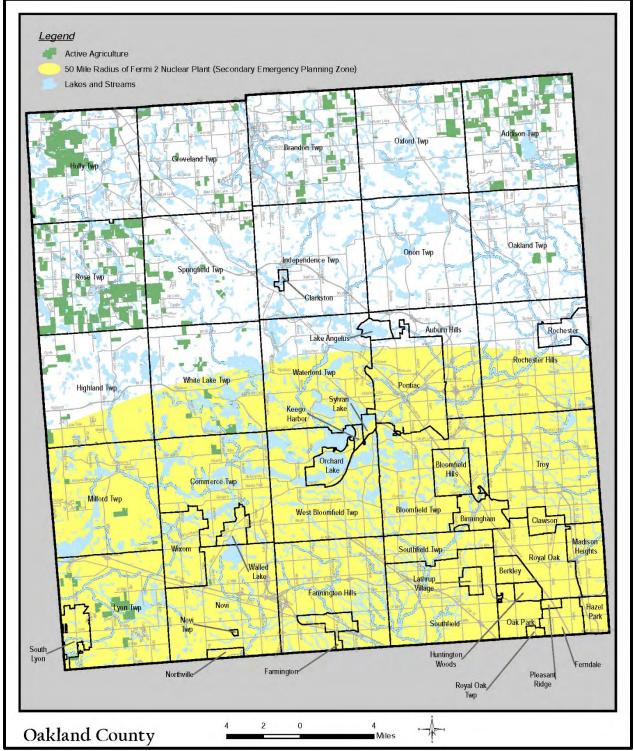
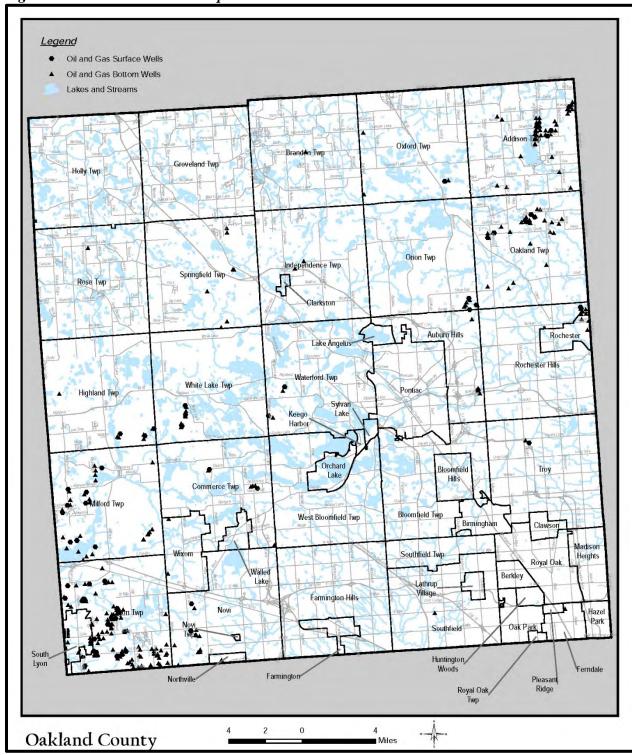
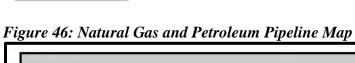




Figure 45: Oil and Gas Well Map







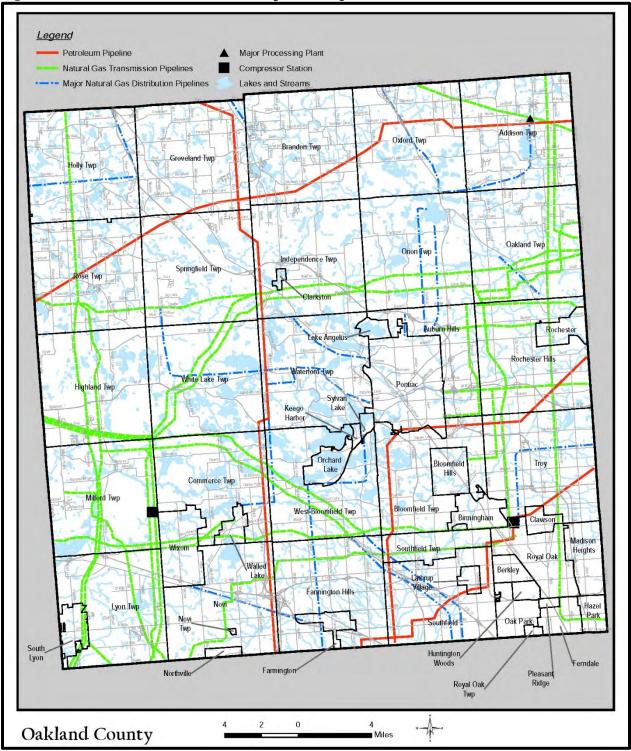




Figure 47: Pipeline and Well Vulnerability Map

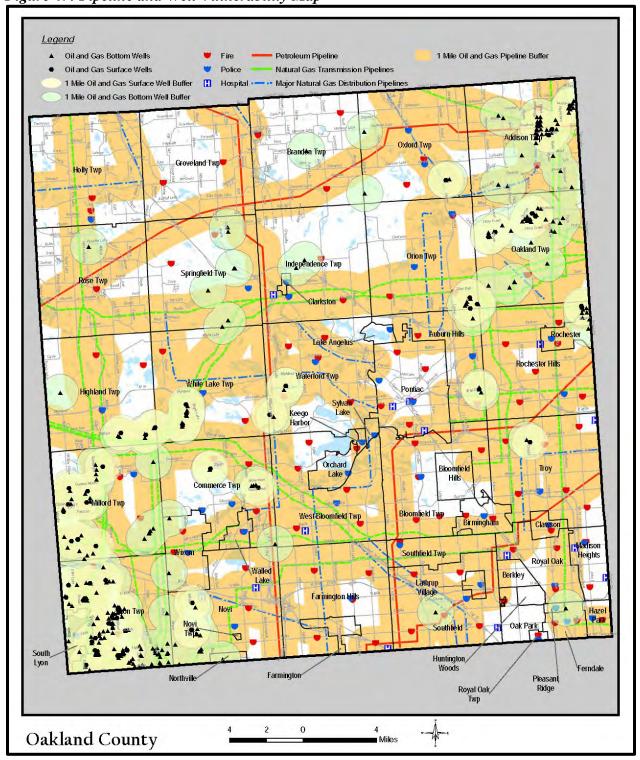
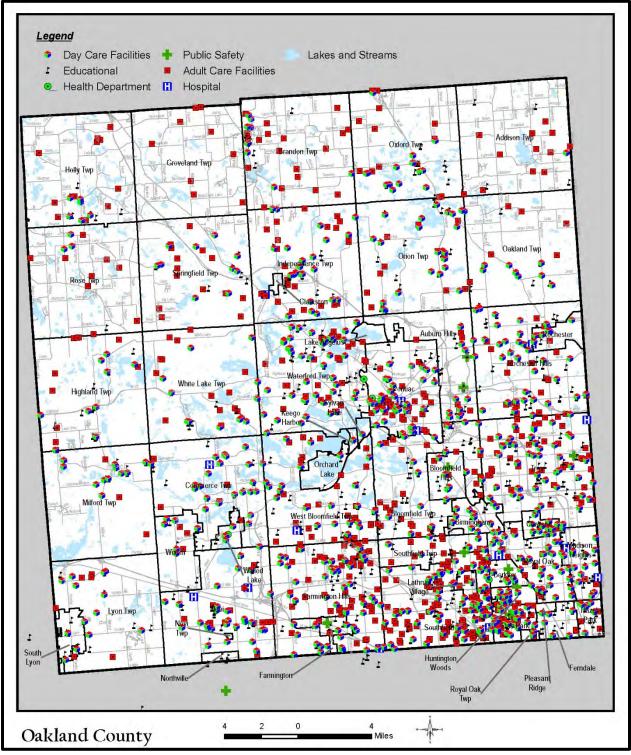




Figure 48: Public Health Emergency Vulnerability Map





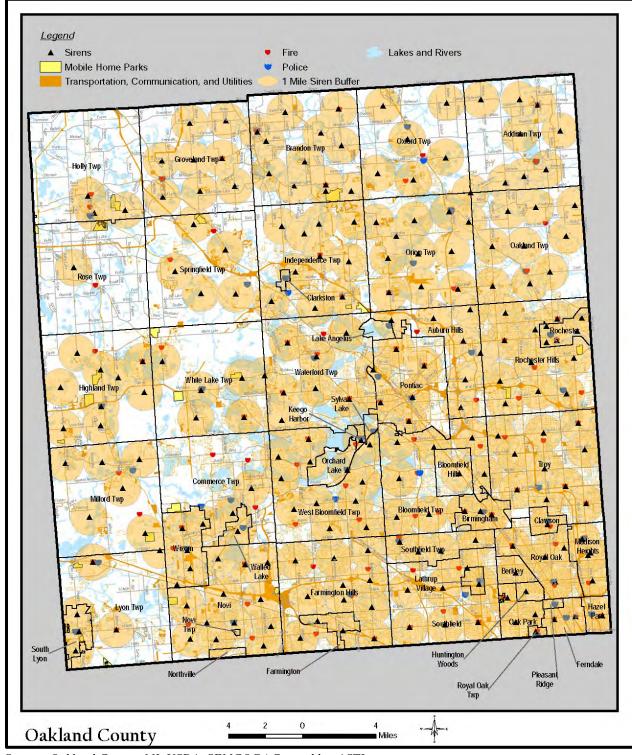
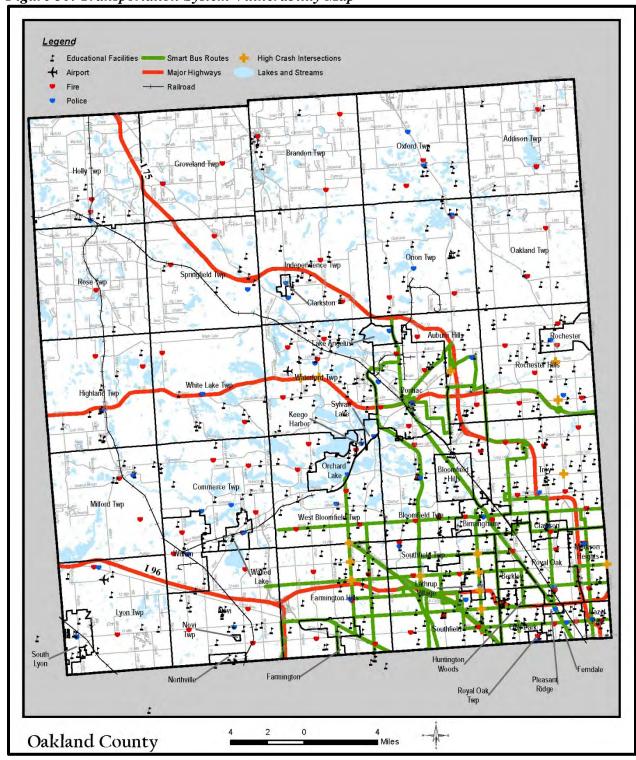


Figure 49: Severe Weather (Thunderstorms, Severe Winds, Tornado) Vulnerability Map

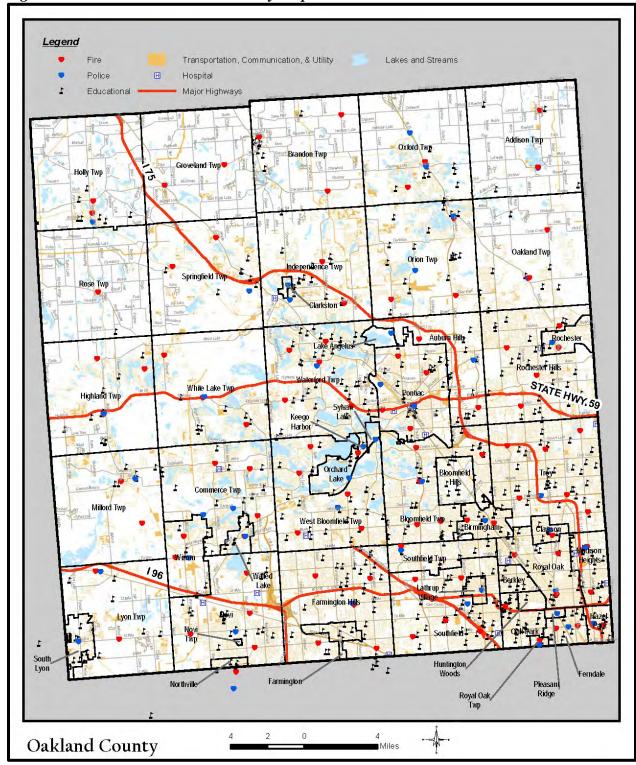














Appendix B: Meetings and Outreach Materials

Steering Committee Meetings

5/5/2017

	- SIGN-IN SHEET: Hazard		
	Hazard Mitigation Plan: Oakland O		
	Hazard Mitigation Plannin	g Meeting - Project Kickoff	
Name	Organization	Phone	E-mail
Jack Blanchard	Berkley Public Safei	248-930-9687	Jblancharde Berkleymic
Mike Crum	Berkley DPS	248) 658-3393	morame Berksey Public Safety, ne
B.N Coke	Rocheter Hills Freded.	(243) 656-4720	Codeborochetohills.org
JOHN BRENMAN	TYT MARINE	586-209-9586	JBRENNAN & NARSHCADEMY, COM
TOM MANGER	Shows FORMS & (FOXE)	248 2002 948	TAVELSIUM & FORM. LAM
Bill Johns	City of Southfield	248-796-5492	w Johns @ Cityof Souf fida
Tim Katvintis	MSP-EMUSD	517 - 202-5597	KetvirtisTemichion.gov
James NewEll	FHEO-	248-331-7716	- neutabathare
MICHAEL BASTIANEZU	Franklin Po	248-626-9672	bastianelli me Village Pd.
Sharon Stahl	Gage Products	248-761-8511	sstahl@gageproducts.co
Connie Sims	WRC	248-858-1441	Simsco Oakgov.com
RonMoore	WixomPD	248 624 6114	RMocre Qwixongov.org
PAIR Tomboulian	Oakland un		tombouli@ oakland.
DO MELEUA	CAKE Angelus ID	248-343-0374	MUELLAN 85Can
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Thom Hardrity	Operas Conser	1	KUZILAMCOPKGOV.

	Oakland	: Project Kickoff Meeting County, MI	
	Hazard Mitigation Plannin Date: 9 Organization	ng Meeting – Project Kickoff 5/5/2017 Phone	E-mail
Name DAVE DOBER	West Bloom fell FD	248 409-1514	DOESOER DWSTONISHI. MG
Sent Michen	/ seffer le VIllage PD	248-663-6031	Police Chief a Cathrey Village
Jim GOETZWGER	GREAT LAKES CROSSING	248-454-5015	JAMES GOETZINGER CAUS.
In willia	HUSH	2489373334	juilling odne cy
AS GOOD MON	LAKE GERCY SCHOOLS	248 521 3178	WROJOSOMEN CCORESTON. K
JOHN B. MARTIN	NOVI FIRE	248-939-0593	inartin pcityotnovi
Glari Marias	OCHSD	248-452-9879	maciosa @ comcast ne
Louis Sulhvan	Ferndale Fire	248-632-2093	KSullvave Ferrbakfire
JOITU CIUSCIT	ROCHESTR FIRM	248 651-4473	JULISLIK PROCHETUR
TONY DRAUTZ	CAKLAND CO HEALTH	248 858 1320	drautato P, oakgov. com
Davo Ale	Isc	208-390-2021	
Don Martin	ZC	847-477-6542	
			4



8/4/2017

- SIGN-IN SHEET: Hazard Mitigation Plan Update -

Hazard Mitigation Plan: Hazard Identification and Risk Analysis $Oakland\ County,\ MI$

Haz	ard Mitigation Planning Meeting - Date: 8	Hazard Identification and Risk An:	alysis
Name	Organization	Phone	E-mail
Thin Hardesh	DCHSD	244-429-9218	Nurdestyt @ oakgas-can
MIKE KUZIA	OCHSD	(248) 858-1598	KUZILAME CAKGOV. COM
James Newed	FHED	148-331-7716	inentidathya com
Stan Barnes	FHFD	248-871-2820	sbarnesofhgovicon
JOHN BRENNAN	THT MARINE INC	586-209-9586	JBRENNANG WHRS ACADEMY. COM
Glori Macias	OCHSD	248 452 9879	maciasg@oakgoo.com
Jack Blanchord	Berkley	248-930-9687	Jblanchard Cherkleymich. Ne
Tedd Strobeha	Boehle Chemicals	248-844-9010	telds @ boehlechem.com
MUHNER KARJUK	WATEL REWS	286-567-4909	Michael e MKKaryoll. Com
PAUL TOMBOULIAN	Oakland Univ	248-651-8740	tombouli@comeast.net
Gara Stockhard	OC Health	248-868-1288	Stoddard so onkgov.com
Jim GOETENGER	GLCO	248-454-5015	JOSETZINGEN COMUNET. NET
DAVE DEBOER	WBFD	248 409 -1514	DOGBOER DEN & Township. org
Mike Crum	Berkley DPS	248) 658-3393	Mcrume Berkley Public Sofety.
Melanie Ben Ezro	646	248-858-1318	Beneziame@oakgov.com
Sharon Stahl	Gage Products	248-761-8511	sstahl@gageproducts.com

- SIGN-IN SHEET: Hazard Mitigation Plan Update -

Name	Organization	Phone	E-mail
OHN AREARON	LEPC	2485051423	SCHEIDK @ CAKERLO
SVIW SCHOLD	OCHSD	248, 858-1724	SCHEIDK @ CAKEOULC
uren Martin	ISC		laven. martin @j - 5- cossu
Parks Abe	Isc	208-390-2021	da. Ko. alco 1-5-coults



11/3/2017

	Hazard Mitigation Plan: Mi	d Mitigation Plan Update - tigation Actions and Strategies County, MI	
	Hazard Mitigatio	n Planning Meeting	
Name	Organization	Phone	E-mail
Duko Abe	Isc	208-390-2021	backs abe @1-5-consulting . Com
MIKZ KUZILA	OCHSD	(348) 888-1598	KUZILA NEGEKGOU CO
DonMyrun	LAKE Angels	248/343.0374	MCLEUAN 85 QCanca
JackBlanchord	Berkley	246 930 - 9687	Iblanchord Oberkaymich.
Marci Wiegers	scH0	248-858-1357	Wiegers MD Cakgo Con
LEE Graham	DE 324	734347 3382	Lee graham B24 Whee ong
TOM DRAWTZ	oct W	248 358 1320	drauteto poakgovic
Sharon Stahl	Gage Products	248-761-8511	SStahl @ gage products. com
PAUL TOMBOULIAN	Oaktand University	248-651-8740	tombouli@oakland.edu
Im Ketvitis	MSP-ENHED	517 202-5597	Katurliste million gos
Dara Stadebard	Heaph	248-854-1288	stoddard sa calgon a
DOHN CIEGUIC	Rocat esta Firs	248 (51-4470	JUSLIK & POCHESTE MI
Peren EGU	ROCHESTER FP	248-651-4470	PEELLE ROOTER MI. O
AVE DEBOON	West Bloomfild	298 409 1514	Drossoca WB Towns AIR.
Emes Newels	FHED	2-18-331-7716	inent of the con
Ju Willen	HUSH	248-937-3334	juillion edur. Des
		1	

The same of the sa	Hazard Mitig	ation Planning Meeting	
Name	Organization	Phone Phone	Inganization E-mail
Connie Sims	Berkley NES	248-858-1441	Simex@oakgou.com
Michael Crum	Berkley Des	248-658-3393	Cryme oupolice. com
leah Kahn	Isc	831-818-3324	leah kah ei srone







12/8/2017

		d Mitigation Plan Update - Plan: Review Meeting	
		County, MI	
	Date:	on Planning Meeting 12/8/2017	
Name	Organization	Phone	E-mail
Jack Blanchard	Berkley	246-930-9667	Sblanchard Oberkleymich Ne.
Tim KeTvirlis	MSP EMMSD	517 202-5697	KETYINTISI & MILLIAM GOV
Thou Hardry	HUSIL	248927-3334	processo OH2-500
BRIAN CRANE	FRANKLIA	2/626-9672	PANEBOVILLAGE PDIORG.
Tony Avensus	FRANKLIN-MINANA	2dr. beb. Grac	MAY CORD SUNCE BYS CAM
Sharon Stahl	Gage Products Ca.	248-761-8511	sstahl@gageproducts.com
Connie Simo	WRC	248-858-1441	sinscoolype, com
Michael Crum	Oakland University	248-721-1706	Crum e Oupolice com
Rean SchHz.	OCRISK	248-830-9375	schiltzel @ oakgovion
James Neuto	EHEO	148-331-7716	incute of the govern
JOHN CIERIK	RFD	248-651-4470	JOIESKIK PROCHESTOMI
MUEVINIA	OCHSD	248 858 1518	Kuzymespreau.
Dako de	750	708-390-2021	
Hour Sillivan	Ferndale Fire	248-632-209	3 KSullivan & Generale Fire re
Sara Stablard	Health Division	1 248-858-1288	stoddards@aakgon
leah katon	150	1 801 818 22211	L a V a s
o o i part	100	1 831-818-3324	leah. Kahnoi-5-cm





Stakeholder Webinars

Table 76: Stakeholder Webinar Participation

Name	Position/Title	Jurisdiction	Webinar Date
Tony Averbuch	Fire Chief	Southfield Township	Aug. 29, 2017
Tom Lindberg	Police Chief	Village of Milford	Aug. 29, 2017
Peter Scholz	Fire Chief	Oxford Township	Aug. 30, 2017
James Neufeld	EMC	City of Farmington Hills	Aug. 30, 2017
Steve King		Birmingham Schools	Aug. 31, 2017
Matthew Hess		Birmingham Schools	Aug. 31, 2017
Sam Barna		Oxford Schools	Aug. 31, 2017
Marshall Johnson	EMC	City of Novi	Sept 5, 2017
Andrew Pazuchowski	EMC	City of Huntington Woods	Sept 5, 2017



Stakeholder/Municipal Workshops



QAKLAND COUNTY EXECUTIVE L. BROOKS PATTERSON

Thomas Hardesty, Manager (248) 858-5300 | hardestyt@oakgov.com

August 22, 2017

Dear Emergency Management Coordinators:

As I had indicated last week we will be holding a series of Mitigation Workshops throughout the County on October 17th, 18th, 23rd and 24th. During these workshops, we will review the hazard risk assessment and ongoing mitigation actions with each community, as well as identify new mitigation actions.

We strongly recommend that each jurisdiction or school district attend one of the workshops. In preparation for the meeting, please review the Mitigation Plan and your jurisdiction's/school district's Ongoing Mitigation Actions and think about new mitigation actions you would like to include in the updated plan. It is beneficial to identify a planning team from your jurisdiction that can help to identify and implement mitigation within your community. Provided below is a list of agencies you might consider:

- · Building Code Enforcement
- City Management/County Administration
- Emergency Management
- Fire Department/District
- Floodplain Administration
- Geographic Information Systems
- Parks and Recreation
- · Planning/Community Development
- Public Works
- · Storm water Management
- Transportation (Roads and Bridges)
- City Council/Board of Commissioners
- Planning Commission
- Planning/Community Development

- Regional/Metropolitan Planning Organization(s)
- City/County Attorney's Office
- Economic Development Agency
- Local Emergency Planning Committee
- Police/Sheriff's Department
- Sanitation Department
- Tax Assessor's Office
- Special Districts and Authorities
- · Airport, Seaport Authorities
- Fire Control District
- · Flood Control District
- School District(s)
- Transit Authority
- Utility Districts

1200 N. Telegraph Road | Building 47W | Pontiac, MI 48341-0410 | Fax (248) 858-5550 | OakGov.com/homelandsecurity



The Workshop schedule is below:

Date	Location	Time
Tuesday, October 17th	Oakland International Airport 6500 Highland Rd. Waterford MI 48327	Local/School Emergency Management Team 2pm to 4 pm Public Meeting 6 pm to 8 pm
Wednesday, October 18th	Independence Twp Fire Station 1 6500 Citation Dr. Clarkston MI 48346	Local/School Emergency Management Team 2 pm to 4 pm
Monday, October 23rd	Farmington Hills Fire Station 5 31455 W. 11 Mile Rd Farmington Hills MI 48336	Local/School Emergency Management Team 2 pm to 4 pm Public Meeting 6 pm to 8 pm
Tuesday, October 24th	Baker's of Milford 2923 S. Milford Rd. Milford MI 48381	Local/School Emergency Management Team 2 pm to 4 pm

Again, please feel free to contact myself or Mike Kuzila at 248-858-5300 if you have any questions. We look forward to seeing you at once of the upcoming workshops. Thank you.

Sincerely,

Thomas G. Hardesty Manager, Homeland Security Division

1200 N. Telegraph Road | Building 47W | Pontiac, MI 48341-0410 | Fax (248) 858-5550 | OakGov.com/homelandsecurity



	ization will attend.		you and others from	
Name *				
First Last				
Jurisdiction/Organization	1 *	_		
Email *				
Phone Number				
### ### ####				
### ### ### Number of Potential Atte	ndees (Including Yo	urself) *		
	ndees (Including You	urself) *		
Number of Potential Atte		urself) * organization will attend. *		
Number of Potential Atte	your jurisdiction/o			



10/17/2017

- SIGN-IN SHEET: Hazard Mitigation Plan Update -

Hazard Mitigation Plan: Workshops Oakland County, MI

	Hazard Mitigation Plann Date: 10	ing Meeting – Workshops //17/2017	
Name	Organization	Phone	E-mail
Steve King	Birmingham P/S	248-203-3983	SKOBBREDDIFMINgham. 12-Mi.
Jerry Monnyski	Addison Tup Fire	248 6285600	SMORAWSK, AFFD EGMAIL. Cay
BRUCE PEARSON	Addison Tup Supraso	1248 628 5409	bferson @ Addison Trup. org
Victor Cardenas	City of Novi	11 347-0450	Vcardenas@citgofkyi.org
JOHN B. MARTIN	CIP OF WOU	248-939-0593	inactinacity of novi. og
MARSHAITJOHNSON		248 347-0558	Madhasan@ CITYOTHEN . ORG
Ted Stinson	W.B. Schools	248 520-1680	theoline. Strason Owbsd. org
BILL CHATTERD	WALLED LAKE STEWN	248-956-3060	Williamshattielde Werd.org
Greg Lelito	MADISON HEIGHTS	248-588-3605	greglelitue madison - heights 15
Alan Weber	Nov.	242-562-3080	anere-OCity of voi. + of
Bill Cooke	Rochester Hills FD	243-656-4717	Cookeborochesterhills, or
Mila Drigo	Novi Commint Schools	248-255-1210	michael-dragoo @ Novi KIK - org
Ine RAONA	Lamphere Schools	248-589-1990	Raonal@Lamphereschools.on
May Covey	Waterford Regson	248-618-6607	MCOVCY ON WATER FUNDS, go)
SOHO CIESLIK	ROCHESTER FIRE	248-651-4773	JEIFSLIK PROCHESTAMI, DEC
Jerrod Hert	City of Novi Police	248-735-5209	shart O esty of MM. org

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Continues p



- SIGN-IN SHEET: Hazard Mitigation Plan: Workshops Outland County, MI Plazard Mitigation Planing Meeting - Workshops Due 10/1999 Phone P









10/18/2017 Workshop

		gation Plan: Workshops Eland County, MI	
The state of the state of		Planning Meeting – Workshops Date: 10/18/2017	
n 1 +	Organization	Phone Phone	E-mail
LARRY WESTLEY	Brandon Townsh		Druguestog Davondok. Kl
Adain Macian	Auborn Hills		amacias @auhurnhills are
HARRY ANDERSON	CLAWSON PD	248-655-4450	hander son Quity of chuson com
Teremy Linz	Holly Twp. /Rose Tu	NP. 248-459-8316	Slintz@noctu.com
Jon Karth	Berkley Schor.		farth & serbleyscloss, org
Mark Brown	Independence Tup	248. 519. 4422	inbrova a independence fire as
Noel Clason	Bloom (el + H.	1/15 248701-0777	nela rono Confieldhill police
Sam Barns	Oxfors Comm School	ds 248 969 5008	san barnal extensibility
leah Wahn	Sc	831-818-3324	Gah. Kahn ei-s-consultin
Dails alle	ISC	208-390-2021	darko aber i-s-consulty com
MIKEKUZILA	OCUSD	248 858 1598	Kuziano orkanco
hon Hurdesa	OC ASA	244 452 9576	mes capto Ostporal









10/23/2017 Workshop

	- SIGN-IN SHEET: Haza	rd Mitigation Plan Update -	
		tion Plan: Workshops ad County, MI	
	Hazard Mitigation Pla	nning Meeting – Workshops : 10/23/2017	
Name	Organization	Phone	E-mail
James Nettel	FHED	248-334-7716	mentallo Chaquion
Mike Crum	Berklay	248-658-3393	Miramo Berkley Public Sofety net
Matt Koehn	Berkiey	248-653-3389	mkoem@buklerphlic Salety, wit
BRIAN CRANE	FRANKI-CPD	2-626-9672	BEANUED FEFT. COL
DAN ROBERIS	FRANKLIN PD	II II	DRoberts@ Franklin.mi.k
HAROLD ROSSMUN	Lake onon	248-693-8321	rossmanhalakeonion police org
Regnald Maleline	Farmington DP.		Madeline & tamgor con-
	Oakland Univ. Police		Kileye apolice com
Kenneth Kiley	- 1	248-474- 470>	tweethrane formyou can
Ted Warthman	Farmington	248/473-7250	
Chuck Eudy	Farminsten	248 336 4201	m Kolinskio ferndalemi gov
Mick Kolinski	terndale		+ - 1
Frat Deness	tamington	248-474-5500 X: 2736	TAMANA CFID. COM
Thy Welcous	FRANCE	SNA OCO WOO	
Karen Mondom	Famington Hills	248 871-2330	
	1 11 11 11 11	e 248-604-2088	3 Dopnzalez @welledlake-
Jacon Galzatez			ballactekactupf
Brandy Sied Kitch	Southfield	248-796-4806	bsiedlactelactupf Southfield.com
) rang sien mitter	Or distinct		

	Hazard Mitigation Plann	ing Meeting - Workshops	
Name	Organization Date: 10)/23/2017 Phone	E-mail
Jon Manier	FARMINGBN PS		prathon, marine & farmingto
Georg Mellyian	Farm Hills como	248 871-2500	Smellylan fragus
Steve Brown	Wixon	248-624-0894	
BRIAN BATTEN	FERNOSIE FIRE	2486322094	BRATTEN & FEELDANSFI DE RESCUE M
Keyn P. Sullivan	Ferndale City/Fire		KSullware Ferndale Grenza
Daiks Abe	Isc d	208-390-2021	daiko. abe pi-s-consulto
loals Wahen	150.	831-818-3324	lesh. Kalnei-S-cons
MIKOKULIL	NCHSO	248 858 1598	KUZILAME SAKGOV. CE
Thom Hardest	OCH20	248 429. 82H	Longesty Osalgos as
John Marian			9







10/24/2017 Workshop

		- SIGN-IN SHEET: Hazard Mitigation Oakland C		
		Hazard Mitigation Planni Date: 10/	ng Meeting – Workshops 24/2017	
	Name	Organization	Phone	E-mail
	Kevin Knowss	Milford Police	248 684 1815	Kknaussamulfompolice.com
	South Michae	/ Hohman Villare	248-463-6032	Police chiefolathey videofice
	Muhar Carlson	NorThulk	248449992	MEDRISONECI, WORKVILLE - 3
	Tam Lindberg	MilFord	248, 984-1812	Hindhary & Milford policy
	DON GREEN	MILFORD TWP	2486858731	supervisor@milfordtownship car
	CARIS SOVIK	SOUTH LYON	248-437-4193	sovikce southly on palice com
	Lloyd Collins	South Lyon	2484371777	chiefesonkly on police com
	John Ellsungth	Wolverine Lake	248-926-6060	JEISWERTH O WOLVERIND LAKE COM
	Bill Johns	Southfield	248-796-5992	Wildhose it you South is ld . con
	Paul Feichtner	Sprinfield Tup	2486256699	firechatesported up. 43
	1	5	248 5403410	hahak Obererly hills police.com
1		Dusty HUS	248 540 3416	ctruss for C boundy hills police con
	had Irossler	Beverly Hills		
Lz	THE MUCE	mucian tras.	248-00-3655	mercan amunican con com
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10			248866 1626	bakaanades-us
TVU		SOUTH LYON SULTOOUS		land shepiche
Pa	IL SHEPALH C	larenceville school Dis	WA 242919-025	50 clarence ileschook. 019
1140	il olleracti	applied action of the	9 - 10	

	II Mitigation Plannis	ng Meeting - Workshops	
	Hazard Mitigation Planni Date: 10/ Organization	24/2017 Phone	E-mail
Name Joe Georga Peter Scholz Leah Kaha Dako Ave	Organization Orchard Lik Patiece Oxford Fire Dept ISCE ISC	218-682-2100 218-969 9483 831-88-3024 208-30-224	Police have city of orchard to the process of the p









Public Meetings



OAKLAND COUNTY EXECUTIVE L. BROOKS PATTERSON

Bill Mullan, Media & Communications Officer Office: (248) 858-1048 | Cell: (248) 202-9688 | mullanw@oakgov.com

NEWS RELEASE

Oakland County seeks public input for disaster plan

Oct. 3, 2017, Pontiac, Mich. – Oakland County residents and businesses can help the county update its emergency preparedness plan by attending a voluntary public meeting, County Executive L. Brooks Patterson announced today.

There will be two informational and planning sessions open to members of the public who wish to inform the county about their emergency preparedness needs in the event of a natural or manmade disaster:

- Tuesday, Oct. 17 from 6-8 p.m. at Oakland County International Airport Main Terminal, J. David VanderVeen Conference Center, 6500 Patterson Parkway, Waterford
- Monday, Oct. 23 from 6-8 p.m. at Farmington Hills Fire Station No. 5, 21455 W. 11 Mile Road, Farmington Hills

"With the public's involvement, we will work together to identify ways to improve our emergency preparedness," Patterson said. "That is why we encourage residents and business owners to attend."

Oakland County updates its hazard mitigation plans every five years to keep residents, businesses, and organizations well prepared and vigilant in compliance with federal requirements.

"Emergency preparedness planning helps to identify policies and actions that can be implemented over the long term to reduce risk and mitigate future losses," said Thomas Hardesty, manager of Oakland County Homeland Security Division.

About Oakland County Homeland Security Division

The Oakland County Homeland Security Division is dedicated to supporting Oakland County cities, villages, and townships through a coordination of effort for logistical support during emergency operations by enhancing all-hazard preparedness along with comprehensive homeland security initiatives and first responder training. It develops and coordinates programs for natural, technological, national security, and nuclear/chemical/biological emergencies/disasters affecting Oakland County. For more information, go to OakGov.com/HomelandSecurity.

For media inquiries only, please contact Bill Mullan, Oakland County media and communications officer, at 248-858-1048.

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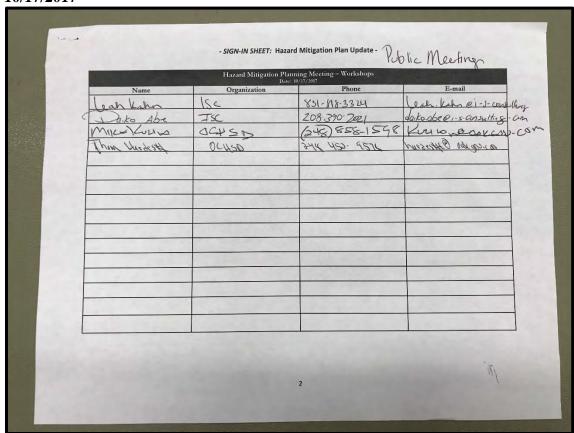
2100 Pontiac Lake Road | County Executive Building 41W | Waterford, MI 48328 | Fax (248) 858-5111 | OakGov.com



PUBLIC MEETING TO PROVIDE INPUT INTO OAKLAND COUNTY'S DISASTER & EMERGENCY PLANS

OAKLAND COUNTY will be hosting two public information and planning sessions to gather input from Oakland County residents regarding the All-Hazard Mitigation Plan, which is undergoing a mandatory 5-year update. The plan addresses the County's key hazards and ways to mitigate their risks. The public is invited to attend either meeting. The first public meeting will be held Tuesday, October 17th at the Oakland International Airport (6500 Highland Rd., Waterford MI 48327) from 6 p.m. to 8 p.m. The second meeting will be held Monday, October 23rd at the Farmington Hills Fire Station 5 (31455 W. 11 Mile Rd., Farmington Hills, MI 48336) from 6 p.m. to 8 p.m.

10/17/2017





10/23/2017

	- SIGN-IN SHEET: Hazard	d Mitigation Plan Update -	
	Hazard Mitigation Plannin	ng Meeting – Public Meeting 0/23/2017	
Name	Organization	Phone	E-mail
TIMOTHY TUTAL	PH RPC/CERT	248-417-0970	jurine medical mit food com
Jack Iswin	Mediladge of Milford	734-417-4379	
Oak Kahn	Sc'	831-814-3324	lab Kahn ai-s-consiling a
Then Hadest	00450	248 8581598	Kuzicane abreaucon
mike Kuzica	TSC TSC	208-390-2021	danko, abeco 1-s. consulty
Darko Abe	+30	208 210 2021	Carro, 100 10 1-3 100 34173 12
		3	





OAKLAND COUNTY EXECUTIVE L. BROOKS PATTERSON

Bill Mullan, Media & Communications Officer
Office: (248) 858-1048 | Cell: (248) 202-9668 | mullanw@oakgov.com

NEWS RELEASE

Public invited to review and comment on County's disaster plan

January 12, 2018, Pontiac, Mich. – Oakland County residents and businesses are invited to review and comment on the County's Hazard Mitigation Plan. The plan can be accessed at OakGov.com/HomelandSecurity.

Comments and questions about the plan can be sent to Oakland County Homeland Security Division by e-mail oakhsd@oakgov.com or phone 248-858-5300. The comment period will close January 25, 2018.

Oakland County adheres to federal requirements to update its emergency preparedness plans every five years in an effort to keep residents, businesses, and organizations well prepared and vigilant. The purpose of emergency preparedness planning is to identify policies and actions that can be implemented over the long term to reduce risk and future losses. This planning effort represents the dedicated participation of the County and all municipalities within Oakland County.

About Oakland County Homeland Security Division

Oakland County Homeland Security Division is dedicated to supporting Oakland County cities, villages, and townships through a coordination of effort for logistical support during emergency operations by enhancing all-hazard preparedness along with comprehensive homeland security initiatives and first responder training. Oakland County Homeland Security Division develops and coordinates programs for natural, technological, national security, and nuclear/chemical/biological emergencies/disasters affecting Oakland County. For more information, go to OakGov.com/HomelandSecurity.

For media inquiries only, please contact Bill Mullan, Oakland County media and communications officer, at 248-858-1048.

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Appendix C: Workshop Materials



Hazard Mitigation Plan Update 2017

Oakland County, Michigan

Workshop Agenda

Meeting Date: 10/23-24/2017

Introductions
Mitigation Overview
Questionnaire Findings
Risk Summary/Risk Assessment Findings
Jurisdiction/District Hazard Summary Worksheet
Review Ongoing Mitigation Actions/Projects
Identify New Mitigation Actions
Oakland County Knowledge Management System



Jurisdiction-Specific Hazard Concerns Oakland County, MI Hazards

	Oakland County, WI Hazards
Name:	; E-mail:;
	Jurisdiction/District:
	Natural Hazards
Hazards	Please describe any specific and/or unique concerns/risks that this hazard poses to your jurisdiction and/or school district. Include any vulnerable properties that are at risk of repetitive damages from this hazard, as applicable.
Drought	
Earthquake	
Extreme Cold	
Extreme Heat	
Fog	
Hailstorm	
High Winds	
Ice/Sleet Storms	
Flood (Riverine)	
Flood (Shoreline Flooding and Erosion)	

Page 1 of 4



	Jurisdiction-Specific Hazard Concerns
Flood (Urban/Flash Flooding)	
Subsidence	
Thunderstorm and Lightning	
Tornado	
Wildfire	
Winter storm/Blizzard	
Hazards	Technological/Manmade Hazards Please describe any specific and/or unique concerns/risks that this hazard poses to your jurisdiction and/or school district. Include any vulnerable properties that are at risk of repetitive
	jurisdiction and/or school district. Include any vulnerable properties that are at risk of repetitive damages from this hazard, as applicable.
Criminal Acts: Arson	
Criminal Acts: Mass Shootings/Active Assailant	
Criminal Acts: Vandalism	
Dam Failure	
Gas/Oil Shortages or Supply Disruption	
Hazardous Materials Incidents: Fixed Site	



	Jurisdiction-Specific Hazard Concerns
Hazardous Materials Incidents: Transportation Incident	
Infrastructure Failure: Communication System Failure Incident	
Infrastructure Failure: Electrical System Failure Incident	
Infrastructure Failure: Sewer System Failure Incident	
Infrastructure Failure: Storm Water System Failure Incident	
Infrastructure Failure: Transportation (Bridges, Roads, Overpasses) Infrastructure System Failure Incident	
Infrastructure Failure: Water System Failure Incident	
Invasive Species	
Nuclear Power Plant Accidents	
Oil and Gas Well Accidents	
Petroleum and Natural Gas Pipeline Accidents	
Scrap Tire Fire	
	Page 3 of 4



	Jurisdiction-Specific Hazard Concerns	
Structural Fire		
Transportation Accidents: Air		_
Transportation Accidents: Highway		_
Transportation Accidents: Marine		
Transportation Accidents: Rail		
Civil Disturbances		
Structural Fire		_
Terrorism and Sabotage		
Weapons of Mass Destruction		_
Pandemic/Epidemic		_
		_
	Page 4 of 4	



	New Mitigation Act	ions (Oaklan	d County)			
Name:						
Organization/Department:						
E-mail:						
Phone:						
New Mitigation Action (Please Describ	oe):					
Year Initiated	2017 (New Mit	igation Ac	tion)			
Applicable Jurisdiction or School District						
Lead Agency/Organization						
Supporting Agencies/Organizations						
Potential Funding Source						
Estimated Cost						
Benefits (loss avoided)						
Projected Completion Date						
PRIORITY (High, Medium, Low)						
Please indicate if the mitigation goals	are applicable to	the new m	iligation a	ction/proje	ect). One	CK AII
Protection of public health and safety Improve and support public and priva Prevention and reduction of damage Protect critical assets (example: hosp Increase awareness and preparedness Encourage personal responsibility.	te organizational re to public and privat vitals, nursing home	esponse ca e property es, schools)	pabilities. and infrasti	ructure.		zards.
Protection of public health and safety Improve and support public and priva Prevention and reduction of damage Protect critical assets (example: hosp Increase awareness and preparedness Encourage personal responsibility. This mitigation action:	te organizational re to public and privat vitals, nursing home	esponse ca e property es, schools)	pabilities. and infrasti	ructure. ment, etc. a	about ha	
Protection of public health and safety Improve and support public and priva Prevention and reduction of damage Protect critical assets (example: hosp Increase awareness and preparedness Encourage personal responsibility. This mitigation action:	te organizational re to public and privat vitals, nursing home	esponse ca e property es, schools) ss, non-pro	pabilities. and infrasti	nucture. ment, etc. a Neither Agree or	about ha	Strong
Protection of public health and safety Improve and support public and priva Prevention and reduction of damage Protect critical assets (example: hosp Increase awareness and preparedness Encourage personal responsibility. This mitigation action: Instructions: Circle the best option	te organizational re to public and privat vitals, nursing home	esponse ca de property des, schools) ss, non-pro	pabilities. and infrastr fit, governr Disagree	ructure. ment, etc. a	about ha	Strong Agree
Protection of public health and safety Improve and support public and priva Prevention and reduction of damage Protect critical assets (example: hosp Increase awareness and preparedness Encourage personal responsibility. This mitigation action: Instructions: Circle the best option	te organizational re to public and privat vitals, nursing home	strongly Disagree (1) 1	pabilities. and infrastr fit, governr Disagree (2) 2	Neither Agree or Disagree (3) 3	Agree (4) 4	Strong Agree (5)
Protection of public health and safety Improve and support public and priva Prevention and reduction of damage Protect critical assets (example: hosp Increase awareness and preparedness Encourage personal responsibility. This mitigation action: Instructions: Circle the best option	te organizational re to public and privat itals, nursing home ss of public, busine	esponse ca e property es, schools) ss, non-pro	pabilities. and infrastr fit, governr Disagree	Neither Agree or Disagree	Agree	Strong Agree
☐ Protection of public health and safety ☐ Improve and support public and priva ☐ Prevention and reduction of damage ☐ Protect critical assets (example: hosp ☐ Increase awareness and preparednes ☐ Encourage personal responsibility. This mitigation action: Instructions: Circle the best option ☐ Is technically feasible ☐ Is cost effective ☐ Can be easily accomplished, funded, me	te organizational re to public and privat itals, nursing home ss of public, busine	strongly Disagree (1) 1	pabilities. and infrastr fit, governr Disagree (2) 2	Neither Agree or Disagree (3) 3	Agree (4) 4	Strong Agree (5)
☐ Protection of public health and safety ☐ Improve and support public and priva ☐ Prevention and reduction of damage ☐ ☐ Protect critical assets (example: hosp Increase awareness and preparednes ☐ Encourage personal responsibility. This mitigation action: Instructions: Circle the best option ☐ Is technically feasible ☐ Is cost effective ☐ Can be easily accomplished, funded, me sustained	te organizational re to public and privat bitals, nursing home ss of public, busine busine	Strongly Disagree (1) 1	Disagree (2) 2 2	Neither Agree or Disagree (3)	Agree (4) 4 4	Strong Agree (5) 5 5
Is cost effective Can be easily accomplished, funded, me	te organizational re to public and privat bitals, nursing home ss of public, busine busine	strongly Disagree (1) 1	pabilities. and infrastr fit, governr Disagree (2) 2 2	Neither Agree or Disagree (3) 3 3	Agree (4) 4 4	Strong Agree (5) 5

Page 1 of 2



Handout: New Mitigation Actions (Oakland County)

Place an "X" by the hazard(s) this action/project will mitigate:

	Place an "X" by the hazard(s) this action/project will mitigate:
	Mitigated Hazards
	Natural Hazards Drought
	Earthquake
-	Extreme Cold
-	Extreme Heat
-	R MORRIPOLENIA R MARKOTT
-	Fog Hailstorm
-	High Winds
-	Ice/Sleet Storms
	Flood (Riverine)
	Flood (Shoreline Flooding and Erosion)
-	Flood (Urban/Flash Flooding)
-	Subsidence
-	Thunderstorm and Lightning
-	Tornado Tornado
-	Wildfire
-	Winter storm/Blizzard
	Technological Hazards
	Criminal Acts: Arson
	Criminal Acts: Mass Shootings/Active Assailant
	Criminal Acts: Vandalism
	Dam Failure
—	Gas/Oil Shortages or Supply Disruption
	Hazardous Materials Incidents: Fixed Site
—	Hazardous Materials Incidents: Transportation Incident
	Infrastructure Failure: Communication System Failure Incident
	Infrastructure Failure: Electrical System Failure Incident
	Infrastructure Failure: Sewer System Failure Incident
	Infrastructure Failure: Storm Water System Failure Incident
	Infrastructure Failure: Transportation (Bridges, Roads, Overpasses) Infrastructure System Failure Incident
	Infrastructure Failure: Water System Failure Incident
	Invasive Species
	Nuclear Power Plant Accidents
	Oil and Gas Well Accidents
	Petroleum and Natural Gas Pipeline Accidents
	Scrap Tire Fire
	Structural Fire
	Transportation Accidents: Air
	Transportation Accidents: Highway
	Transportation Accidents: Marine
	Transportation Accidents: Rail
	Civil Disturbances
	Structural Fire
	Terrorism and Sabotage
	Weapons of Mass Destruction
	Pandemic/Epidemic

Page 2 of 2



Appendix D: Questionnaire



OAKLAND COUNTY HAZARD MITIGATION QUESTIONNAIRE



2017

To Whom It May Concern:

Oakland County is conducting a study to better understand the preparedness needs and risk perceptions of its residents as part of the County's Hazard Mitigation Plan update process. To do so, a questionnaire has been distributed throughout the county, and you have been selected to participate. Your feedback is greatly needed and appreciated!

The questionnaire should only take about <u>10</u> minutes to complete. All responses will be kept confidential, and your participation is strictly voluntary. Your input will enable the County to better serve you.

Thank you for your participation.

If you have any questions, please contact: Oakland County Homeland Security Division (248.858.5300)

DEFINITIONS

Hazard Mitigation: The purpose of hazard mitigation planning is to identify policies and actions that can be implemented over the long term to reduce risk and future losses. Mitigation forms the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage.

□ Yes, I live in Oakland County □ Yes, I live and work in Oaklar □ Yes, I live in Oakland County □ Yes, I work in Oakland Count	nd County , but work in another county	lect the best answer that applies to your current situation. No, I do not live or work in Oakland County Not Applicable Do Not Know Other:		
Approximately how many v	ears have you lived in Oakland	l County, Michigan (IF APPI	LICABLE)?	
□ 0 - 2 years □ 3 - 5 years	□ 6 - 10 years □ 11 - 20 years	☐ 21 or more years ☐ Not Applicable	□ Do not know	
Approximately how many y	ears have you <u>worked</u> in Oakla	and County, Michigan (IF AF	PLICABLE)?	
□ 0 - 2 years □ 3 - 5 years	□ 6 - 10 years □ 11 - 20 years	□ 21 or more years□ Not Applicable	□ Do not know	
Please indicate which comm	City of Ferndale Village of Franklin Groveland Township City of Hazel Park Highland Township Village of Holly City of Huntington Woods Independence Township City of Huntington Woods Independence Township City of Keego Harbor City of Lake Angelus Village of Lake Orion City of Lathrup Village Village of Leonard Lyon Township City of Madison Heights	live in (IF APPLICABLE). Milford Township Village of Milford City of Northville Novi Township City of Oak Park Oakland Township City of Orchard Lake Orion Township Village of Ortonville Oxford Township Village of Oxford City of Pleasant Ridge City of Pontiac City of Rochester Hills City of Rochester	□ Rose Township □ City of Royal Oak □ Royal Oak Township □ City of South Lyon □ City of Southfield □ Southfield Township □ Springfield Township □ City of Sylvan Lake □ City of Troy □ City of Walled Lake □ Waterford Township □ West Bloomfield Township □ White Lake Township □ City of Wiscom □ Village of Wolverine Lake □ Other:	
Please indicate which comm ☐ Addison Township ☐ City of Auburn Hills ☐ City of Berkley ☐ Village of Beverly Hills ☐ Village of Bingham Farms	unity in Oakland County you City of Ferndale Village of Franklin Groveland Township City of Hazel Park Highland Township	work in (IF APPLICABLE). Milford Township Village of Milford City of Northville Novi Township City of Novi	☐ Rose Township ☐ City of Royal Oak ☐ Royal Oak Township ☐ City of South Lyon ☐ City of Southfield	



Please indicate how Oaklan provide preparedness mater	d County can better ass rials in my language).	ist you in	preparir	ng for emergenci	es and disa	sters (exam _l	ple:
I can easily obtain emergency i		0	О	0	О	О	0
During times of emergency, info	disasters.	0	0	0	0	0	0
pre I am familiar with Oakland Cou easily obtain information a		0	0	0	0	0	0
Oakland County is providing th	e services necessary to	Agree O	Agree O	nor Disagree	Disagree O	Disagree O	Knov
Jana jou agree or disagree		Strongly		Neither Agree	(0.655)	Strongly	Do No
Please indicate where you go Municipal government web sites County government web sites State government web sites Federal government web sites (e Web search (example: bing.com Social media (example: facebool Voluntary organizations (example. Army, etc.) Religious Organization Local English-speaking television	xample: www.fema.gov) , google.com) k, twitter, google+, etc.) le: American Red Cross, Sal on	vation	Local Eng Local Spa National Print Med Brochure Word of	glish-speaking radianish-speaking radi News (Radio and T lia - English (exam s and Newsletters Mouth (example: frease specify):	o o 'elevision) ple: newspap iends, family	ers) , co-workers)	
☐ Flood insurance ☐ 72 hour kit/Disaster supply kit ☐ Visited local government web si		lness inforr]	A weather radio Signed up for Oa Other (please spe	kAlert		
Please indicate those activitie I have		are for en	C	es and disasters. An evacuation pl		ct ALL that	apply.
☐ Computer/laptop at none ☐ Computer/laptop at work/office ☐ iPad/tablet ☐ Cell phone		to the Inter	rnet				
Please indicate what type of o	levice(s) you use to acces	ss the inte	rnet. Sel	ect <u>ALL</u> that ap	ply.		
☐ City of Farmington Hills☐ City of Farmington☐ City of Fenton☐	☐ Village of Leonard☐ Lyon Township☐ City of Madison Height		City of F	ontiac Lochester Hills	□ City □ Villa	of Wixom age of Wolveri	ne Lake
☐ City of Clarkston☐ City of Clawson☐ Commerce Township	☐ City of Keego Harbor ☐ City of Lake Angelus ☐ Village of Lake Orion ☐ City of Lathrup Village		Oxford T Village o		□ Wate	of Walled Lal erford Townsh t Bloomfield T te Lake Towns	iip Township
☐ City of Bloomfield Hills ☐ Bloomfield Township ☐ Brandon Township	☐ City of Huntington Woo) [Orion To		□ City	of Sylvan Lak of Troy	



Do you believe that your household : Please rate what hazards present the	and/or place of business	0	threatened by	the following	hazards?
ow Risk = Low impact on threat to life and	Medium Risk = Medium	impact on threat	to High Risk	0 1	n threat to life an
property damage	life and property	0.01	Medium Risk	property dan	200.000 00 000 000
	Civil Disorder/Riot	Low Risk	O O	High Risk	Not Applicabl
riminal Acts (example: Active Shooter/Assai		0	0	0	0
(Vania)	Dam Failure	0	0	0	0
	Drought	0	0	0	0
	Earthquake	О	0	0	0
	Extreme Cold Incident	О	О	О	0
	Extreme Heat Incident	0	0	0	О
	Flooding	О	О	О	0
	Fog	0	0	0	0
	Gas/Oil Shortages	0	0	О	О
Hazardous Materials Release (e	xample: Chemical Spill)	0	0	0	0
Infrastructure Failure (ex	ample: Bridge Collapse)	О	0	О	О
Major Transpor	tation Accident/Incident	0	0	0	0
	Oil/Gas Well Accident(s)	O	O	О	O
Public Health Emergen	cy (example: Pandemic)	О	О	0	О
	Radiological Incident	О	О	О	О
Severe Winter Storm/H	eavy Snowfall/Ice Storm	0	0	О	0
	Subsidence (Sinkhole)	О	О	О	О
	Terrorism Incident	О	0	0	О
	Thunderstorms	О	О	О	О
Т	ornado and High Winds	О	0	0	О
	Utility Failure	0	0	О	0
	Wildfires	0	0	0	0
☐ I have never experienced property dama ☐ I have experienced minor property dame ☐ I have experienced major property dame ☐ I have experienced catastrophic property ☐ If you have experienced any damage damages/losses and/or injuries (Example 1) ☐ If you have experienced any damage my home, on a roadway or intersect	ge and loss from a disaster(ge and loss from a disaster(damage and loss from a di (s) or injury(ies) from a nple: flooding, wind, w (s) or injury(ies) from a	(s) (s) (s) (s) (a disaster, pleasinter storm).			
If you have experienced any damage (Example: basement flooded, roof w					



Mitigation Needed = No gation on this hazard is acted or needed	reconstruction, and repeated damage. Low Priority = This hazard should b mitigated, but is not a high priority compared to other hazards		n Priority = ant to mitigal	It is te this hazard	High Priority = priority to empha for this hazard	
	•		Mitigation Needed	Low Priority	Medium Priority	High Priority
	Civil Disorder/	Riot	О	0	О	0
iminal Acts (example: Acti	ve Shooter/Assailant, Arson, Vandal	ism)	O	О	О	О
	Dam Fai	lure	О	0	0	0
	Dro	ıght	О	O	О	О
	Earthqu	ake	O	0	О	О
	Extreme Cold Incid	dent	O	О	О	О
	Extreme Heat Incid	dent	О	О	0	0
	Floo	ding	O	O	О	О
		Fog	О	О	0	0
	Gas/Oil Short	ages	O	O	О	О
Hazardous Ma	terials Release (example: Chemical S	pill)	O	О	О	О
Infrastru	cture Failure (example: Bridge Colla	pse)	O	O	О	O
	Major Transportation Accident/Inci	dent	O	О	О	О
	Oil/Gas Well Accide	ıt(s)	O	О	О	О
Public	Health Emergency (example: Pander	mic)	0	О	О	О
	Radiological Incid	dent	O	О	О	О
Severe	Winter Storm/Heavy Snowfall/Ice St	orm	О	О	О	0
	Subsidence (Sinkh	ole)	O	О	О	О
	Terrorism Inci	dent	О	О	0	0
	Thundersto	rms	О	О	0	0
	Tornado and High W	inds	О	О	0	0
	Utility Fai	lure	О	О	О	О
	Wild	ires	0	0	0	0
If an evacuation was	•	Likely	Somewhat Likely	Not Likely	Do Not Know	Not Applicable
Immediately evacuate a I would first consult wif	o morr detecti	0	0	0	0	0
outside my household be evacuate.	efore making a decision to	0	О	0	Ο	Ο
Wait and see how bad to before deciding to evacu	he situation is going to be	0	0	О	О	О
Refuse to evacuate no m		0	0	0	0	0
What might prevent y apply. □ Pet □ Livestock □ Job □ Need to care for anoth □ Spouse/significant otheleave			rty Lac Dis No I we	k of gas/fuel for ability/health iss obstacles would	vehicle ues prevent me from e acuate no matter w	vacuating
If you were to evacua ☐ Shelter/evacuate cente ☐ Church or place of wo		□ Hote	l/motel	e best answer		



, ,	21a, 21b) ☐ No (Skip ons 21a, 21b) ☐ Do not kr	to Question 22) now	☐ Not applicable ☐ Other:	
21a Would that a	ssistance be provided by son	neone within your house	hold, by an outside agency, or by a	friend
☐ Within house		utside Agency o not know	□ Not Applicable □ Other:	
	please indicate what kind of tation, Medical, etc.).	f outside assistance your	household may need during an eva	ıcuatio
What type of structure	a da man lima in 9			
What type of structure ☐ Detached single family		□ Recreational	vehicle (RV)	
☐ Duplex, triplex, quadrup	ple home - 2 stories or less (apartment/cond	 □ Some other ty □ Do not know 		
☐ Mobile home	- 2 stories of fess (apartificin/cond	 □ Do not know □ Not applicabl 		
☐ Manufactured home		☐ Other (please	specify):	
How many pareans in	ncluding yourself, are curren	thy living in your housel	oold?	
			Ages 80+:	
	Ages 20-44:			
□ Spanish □ Other Indo				
	□ Not Applicable			
Please indicate your se Female	□ Not Applicable vould like someone to contact		ncy preparedness in Oakland Coun u. We will ensure your information	
Please indicate your se Female	□ Not Applicable vould like someone to contact ormation below, and a repres	sentative will contact yo	u. We will ensure your information	is kept
Please indicate your se Female	□ Not Applicable vould like someone to contact ormation below, and a repres	sentative will contact yo		is kept
Please indicate your se Female Male (OPTIONAL) If you w leave your contact info confidential.	□ Not Applicable vould like someone to contact ormation below, and a repres	sentative will contact yo	u. We will ensure your information Email:	is kept
Please indicate your se Female Male (OPTIONAL) If you w leave your contact info confidential.	□ Not Applicable rould like someone to contact ormation below, and a repres Phone Num This concludes the su	sentative will contact yo	u. We will ensure your information Email: r your time!	is kept
Please indicate your se Female	Not Applicable rould like someone to contact ormation below, and a repres Phone Num This concludes the su PLEASE MAIL C	sentative will contact yo ber:	u. We will ensure your information Email: r your time! S TO:	is kept
Please indicate your se Female	Not Applicable rould like someone to contact rmation below, and a repres Phone Num This concludes the su PLEASE MAIL C Oakland County	ber:rvey. Thank you for	u. We will ensure your information Email: r your time! S TO:	is kep
Please indicate your se Female Male (OPTIONAL) If you w leave your contact info confidential.	Not Applicable rould like someone to contact rmation below, and a repres Phone Num This concludes the su PLEASE MAIL C Oakland County 1200 N Tel	ber: Thank you for OMPLETED SURVEY Homeland Security Directors	u. We will ensure your information Email: r your time! S TO:	is kep
Please indicate your se Female	Not Applicable rould like someone to contact rmation below, and a repres Phone Num This concludes the su PLEASE MAIL C Oakland County 1200 N Tel	ber: TVey. Thank you for OMPLETED SURVEY Homeland Security Dir legraph Rd, Bldg 47W	u. We will ensure your information Email: r your time! S TO:	is kept
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Please indicate your se Female	Not Applicable rould like someone to contact rmation below, and a repres Phone Num This concludes the su PLEASE MAIL C Oakland County 1200 N Tel	ber: TVey. Thank you for OMPLETED SURVEY Homeland Security Dir legraph Rd, Bldg 47W	u. We will ensure your information Email: r your time! S TO:	is kept
Please indicate your se Female Male (OPTIONAL) If you w leave your contact info confidential.	Not Applicable rould like someone to contact rmation below, and a repres Phone Num This concludes the su PLEASE MAIL C Oakland County 1200 N Tel	ber: TVey. Thank you for OMPLETED SURVEY Homeland Security Dir legraph Rd, Bldg 47W	u. We will ensure your information Email: r your time! S TO:	is kept
Please indicate your se Female	Not Applicable rould like someone to contact rmation below, and a repres Phone Num This concludes the su PLEASE MAIL C Oakland County 1200 N Tel	ber: TVey. Thank you for OMPLETED SURVEY Homeland Security Dir legraph Rd, Bldg 47W	u. We will ensure your information Email: r your time! S TO:	is kept



NEED MORE INFORMATION?



To assist you further in obtaining important information about emergency and disaster preparedness, please visit https://www.oakgov.com/homelandsecurity

Sign Up for OakAlert: Oakland County Emergency Notification System

In the event of an emergency, it is critically important for you to be prepared and for you to be informed. Oakland County is taking a proactive approach to enabling its citizens to be more aware of emergency situations that may impact individuals and businesses in Oakland County, by implementing the Oakland County Emergency Notification System (OakAlert). OakAlert is an emergency notification system enabling and empowering interested parties to be aware of extreme incidents in Oakland County.

- https://www.oakgov.com/homelandsecurity/oakalert
- Or contact the Homeland Security Division at 248.858.5300

Do 1 Thing - Emergency Preparedness

Being prepared for disasters and emergencies can seem like a big job. Many people don't know where to start, so they never start at all. With Do 1 Thing you can take small steps that make a big difference in an emergency.

• For more information about dolthing, see: http://dolthing.com/

Page 6 DONE

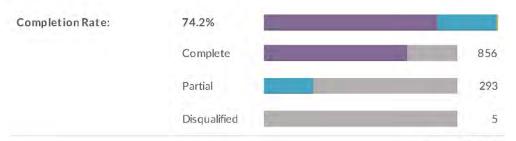


Appendix E: Questionnaire Results and Findings



Report for 2017 Oakland County and Municipality Hazard Mitigation Questionnaire

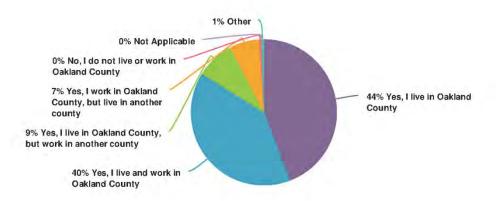
Response Counts



Total: 1,154



1. Do you live and/or work in Oakland County? Please select the best answer that applies to your current situation.

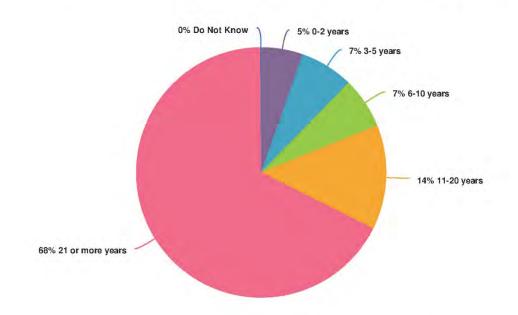


	Percent	Responses
111	44.1%	482
	39.7%	434
	8.5%	93
	6.6%	72
	0.4%	4
	0.1%	1
	0.5%	6
		44.1% 39.7% 8.5% 6.6% 0.4% 0.1%

Total: 1,092



2. Approximately how many years have you lived in Oakland County, Michigan?

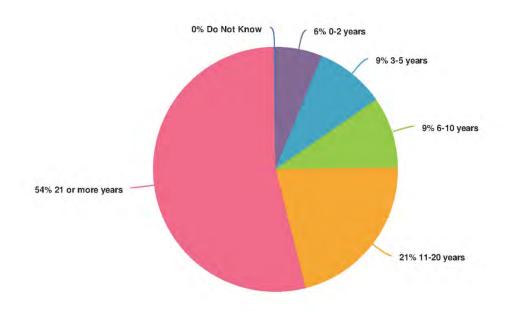


Value	Percent	Responses
0-2 years	5.4%	54
3-5 years	6.9%	68
6-10 years	6.6%	65
11-20 years	13.5%	134
21 or more years	67.5%	669
Do Not Know	0.1%	1

Total: 991



$3.\, Approximately how many years have you worked in Oakland County, \\Michigan?$

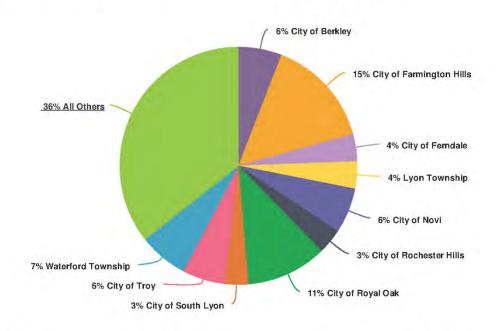


Value	Percent	Responses
0-2 years	6.2%	31
3-5 years	9.2%	46
6-10 years	9.4%	47
11-20 years	21.3%	107
21 or more years	53.8%	270
Do Not Know	0.2%	1

Total: 502



4. Please indicate which community in Oakland County you live in.



City of Farmington Hills 14.8% 134 City of Ferndale 3.7% 33 Lyon Township 3.7% 33 City of Novi 6.2% 56 City of Rochester Hills 3.4% 31	Value	Percent	Responses
City of Ferndale 3.7% 33 Lyon Township 3.7% 33 City of Novi 6.2% 56 City of Rochester Hills 3.4% 31	City of Berkley	5.9%	53
Lyon Township 3.7% City of Novi 6.2% City of Rochester Hills 3.4%	City of Farmington Hills	14.8%	134
City of Novi 6.2% 56 City of Rochester Hills 3.4% 31	City of Ferndale	3.7%	33
City of Rochester Hills 3.4% 31	Lyon Township	3.7%	33
	City of Novi	6.2%	56
City of Royal Oak 11.0% 99	City of Rochester Hills	3.4%	31
	City of Royal Oak	11.0%	99
City of South Lyon 3.2% 29	City of South Lyon	3.2%	29

Total: 904



Value		Percent	Responses
City of Troy		5.8%	52
Waterford Township		6.7%	61
Addison Township		0.1%	1
City of Auburn Hills		0.7%	6
Village of Beverly Hills		0.6%	5
Village of Bingham Farms		2.2%	20
City of Birmingham		1.3%	12
Bloomfield Township		0.6%	5
Brandon Township		0.9%	8
City of Clarkston		0.7%	6
City of Clawson		0.6%	5
Commerce Township		1.9%	17
City of Farmington		0.9%	8
Village of Franklin		0.1%	1
Groveland Township		0.2%	2
City of Hazel Park		0.2%	2
Highland Township		1.7%	15
HollyTownship		0.1%	1
Village of Holly	100	0.3%	3
City of Huntington Woods		0.8%	7

Total: 904



Value	Percent	Responses
Independence Township	2.0%	18
City of Keego Harbor	0.2%	2
Village of Lake Orion	0.2%	2
Village of Leonard	0.1%	1
City of Madison Heights	2.9%	26
Milford Township	1.1%	10
Village of Milford	1.0%	9
Novi Township	0.1%	1
City of Oak Park	0.8%	7
Oakland Township	1.3%	12
City of Orchard Lake	0.4%	4
Orion Township	1.1%	10
Village of Ortonville	0.1%	1
Oxford Township	1.1%	10
Village of Oxford	0.3%	3
City of Pleasant Ridge	0.2%	2
City of Pontiac	0.6%	5
City of Rochester	1.1%	10
Rose Township	0.3%	3
Royal Oak Township	0.1%	1
		1 A. 11 6 Kink

Total: 904

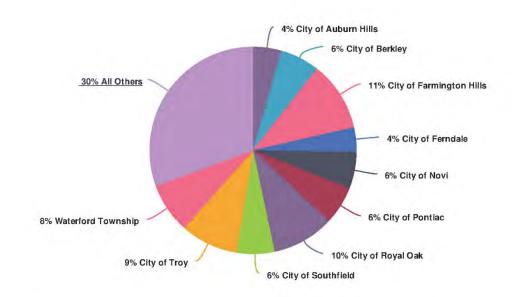


Value	Percen	t Responses
City of Southfield	0.99	% 8
Springfield Township	0.83	% 7
City of Sylvan Lake	0.29	% 2
West Bloomfield Township	1.59	% 14
White Lake Township	2.49	% 22
City of Wixom	0.49	% 4
Village of Wolverine Lake	0.19	% 1
Other	0.49	% 4

Total: 904



5. Please indicate which community in Oakland County you work in.



Value	Percen	t Responses
City of Auburn Hills	4.49	6 21
City of Berkley	6.19	6 29
City of Farmington Hills	10.89	6 51
City of Ferndale	3.89	6 18
City of Novi	5.79	6 27
City of Pontiac	5.99	6 28
City of Royal Oak	9.79	6 46
City of Southfield	5.99	6 28

Total: 473



Value	Percent	Responses
City of Troy	8.9%	42
Waterford Township	7.8%	37
Addison Township	0.4%	2
Village of Beverly Hills	0.4%	2
Village of Bingham Farms	1.3%	6
City of Birmingham	0.6%	3
City of Bloomfield Hills	1.3%	6
Bloomfield Township	2.1%	10
Brandon Township	0.2%	1
City of Clawson	0.2%	1
Commerce Township	1.9%	9
City of Farmington	0.4%	2
Village of Franklin	0.6%	3
City of Hazel Park	0.2%	1
Highland Township	0.8%	4
Holly Township	0.4%	2
Village of Holly	0.2%	1
Independence Township	0.2%	1
City of Lake Angelus	0.2%	1
Village of Lake Orion	0.2%	1

Total: 473



Value	Percent	Responses
City of Lathrup Village	0.4%	2
Lyon Township	1.1%	5
City of Madison Heights	1.9%	9
Milford Township	1,3%	6
Village of Milford	1.1%	5
City of Northville	0.8%	4
Novi Township	0.4%	2
City of Oak Park	0.2%	1
Oakland Township	0.4%	2
City of Orchard Lake	0.6%	3
Orion Township	0.8%	4
Oxford Township	0.2%	1
City of Pleasant Ridge	0.2%	1
City of Rochester Hills	1.5%	7
City of Rochester	1.1%	5
City of South Lyon	0.8%	4
Southfield Township	0.4%	2
Springfield Township	0.6%	3
City of Sylvan Lake	0.2%	1
City of Walled Lake	0.4%	2

Total: 473

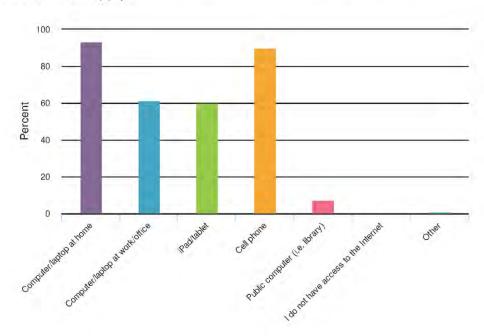


677	1900/03	2.00.000
Value	Percent	Responses
West Bloomfield Township	1.9%	9
White Lake Township	0.2%	1
City of Wixo m	0.8%	- 4
Village of Wolverine Lake	0.4%	2
Other	1.1%	5

Total: 473



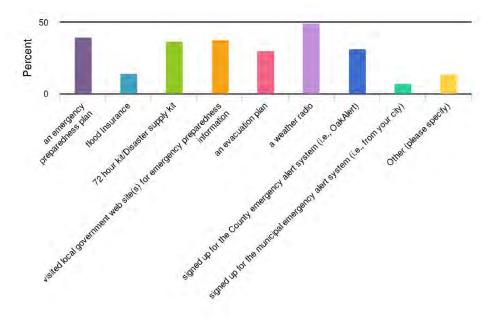
6. Please indicate what type of device(s) you use to access the internet. Select ALL that apply.



Value	Percent	Responses
Computer/laptop at home	93.2%	916
Computer/laptop at work/office	61.2%	602
iPad/tablet	60.1%	591
Cell phone	89.7%	882
Public computer (i.e. library)	7.4%	73
I do not have access to the Internet	0.2%	2
Other	0.9%	9



7. Please indicate those activities you have done to prepare for emergencies and disasters. Please select ALL that apply. I have...

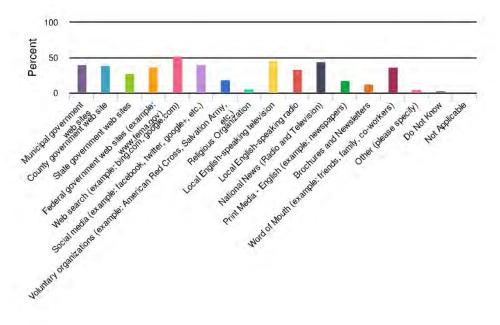




Value	Perce	ent	Responses
an emergency preparedness plan	39	.7%	323
flood Insurance	14	.3%	116
72 hour kit/Disaster supply kit	37	.0%	301
visited local government web site(s) for emergency preparedness information	37	.8%	307
an evacuation plan	30	.1%	245
a weather radio	49	.7%	404
signed up for the County emergency alert system (i.e., OakAlert)	31	.2%	254
signed up for the municipal emergency alert system (i.e., from your city)	7	.1%	58
Other (please specify)	13	.8%	112



8. Please indicate where you go to obtain emergency and disaster related information? Please select ALL that apply.





Value	Percent	Responses
Municipal government web sites	40.5%	397
County government web site	39.0%	382
State government web sites	27.9%	273
Federal government web sites (example: www.fema.gov)	36.9%	362
Web search (example: bing.com, google.com)	51.8%	508
Social media (example: facebook, twitter, google+, etc.)	39.5%	387
Voluntary organizations (example: American Red Cross, Salvation Army, etc.)	18.5%	181
Religious Organization	5.9%	58
Local English-speaking television	45.8%	449
Local English-speaking radio	33.0%	323
National News (Radio and Television)	44.1%	432
Print Media - English (example: newspapers)	18.0%	176
Brochures and Newsletters	12.0%	118
Word of Mouth (example: friends, family, co-workers)	36.3%	356
Other (please specify)	4.0%	39
Do Not Know	3.5%	34
Not Applicable	0.4%	4



$9. \, Would \, you \, agree \, or \, disagree \, with \, the \, following \, statements?$

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know	Responses
Oakland County is providing the services necessary to prepare me for a disaster. Count Row %	95 9.7%	284 28.9%	304 30.9%	50 5.1%	19 1.9%	231 23.5%	983
I am familiar with Oakland County's web site and can easily obtain information about emergencies and disasters. Count Row %	96 9.9%	272 28.0%	217 22.3%	180 18.5%	68 7.0%	138 14.2%	971



	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know	Responses
During times of emergency, information from Oakland County is provided in a language or format I can understand. Count Row %	296 30.1%	370 37.6%	133 13.5%	9 0.9%	3 0.3%	173 17.6%	984
I can easily obtain emergency information from Oakland County in times of crisis.	137 13.9%	359 36.5%	235 23.9%	44 4.5%	11 1.1%	197 20.0%	983

Total
Total 984
Responses



$10. \, Would \, you \, agree \, or \, disagree \, with \, the \, following \, statements?$

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know	Responses
The City of Royal Oak is providing the services necessary to prepare me for a disaster. Count Row %	3 4.8%	14 22.6%	16 25.8%	9 14.5%	4 6.5%	16 25.8%	62
I am familiar with the City of Royal Oak's web site and can easily obtain information about emergencies and disasters. Count Row %	5 7.9%	24 38.1%	15 23.8%	8 12.7%	3 4.8%	8 12.7%	63



	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know	Responses
During times of emergency, information from the City of Royal Oak is provided in a language or format I can understand. Count Row %	7 11.5%	23 37.7%	10 16.4%	1 1.6%	0 0.0%	20 32.8%	61
I can easily obtain emergency information from the City of Royal Oak in times of crisis. Count Row %	4 6.5%	18 29.0%	11 17.7%	8 12.9%	1 1.6%	20 32.3%	62

Total
Total 63
Responses

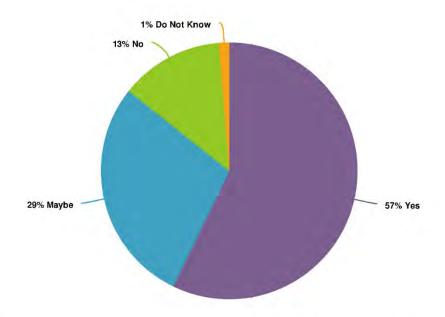


11. Please indicate how Oakland County, your city, and/or your township can better assist you in preparing for emergencies and disasters (example: provide preparedness materials in my language).





12. If a disaster (i.e. snow storm) impacted Oakland County, knocking out electricity and running water, would your household be able to manage on its own for at least three (3) days?



Value	Percent	Responses
Yes	57.2%	559
Maybe	28.5%	278
No	13.0%	127
Do Not Know	1.3%	13

Total: 977



13. Do you believe that your household and/or place of business might ever be threatened by the following hazards? Please rate what hazards present the greatest risk.Low Risk = Low impact on threat to life and property damage Medium Risk = Medium impact on threat to life and property damage High Risk = High impact on threat to life and property damage

	Low Risk	Medium Risk	High Risk	Not Applicable	Responses
Civil Disorder/Riot Count Row %	554 65.6%	210 24.9%	68 8.0%	13 1.5%	845
Criminal Acts (example: Active Shooter/Assailant, Arson, Vandalism) Count Row %	306 36.2%	410 48.5%	125 14.8%	5 0.6%	846
Dam Failure Count Row %	580 67.2%	35 4.1%	7 0.8%	241 27.9%	863
Drought Count Row %	550 64.3%	221 25.8%	32 3.7%	52 6.1%	855
Earthquake Count Row%	705 82.2%	65 7.6%	9 1.0%	79 9.2%	858
Extreme Cold Incident Count Row%	129 15.1%	463 54.3%	252 29.5%	9 1.1%	853
Extreme Heat Incident Count Row%	207 24.1%	472 54.9%	172 20.0%	8 0.9%	859
Flooding Count Row%	364 42.7%	348 40.8%	119 14.0%	22 2.6%	853



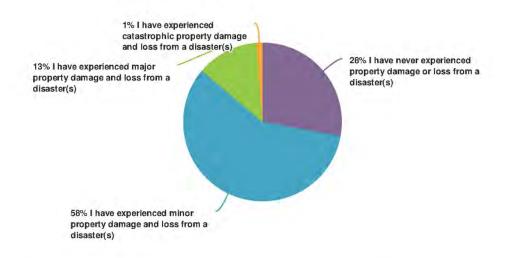
	Low Risk	Medium Risk	High Risk	Not Applicable	Responses
Fog Count Row %	343 40.2%	365 42.8%	128 15.0%	17 2.0%	853
Gas/Oil Shortages Count Row %	362 42.6%	361 42.5%	118 13.9%	9 1.1%	850
Hazardous Materials Release (example: Chemical Spill) Count Row %	341 40.0%	342 40.1%	150 17.6%	19 2.2%	852
Infrastructure Failure (example: Bridge Collapse) Count Row %	419 49.4%	264 31.1%	127 15.0%	39 4.6%	849
Major Transportation Accident/Incident Count Row %	231 27.1%	365 42.9%	234 27.5%	21 2.5%	851
Oil/Gas Well Accident(s) Count Row %	538 63.4%	182 21.5%	49 5.8%	79 9.3%	848
Public Health Emergency (example: Pandemic) Count Row %	304 35.7%	372 43.7%	164 19.3%	11 1.3%	851
Radiological Incident Count Row %	532 63.2%	201 23.9%	80 9.5%	29 3.4%	842
Severe Winter Storm/Heavy Snowfall/Ice Storm Count Row %	48 5.6%	366 42.7%	439 51.2%	5 0.6%	858



	Low Risk	Medium Risk	High Risk	Not Applicable	Responses
Subsidence (Sinkhole)					
Count Row %	465 54.7%	293 34.5%	70 8.2%	22 2.6%	850
Terrorism Incident					
Count	390	297	149	11	847
Row%	46.0%	35.1%	17.6%	1.3%	
Thunderstorms					
Count	90	355	407	2	854
Row%	10.5%	41.6%	47.7%	0.2%	
Tornado and High Winds					
Count	65	455	331	3	854
Row%	7.6%	53.3%	38.8%	0.4%	
Utility Failure					
Count	84	398	370	2	854
Row%	9.8%	46.6%	43.3%	0.2%	
Wildfires					
Count	669	94	20	71	854
Row %	78.3%	11.0%	2.3%	8.3%	
Total					
Total Responses					863



14. Please select the answer that best describes your experience.



Value	Percent	Responses
I have never experienced property damage or loss from a disaster(s)	27.9%	242
I have experienced minor property damage and loss from a disaster(s)	58.3%	505
I have experienced major property damage and loss from a disaster(s)	12.6%	109
Thave experienced catastrophic property damage and loss from a disaster(s)	1.2%	10

Total: 866



15. If you have experienced any damage(s) or injury(ies) from a disaster, please list the hazard(s) that caused the damages/losses and/or injuries (Example: flooding, wind, winter storm)





16. If you have experienced any damage(s) or injury(ies) from a disaster, please indicate where this occurred (Example: my home, on a roadway or intersection, at work, on vacation, etc.)





17. If you have experienced any damage(s) or injury(ies) from a disaster, please describe the damages and/or injuries. (Example: basement flooded, roof was damaged, vehicle was damaged, broken bones, lacerations, etc.)





18. Based on YOUR PERCEPTION of your jurisdiction's hazards, to what degree of emphasis would you expect your jurisdiction to mitigate the following hazards? Mitigation definition: The purpose of mitigation planning is to identify policies and actions that can be implemented over the long term to reduce risk and future losses. Mitigation forms the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. No Mitigation Needed = No mitigation on this hazard is expected or needed Low Priority = This hazard should be mitigated, but is not a high priority compared to other hazards Medium Priority = It is important to mitigate this hazard High Priority = It is a high priority to emphasize mitigation for this hazard

	No Mitigation Needed	Low Priority	Medium Priority	High Priority	Responses
Civil Disorder/Riot Count Row %	135 16.1%	281 33.5%	191 22.7%	233 27.7%	840
Criminal Acts (example: Active Shooter/Assailant, Arson, Vandalism) Count Row %	52 6.2%	153 18.2%	284 33.8%	351 41.8%	840
Dam Failure Count Row %	491 58.3%	220 26.1%	62 7.4%	69 8.2%	842
Drought Count Row %	339 39.9%	376 44.2%	102 12.0%	33 3.9%	850
Earthquake Count Row %	397 46.7%	323 38.0%	70 8.2%	60 7.1%	850
Extreme Cold Incident Count Row %	93 10.9%	234 27.5%	340 40.0%	183 21.5%	850



	No Mitigation Needed	Low Priority	Medium Priority	High Priority	Responses
Extreme Heat Incident Count Row %	103 12.2%	264 31.3%	333 39.5%	143 17.0%	843
Flooding Count Row %	94 11.0%	255 30.0%	297 34.9%	205 24.1%	851
Fog Count Row%	386 45.4%	329 38.7%	107 12.6%	29 3.4%	851
Gas/Oil Shortages Count Row %	165 19.6%	333 39.6%	247 29.4%	95 11.3%	840
Hazardous Materials Release (example: Chemical Spill) Count Row %	84 10.0%	226 26.8%	236 28.0%	298 35.3%	844
Infrastructure Failure (example: Bridge Collapse) Count Row%	120 14.2%	218 25.7%	242 28.5%	268 31.6%	848
Major Transportation Accident/Incident Count Row %	81 9.6%	176 20.9%	318 37.7%	268 31.8%	843
Oil/Gas Well Accident(s) Count Row %	229 27.3%	294 35.0%	180 21.4%	137 16.3%	840
Public Health Emergency (example: Pandemic) Count Row %	68 8.1%	171 20.3%	245 29.1%	357 42.4%	841



	No Mitigation Needed	Low Priority	Medium Priority	High Priority	Responses
Radiological Incident Count Row %	162 19.2%	247 29.3%	177 21.0%	256 30.4%	842
Severe Winter Storm/Heavy Snowfall/Ice Storm Count Row %	30 3.5%	136 16.1%	313 37.0%	367 43.4%	846
Subsidence (Sinkhole) Count Row %	161 19.2%	337 40.2%	188 22.4%	152 18.1%	838
Terrorism Incident Count Row %	87 10.4%	183 21.8%	207 24.6%	363 43.2%	840
Thunderstorms Count Row %	108 12.8%	269 31.9%	265 31.4%	201 23.8%	843
Tornado and High Winds Count Row %	45 5.3%	177 20.9%	341 40.4%	282 33.4%	845
Utility Failure Count Row%	37 4.4%	135 16.1%	301 35.8%	368 43.8%	841
Wildfires Count Row %	369 43.9%	308 36.7%	87 10.4%	76 9.0%	840
Total Total Responses					851



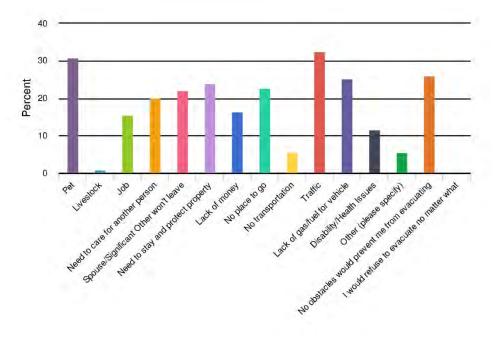
19. If an evacuation was ordered for your area, please indicate how likely you	
17. If all evacuation was ordered for your area, please indicate now likely you	
would be to do the following.	
would be to do the rollowing.	
	34
	J-



	Very Likely	Somewhat Likely	Not Very Likely	Not Likely at All	Do Not Know	Not Applicable	Response
Immediately evacuate as instructed. Count Row %	383 45.0%	338 39.7%	68 8.0%	30 3.5%	26 3.1%	6 0.7%	851
I would first consult with family and friends outside my household before making a decision to evacuate. Count Row %	292 35.2%	276 33.3%	142 17.1%	96 11.6%	10 1.2%	14 1.7%	830
Wait and see how bad the situation is going to be before deciding to evacuate. Count Row %	140 16.9%	280 33.8%	247 29.8%	140 16.9%	15 1.8%	6 0.7%	828
Refuse to evacuate no matter what. Count Row %	2 0.2%	32 3.8%	151 18.1%	575 69.0%	40 4.8%	33 4.0%	833
Total Total Responses							851



20. What might prevent you from leaving your place of residence if there was an evacuation order? Please select ALL that apply.

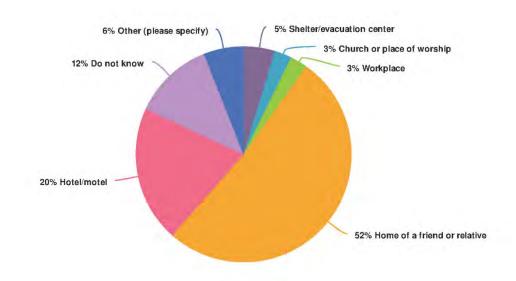




Value		Percent	Responses
Pet		30.8%	260
Livestock		0.8%	7
Job		15.4%	130
Need to care for another person		20.2%	171
Spouse/Significant Other won't leave		22.0%	186
Need to stay and protect property		23.8%	201
Lack of money		16.4%	139
No place to go		22.7%	192
No transportation		5.4%	46
Traffic		32.5%	275
Lack of gas/fuel for vehicle		25.1%	212
Disability/Health Issues		11.6%	98
Other (please specify)		5.4%	46
No obstacles would prevent me from evacuating	-	25.9%	219
I would refuse to evacuate no matter what		0.1%	1



21. If you were to evacuate, where would you most likely stay? Please select the best answer.

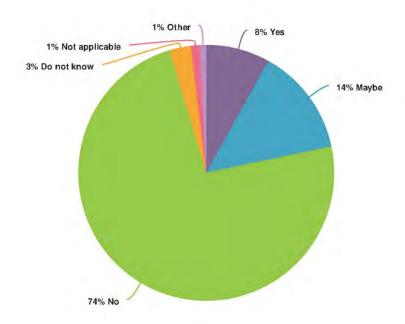


Value	P	ercent	Responses
Shelter/evacuation center		4.7%	40
Church or place of worship		2.6%	22
Workplace		2.6%	22
Home of a friend or relative		51.7%	441
Hotel/motel		20.4%	174
Do not know		12.1%	103
Other (please specify)		6.0%	51

Total: 853



22. In an evacuation, would you or anyone in your household require special assistance?

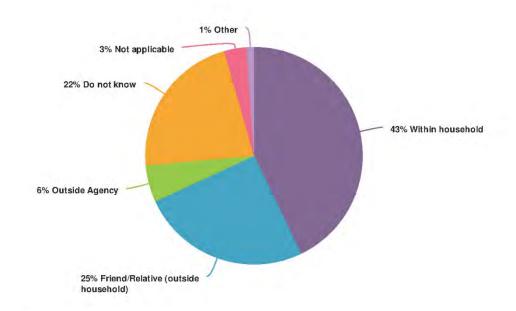


Value	Percent	Responses
Yes	8.1%	69
Maybe	13.6%	116
No	73.7%	629
Do not know	2.7%	23
Not applicable	1.1%	9
Other	0.8%	7

Total: 853



23. If yes, would that assistance be provided by someone within your household, by an outside agency, or by a friend or relative outside your household?



Value	Percent	Responses
Within household	42.9%	78
Friend/Relative (outside household)	25.3%	46
Outside Agency	5.5%	10
Do not know	22.0%	40
Not applicable	3.3%	6
Other	1.1%	2

Total: 182

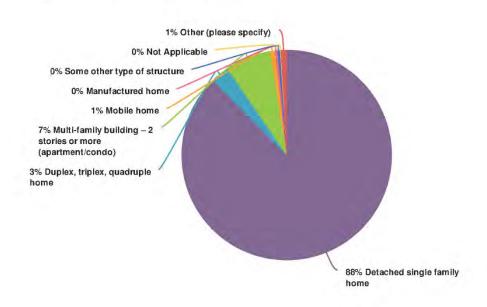


24. If applicable, please indicate what kind of outside assistance your household may need during an evacuation (i.e. Transportation, Medical, etc.)





25. What type of structure do you live in?

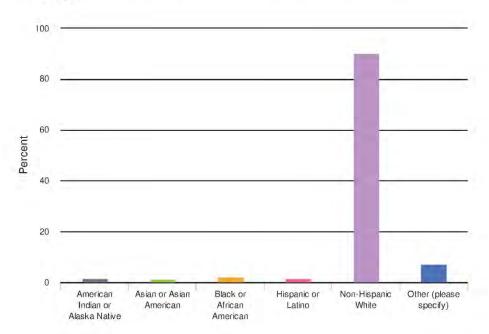


Value	Percent	Responses
Detached single family home	87.7%	746
Duplex, triplex, quadruple home	2.8%	24
Multi-family building – 2 stories or more (apartment/condo)	7.1%	60
Mobile home	0.7%	6
Manufactured home	0.4%	3
Some other type of structure	0.4%	3
Not Applicable	0.1%	1
Other (please specify)	0.9%	8

Total: 851



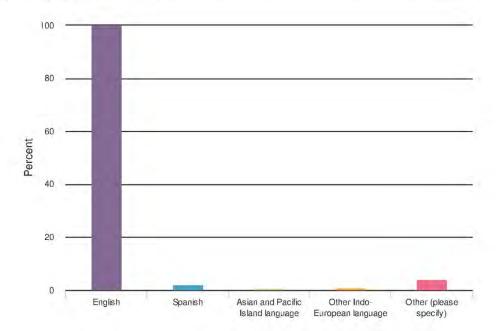
28. Which of the following best describes your race/ethnicity? Please select ALL that apply.



Value		Percent	Responses
American Indian or Alaska Native		1.4%	12
Asian or Asian American		1.2%	10
Black or African American		2.3%	19
Hispanic or Latino	(100)	1.4%	12
Non-Hispanic White		90.1%	756
Other (please specify)	1000	7.0%	59



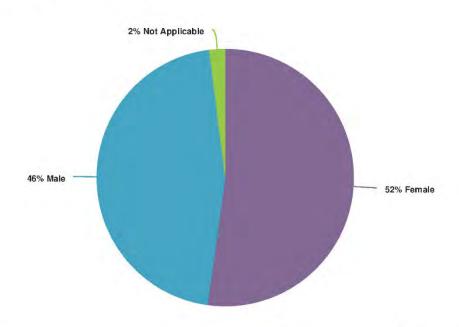
$29. \, Please \, indicate \, the \, language (s) \, spoken \, in \, your \, household. \, Please \, select \, \, ALL \, that \, apply.$



Value	Percent	Responses
English	100.0%	853
Spanish	2.2%	19
Asian and Pacific Island language	0.5%	4
Other Indo-European language	0.8%	7
Other (please specify)	4.0%	34



30. Please indicate your sex.



Value	Percent	Responses
Female	52.2%	445
Male	45.8%	391
Not Applicable	2.0%	17

Total: 853

50



Appendix F: Example Community Resolution for Plan Adoption

	SAMPLE Resolution N	0	
ADOPTION OF T	HE OAKLAND COUNT	TY HAZARD MITIC	GATION PLAN
	of (insert community name he		
	nunity name), Michigan is sub al, and human hazards; and	ject to flooding, tornadoo	es, winter storms, and
Emergency Planning Constakeholder organizations	land County Homeland Securi mittee, comprised of represer , have prepared a recommende and reduce damage from these	tatives from the County, ed Hazard Mitigation Pla	municipalities, and
this Plan, providing infor	munity name) has participated nation specific to local hazard I mitigation strategies, and rev	priorities, encouraging p	oublic participation,
Emergency Planning Com MITIGATION PLAN (th Hazard Mitigation Coordi	County Homeland Security D nmittee (LEPC), has developed e "Plan") as an official docum inating Committee, pursuant to ations (44 CFR 210.6); and	d the OAKLAND COUN ent of the County and es	TY HAZARD ablishing a County
	been widely circulated for re I, and local review agencies a		
NOW THEREFORE BE that:	IT RESOLVED by the (insert	community name and go	verning body here)
community) is/ar 2. The (insert name recommendation: limitations as pro 3. The (insert name	anty Hazard Mitigation Plan (ce hereby adopted as an official of position) is charged with seas, as they pertain to (insert convided by the (insert community position) shall give priority portions of the Plan specific to	I plan of (insert Commur apervising the implement amunity name here) and by governing body) or other attention to the following	atty name here). attorn of the Plan's within the funding her sources. g action items
a. b. c.	(Recommendation (Recommendation (Recommendation)	, Section, page, Section, page, Section, page	
Passed by the (insert com	munity name and governing b	ody here) on (insert date)	
Signature		Signature	
Vote:			
Yes			



Appendix G: Notice of Endorsement & Adoption

Notices of Endorsement and Adoption from each jurisdiction will be included in this section upon receiving FEMA's conditional approval of the plan.



U.S. Department of Homeland Security Region V 536 S. Clark St., 6th Floor Chicago, IL 60605-1509



April 2, 2018

Mr. Matt Schnepp State Hazard Mitigation Officer Michigan State Police Emergency Management and Homeland Security Division P.O. Box 30634 Lansing, MI 48909

Dear Mr. Schnepp:

Thank you for submitting the Oakland County Hazard Mitigation Plan for our review. The plan was reviewed based on the local plan criteria contained in 44 CFR Part 201, as authorized by the Disaster Mitigation Act of 2000. Oakland County met the required criteria for a multi-jurisdiction hazard mitigation plan. Formal approval of this plan is contingent upon the adoption of the plan by the jurisdictions. Once FEMA Region V receives documentation of adoption we will send a letter of official approval to your office.

We look forward to receiving the adoption documentation and completing the approval process for the Oakland County Hazard Mitigation Plan.

If you or the community has any questions, please contact Christine Meissner at (312) 408-4460 or christine meissner@fema.dhs.gov.

Sincerely,

Melissa A. Janssen Chief, Risk Analysis Branch

Mitigation Division

Attachment: Local Plan Review Sheets

www.fema.gov



Appendix H: Federal Funding Sources and Programs

Many local governments are in a quandary to implement measures to secure and protect property with today's economic constraints. Many programs, including FEMA's Pre-Disaster Mitigation Program and the Hazard Mitigation Grant Program, are the victims of budget cuts. DHS' 2006 Emergency Management Performance Grants – Program Guidance and Application Kit states that "emergency managers at all levels should leverage all available funding and resources from multiple sources wherever possible...(and)...should not restrict their activities to only Federal funding to achieve the goals outlined within their strategies. Rather, special attention should be given to leveraging relevant funding sources and resources that support"... mitigation activities.[1] In addition to federal programs, the State homeland security and preparedness programs and resources may be available to meet the objectives outlined in the All-Hazard Mitigation Plan. This section outlines potential funding sources.

FEDERAL PROGRAMS AND FUNDING

DHS: FEMA

Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) administered by the Federal Emergency Management Agency (FEMA) provides grants to State, tribal, and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Pre-Disaster Mitigation Program

Funding for the Pre-Disaster Mitigation (PDM) program is provided through the National Pre-Disaster Mitigation Fund to assist State, tribal, territorial and local governments in implementing cost-effective hazard mitigation activities that complement a comprehensive mitigation program. The PDM program was allocated \$30,000,000 in FY 2015. Project priorities are:

Mitigation planning and project sub-applications

Flood Mitigation Assistance Grant Program

The Flood Mitigation Assistance (FMA) Grant Program provides funding to assist States and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program (NFIP). According to the FY 2015 Flood Mitigation Assistance (FMA) Grant Program Fact Sheet, \$150,000,000 is available to States, Tribal, Territorial, and local governments. FEMA will prioritize eligible planning and project sub-applications as follows:



Mitigation planning sub-applications consistent with 44 CFR Part 201 up to a maximum of \$100,000 federal share per applicant.

Projects that mitigate at least 50 percent of structures that meet definition part (b)(ii) of a Severe Repetitive Loss (SRL) property: At least 2 separate NFIP claim payments have been made with the cumulative amount of such claims exceeding the market value of the insured structure.

Project sub-applications that mitigate at least 50 percent of structures that meet the definition of a Repetitive Loss (RL) property: Have incurred flood-related damage on 2 occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Projects that mitigate at least 50 percent of structures meet definition part (b)(i) of a SRL property: 4 or more separate NFIP claims payments have been made with the amount of each claim exceeding \$5,000, and with the cumulative amount of claims payments exceeding \$20,000.

Projects that will reduce the risk profile in communities through mitigation of the largest number of contiguous NFIP-insured properties.

Repetitive Flood Claims and Severe Repetitive Loss Grant Program

The Repetitive Flood Claims (RFC) and Severe Repetitive Loss (SRL) grant programs were authorized by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (P.L. 108–264), which amended the National Flood Insurance Act (NFIA) of 1968 (42 U.S.C. 4001, et al). According to FEMA, "The SRL Grant Program makes funding available for a variety of flood mitigation activities. Under this program, FEMA provides funds to state and local governments to make offers of assistance to NFIP-insured SRL residential property owners for mitigation projects that reduce future flood losses through:

Acquisition or relocation of at-risk structures and conversion of the property to open space;

Elevation of existing structures; or Dry floodproofing of historic properties.

SRL mitigation grants are provided to eligible applicant states/tribes/territories that, in turn, provide subgrants to local governments or communities. The applicant must have a FEMA-approved mitigation program in place that includes SRL properties" (Guidance for Severe Repetitive Loss Properties, 2011). According to FEMA, "RFC funds may only be used to mitigate structures that are located within a state or community that is participating in the NFIP that cannot meet the requirements of the Flood Mitigation Assistance (FMA) program because they cannot provide the non-federal cost share, or do not have the capacity to manage the activities" (fema.gov).

Mitigation Technical Assistance Program



There are three major mitigation technical assistance programs that provide technical support to state/local communities, FEMA Regional and Headquarters Mitigation staff in support of mitigation initiatives. These programs include the Hazard Mitigation Technical Assistance Program, the National Earthquake Technical Assistance Program, and the Wind and Water Technical Assistance Program.

They provide the technical support that is necessary to mitigate against potential loss of lives and minimize the amount of damage as a result of a natural disaster.

Staffing for Adequate Fire and Emergency Response Grant Program

The goal of the Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program is to assist local fire departments with staffing and deployment capabilities in order to respond to emergencies, and assure that communities have adequate protection from fire and fire-related hazards. For FY 2015, an estimated \$340,000,000 is set aside to assist fire departments in achieving the SAFER goal. There are two program priorities: to hire firefighters, and to recruit and retain volunteer firefighters.

Fire Prevention and Safety Grant Program

The Fire Prevention and Safety (FP&S) Grant Program had \$34,000,000 available in FY 2014 in support of two activities: fire prevention and safety (including general education/awareness, code enforcement/awareness, fire & arson investigation, and national/state/regional programs and studies) and research and development (including clinical studies, technology and product development, database system development, dissemination and implementation research, and preliminary studies).

Homeland Security Grant Program

Comprised of three interconnected grant programs, the Homeland Security Grant Program (HSGP) seeks to support the building, sustainment, and delivery of core capabilities essential to achieving the National Preparedness Goal, which is "A secure a resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that post the greatest risk." The HSGP grant programs are the State Homeland Security Program (SHSP), the Urban Areas Security Initiative (UASI), and Operation Stonegarden (OPSG).

State Homeland Security Program

In FY 2015, \$402,000,000 was allocated to the State Homeland Security Program (SHSP). Although only states and territories can apply for SHSP funds, the program is directed at supporting States, Tribes, and local governments to address high-priority preparedness gaps identified in the Threat and Hazard Identification and Risk Assessment (THIRA) with relation to terrorism. Award methodology is based on the minimum amounts as legislatively mandated (0.35% of total funds for states, Washington D.C., and Puerto Rico and 0.08% of total funds for



American Samoa, Guam, the Northern Mariana Islands and the U.S. Virgin Islands), DHS' risk methodology, and the anticipated effectiveness of proposed projects.

Operation Stonegarden

Operation Stonegarden (OPSG) is designed to support cooperation and coordination between Customs and Border Protection (CBP), the United States Border Patrol (USBP), and local, Tribal, territorial, State, and Federal law enforcement agencies. In FY 2015, \$55,000,000 is allocated to this program. States and territories that border Canada, Mexico, or international waters are eligible. Counties and federally-recognized Tribal governments within those states are eligible to apply for funds through their State Administrative Agency (SAA).

Cooperating Technical Partners Program

The Cooperating Technical Partners (CTP) Program seeks to strengthen and increase the effectiveness of the National Flood Insurance Program (NFIP) through fostering relationships among all levels of government to reduce flood losses and promote community resiliency. The total funding for Region 4 in FY 2015 was \$12,973,272. The main focus in FY 2015 for the CTP program is to support the mission and objectives of FEMA's Risk MAP (Mapping, Assessment, and Planning) program.

Emergency Management Performance Grant

In FY 2015, \$350,100,000 was allocated to the Emergency Management Performance Grant (EMPG). This program is designed to assist state, local, territorial, and tribal governments to prepare for all hazards. The State Administrative Agency (SAA) or Emergency Management Agency (EMA) can apply for the funding. All 50 states, Washington D.C., and Puerto Rico will receive at least 0.75% of total funding. American Samoa, Guam Northern Mariana Island and the U.S. Virgin Island will each receive at least 0.25% of total funding. The balance will be distributed on a population-share basis.

Homeland Security National Training Program Continuing Training Grants Program

The Homeland Security National Training Program Continuing Training Grants Program (HSNTP/CTG) had \$11,521,000 for FY 2015 to be used for training focused on cybersecurity, hazardous materials, countering violent extremism, and rural training. Eligible entities (including state, local, tribal, and territorial entities) must have existing programs or demonstrate expertise relevant to the focus areas.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Immunization Research, Demonstration, Public Information and Education Grants

The Immunization Research, Demonstration, Public Information and Education Grant program assists States, political subdivisions of States, and other public and private nonprofit entities to



conduct research, demonstration projects, and provide public information on vaccine-preventable diseases and conditions. Project funds may be used for the costs associated with organizing and conducting these projects, and in certain circumstances, for purchasing vaccine. Requests for direct assistance (i.e., "in lieu of cash") for personnel, vaccines, and other forms of direct assistance will be considered. Funds may not be used to supplant existing immunization program activities.

Immunization Grants

Immunization Grants assist States and communities in establishing and maintaining preventive health service programs to immunize individuals against vaccine-preventable diseases (including measles, rubella, poliomyelitis, diphtheria, pertussis, tetanus, hepatitis B, hepatitis A, varicella, mumps, haemophilus influenza type b, influenza, and pneumococcal pneumonia). Grant funds may be used for costs associated with planning, organizing, and conducting immunization programs directed toward vaccine-preventable diseases and for the purchase of vaccine; and for the implementation of other program elements, such as assessment of the problem; surveillance and outbreak control; information and education; adequate notification of the risks and benefits of immunization; compliance with compulsory school immunization laws; vaccine storage, supply, and delivery; citizen participation; and use of volunteers. Vaccine will be available "in lieu of cash" if requested by the applicants. Requests for personnel and other items "in lieu of cash" will also be considered. Vaccine purchased with grant funds may be provided to private practitioners who agree not to charge for vaccine. Grant funds may be used to supplement (not substitute for) existing immunization services and operations provided by a State or locality.

DEPARTMENT OF THE INTERIOR

River, Trail, and Conservation Assistance Program

The goal of this program is to work with community groups and local and State governments to conserve rivers, preserve open space, and develop trails and greenways; with the goal of helping communities achieve on-the-ground conservation successes for their projects.

ENVIRONMENTAL PROTECTION AGENCY

Wetland Program Development Grants

The Wetland Program Development Grants are designed to assist state, tribal, and local government agencies in building their wetland management programs. Grant funds can be used to develop new or refine existing wetland protection, management or restoration programs. The types of projects funded through this program are very diverse. In the past, states, tribes and local governments have pursued a wide range of activities from very broad policy or regulatory projects, to development of specific technical approaches/methods for wetland health or restoration.

Nonpoint Source Implementation Grants – 319 Program



Through its 319 program, EPA provides formula grants to the states and tribes to implement nonpoint source projects and programs in accordance with section 319 of the Clean Water Act (CWA). Nonpoint source pollution reduction projects can be used to protect source water areas and the general quality of water resources in a watershed.

Examples of previously funded projects include installation of best management practices (BMPs) for animal waste; design and implementation of BMP systems for stream, lake, and estuary watersheds; basinwide landowner education programs; and lake projects previously funded under the CWA section 314 Clean Lakes Program. For FY 2014, tribal base grants were from \$30,000 to \$50,000, and competitive grant awards could be up to \$100,000.

Watershed Organizations

EPA recognizes that strong and committed watershed organizations and local governments are necessary partners to achieve the goals of the Clean Water Act and improve our nation's water quality. To support these local efforts, the EPA is working to: build the capacity of watershed organizations to develop and implement sustainable funding plans to obtain achieve environmental results; and, build the capacity of private and public funders to channel their resources towards good watershed initiatives.

US DEPARTMENT OF AGRICULTURE

Emergency Watershed Protection Program

The USDA Natural Resources Conservation Service's (NRCS) Emergency Watershed Protection (EWP) Program helps protect lives and property threatened by natural disasters such as floods, hurricanes, tornadoes, droughts, and wildfires. There are two parts of the program: EWP - Recovery and EWP - Floodplain Easement (FPE).

EWP – Recovery: The EWP Program is a recovery effort program aimed at relieving imminent hazards to life and property caused by floods, fires, windstorms, and other natural occurrences. Public and private landowners are eligible for assistance, but must be represented by a project sponsor that must be a legal subdivision of the State, such as a city, county, township or conservation district, and Native American Tribes or Tribal governments. NRCS may pay up to 75 percent of the construction cost of emergency measures. The remaining 25 percent must come from local sources and can be in the form of cash or in-kind services.

EWP – Floodplain Easement: Privately-owned lands or lands owned by local and state governments may be eligible for participation in EWP-FPE. To be eligible, lands must meet one of the following criteria:

Lands that have been damaged by flooding at least once within the previous calendar year or have been subject to flood damage at least twice within the previous 10 years.



Other lands within the floodplain are eligible, provided the lands would contribute to the restoration of the flood storage and flow, provide for control of erosion, or that would improve the practical management of the floodplain easement Lands that would be inundated or adversely impacted as a result of a dam breach.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Community Development Block Grant Program

The Department of Housing and Urban Development sponsors this program, intended to develop viable communities by providing decent housing and a suitable living environment and by expanding economic opportunities primarily for persons of low and moderate income. Recipients, which include principal cities of Metropolitan Statistical Areas (MSAs), other metropolitan cities with populations of at least 50,000, and qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities), may initiate activities directed toward neighborhood revitalization, economic development, and provision of improved community facilities and services. Specific activities may include public services, acquisition of real property, relocation and demolition, rehabilitation of structures, and provision of public facilities and improvements, such as new or improved water and sewer facilities.



Appendix I: Acronyms and Definitions

ADA - American Disabilities Act

ASFPM - Association of State Floodplain Managers

BCA - Benefit Cost Analysis

BCR - Benefit Cost Ratio

BMPs - Best Management Practices

CBP - Customs and Border Protection

CDBG - Community Development Block Grant

CFR - Code of Federal Regulations

CRS - Community Rating System

CTP - Cooperating Technical Partners

DFO - Disaster Field Office

DMA2K - Disaster Mitigation Act of 2000

DNR - Department of Natural Resources

DOT - Department of Transportation

EA - Environmental Assessment

EMPG - Emergency Management Performance Grant

EOC - Emergency Operations Center

EPA - Environmental Protection Agency

EWP - Emergency Watershed Protection

FCO - Federal Coordinating Officer

FEMA - Federal Emergency Management Agency

FIA - Flood Insurance Administration

FIRM - Flood Insurance Rate Map

FIS - Flood Insurance Study

FMA - Flood Mitigation Assistance

FP&S - Fire Prevention and Safety

GIS - Geographic Information System

HAZUS

HMPG - Hazard Mitigation Grant Program

HMTAP - Hazard Mitigation Technical Assistance Program

HSGP - Homeland Security Grant Program

HUD - Housing and Urban Development

IA - Individual Assistance

IAP - Incident Action Plan

IBC - International Building Code

ICC - Increased Cost of Compliance

ICS - Incident Command System

LCA - Local Capability Assessment

MOU - Memorandum of Understanding

MSAs - Metropolitan Statistical Areas

NEPA - National Environmental Policy Act

NFIP - National Flood Insurance Program

NFIRA - National Flood Insurance Reform Act



NRCS - Natural Resources Conservation Service

OMB - Office of Management and Budget

OPSG - Operation Stonegarden

PA - Public Assistance

PAO - Public Assistance Officer

PDA - Preliminary Damage Assessment

PDM - Pre-Disaster Mitigation

PDM-C - Pre-Disaster Mitigation Competitive

RFC - Repetitive Flood Claims

RL - Repetitive Loss

RLP - Repetitive Loss Property

RLR - Repetitive Loss Report

SAFER - Staffing for Adequate Fire and Emergency Response

SFHA - Special Flood Hazard Area

SHMO - State Hazard Mitigation Officer

SHMP - State Hazard Mitigation Plan

SHS - State Historical Society

SHSP - State Homeland Security Program

SRL - Severe Repetitive Loss

THIRA - Threat and Hazard Identification and Risk Assessment

UASI - Urban Areas Security Initiative

UDC - Uniform Dwelling Code

USBP - United States Border Patrol

USDA - U. S. Department of Agriculture



Appendix J: FEMA Crosswalk



APPENDIX A:

LOCAL MITIGATION PLAN REVIEW TOOL

The Local Mitigation Plan Review Tool demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The <u>Regulation Checklist</u> provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The <u>Plan Assessment</u> identifies the plan's strengths as well as documents areas for future improvement.
- The <u>Multi-jurisdiction Summary Sheet</u> is an optional worksheet that can be used to
 document how each jurisdiction met the requirements of the each Element of the
 Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation
 Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this Local Mitigation Plan Review Guide when completing the Local Mitigation Plan Review Tool.

Local Point of Contact: Thomas Hardesty Title:	Address:		
Tieles	(lakland (Allint) F	Homeland Security Division	
Manager	1200 N Telegraph Pontiac, MI 48341	Road	
Agency: Oakland County Homeland Security D	ivision		
Phone Number: 248-452-9578	E-Mail: hardestyt@oakgo	ov.com	
State Reviewer:	Title:	Date:	
FEMA Reviewer:	Title:	Date:	
Date Received in FEMA Region (Insert #)			
Plan Not Approved			
Plan Approvable Pending Adoption			
Plan Approved			



SECTION 1: REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.' The 'Required Revisions' summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is 'Not Met.' Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this Plan Review Guide in Section 4, Regulation Checklist.

A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1)) A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2)) A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement \$201.6(b)(1)) A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement \$201.6(b)(3)) A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement \$201.6(c)(4)(iii))	Location in Plan (section and/or Not page number) Met Met
was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1)) A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2)) A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement \$201.6(b)(1)) A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement \$201.6(b)(3)) A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement [pg. 203)	
communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2)) A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement planning process during the drafting stage? (Requirement \$201.6(b)(1)) A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement \$201.6(b)(3)) A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement Continued Public Involvement (pg. 203)	ess for each Plan Process (pg.
planning process during the drafting stage? (Requirement §201.6(b)(1)) A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3)) A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement	ed in hazard Other Stakeholders ority to regulate (pg. 31)
plans, studies, reports, and technical information? (Requirement §201.6(b)(3)) A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement Involvement (pg. 203)	Outreach (pg. 31) - Plan Activities (pg. 32)
participation in the plan maintenance process? (Requirement Involvement (pg. 203)	n? (Requirement Implementation through Existing
	Continued Fubilic
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i)) Plan Maintenance Process (pg. 203)	ng the mitigation plan Process (pg. 203)
ELEMENT A: REQUIRED REVISIONS	

A-2

Local Mitigation Plan Review Tool



Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSM	MENT		
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	- Hazard Profile & Risk Assessment (pg. 60) - Volume II: Hazards (for each community)		
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Hazard Profile & Risk Assessment (pg. 80) Volume II: Hazards (for each community)		
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	- Hazard Profile & Risk Assessment (pg. 60) - Volume II: Hazards (för each community)		
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	Flooding (pg. 109)	6 4	
- and control to the second se	Community Drofile (no. 20)		
ELEMENT C. MITIGATION STRATEGY C1. Does the plan document each jurisdiction's existing authorities,	- Community Profile (pg. 39)		
policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	- Implementation through Existing Programs (pg. 207-208)		
C2. Does the Plan address each jurisdiction's participation in the NFIP	And the second second	10 000	
and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Flooding (pg. 109)		
and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii)) C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))			
and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii)) C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(ii)) C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	109) Mitigation Goals and		
and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii)) C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(ii)) C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement	109) Mitigation Goals and Objectives (pg. 197) -Mitigation Strategies & Actions (pg. 198)		

Local Mitigation Plan Review Tool

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1. REGULATION CHECKLIST	Location in Plan		Not
Regulation (44 CFR 201.6 Local Mitigation Plans)	page number)	Met	Met
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMEN	ITATION (applicable to	plan upo	dates
only)			
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	- Community Profile (pg. 39)		
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	-Volume II and III	131	1
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	-Volume II and III		
ELEMENT E. PLAN ADOPTION			
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Plan Adoption (pg. 36-37); Appendix G: Notice of Endorsement and Adoption (pg. 310) - Will be fulfilled upon FEMA approval		
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Plan Adoption (pg. 36-37); Appendix G: Notice of Endorsement and Adoption (pg. 310) - Will be fulfilled upon FEMA approval		
ELEMENT E: REQUIRED REVISIONS			
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTION NOT TO BE COMPLETED BY FEMA)	AL FOR STATE REVIE	WERS (ONLY;
F1.			
F2.			
ELEMENT F: REQUIRED REVISIONS	4		
d			

Local Mitigation Plan Review Tool

A-4



MEMORANDUM

Planning Division

DATE: October 19, 2018

TO: Joseph A. Valentine, City Manager

FROM: Jana Ecker, Planning Director

SUBJECT: Master Plan Consultant Selection

INTRODUCTION:

On September 17, 2018, the City Commission considered the recommendation by the Ad Hoc Committee to select DPZ to provide an update to the City's comprehensive master plan. After much discussion, the City Commission requested that they receive copies of the presentations conducted by both DPZ and MKSK before the Ad Hoc Committee, and requested that representatives from MKSK be present at the next meeting to respond to questions from the City Commission.

BACKGROUND:

The City Commission clearly stated that no presentations would be conducted at the City Commission meeting on October 8, 2018 by either the DPZ or MKSK teams. The MKSK team members were present on October 8, 2018 to answer questions of clarification on their previously submitted proposal for the master plan, as DPZ team members did on September 17, 2018. DPZ team members were also in attendance. After much discussion, the City Commission postponed consideration of the matter to the October 29, 2018 meeting so that all Commissioners could be present to vote.

LEGAL REVIEW:

The City Attorney has reviewed the RFP and the proposals received.

FISCAL IMPACT:

The master plan update was included in the FY 17-18 and FY 18-19 budget for a total amount of \$300,000.

SUMMARY:

The City Commission is requested to select the preferred consultant team to complete the master plan update.

ATTACHMENTS:

City Commission memo dated September 28, 2018

SUGGESTED RESOLUTION:

To APPROVE the contract with DPZ Partners, LLC, as recommended by the Ad Hoc Master Plan Selection Committee, in the amount of \$298,000.00 payable from account # 101-721-000-811.000, to provide professional services to prepare an update to the City's comprehensive master plan, and to direct the Mayor to execute same.

OR

To APPROVE the contract with MKSK, in the amount of \$289,000.00 payable from account # 101-721-000-811.000, to provide professional services to prepare an update to the City's comprehensive master plan, and to direct the Mayor to execute same.



MEMORANDUM

Planning Division

DATE: September 28, 2018

TO: Joseph A. Valentine, City Manager

FROM: Jana L. Ecker, Planning Director

SUBJECT: Master Plan Consultant Selection

On April 9, 2018 the City Commission voted to issue an RFP for a new Birmingham Master Plan. The deadline to submit proposals for consideration is June 1, 2018. During previous meetings regarding the Master Plan RFP there has been discussion on the consultant selection process. The final selection will be made by the City Commission. The part of the process that was discussed at the joint meeting was who should perform a preliminary review of all of the RFP submittals. This topic was extensively discussed at the joint City Commission/ Planning Board meeting of September 16, 2016 (minutes attached). At that meeting several scenarios were considered. The options discussed were to have the Planning Board review the submittals and make a recommendation to the City Commission, which has been the process followed for many of the subarea plans. A second option discussed was to form a subcommittee that incorporates members of the Planning Board, select members of other relevant boards and Birmingham residents. Although no decision was made, as it was a study session, the conversation favored the ad hoc committee approach.

On May 14, 2018, the City Commission established an Ad Hoc Master Plan Selection Committee ("the Committee") to assist in the selection of a consultant to update the City's comprehensive master plan. The Committee was comprised of the following representatives:

- Two (2) Planning Board members
- Two (2) City residents, at least one of whom should be a former City Commissioner
- One (1) Multi-Modal Transportation Board member
- One (1) Advisory Parking Committee member
- One (1) Parks and Recreation Board member
- One (1) Design Review Board/Historic District Commission member
- One (1) Architectural Review Committee member

On July 31, 2018, the Committee met to review the three proposals received in response to the City's RFP for a master plan consultant. After much deliberation, the Committee voted to eliminate the proposal submitted by Houseal Lavigne as it did not provide the requested parking study

component. Two finalists then remained and the Committee recommending inviting both the MKSK and DPZ consultant teams to come into the City for a formal interview. In addition, it was recommended that each of the two finalist consulting teams be asked to extend the term of their proposals by 45 days to allow the City to complete the selection process. Both teams agreed to do so.

On August 29, 2018, the Committee conducted interviews with both MKSK and DPZ, the top two finalists. Each team was given 1.5 hours to conduct a presentation and answer questions from the Committee. The Committee evaluated both teams, and voted 7-1 in favor of recommending to the City Commission that the DPZ team be selected to provide an update to the City's comprehensive master plan.

On September 17, 2018, the City Commission considered the recommendation by the Ad Hoc Committee to select DPZ to provide an update to the City's comprehensive master plan. The City Commission had numerous questions for the representatives of DPZ that were in attendance. After much discussion, the City Commission was unable to pass a motion to approve a contract with either DPZ or MKSK. The City Commission requested that they receive copies of the presentations conducted by both DPZ and MKSK before the Ad Hoc Committee, and requested that representatives from MKSK be present at the next meeting to respond to questions from the City Commission. The Commission voted to continue the matter to their regular meeting on October 8, 2018. Representatives from both DPZ and MKSK will be in attendance that evening. Please see attached presentations, as well as new correspondence from DPZ.

Please find attached the following documents for your review:

- A summary chart of all proposals received comparing the terms of each;
- The RFP that was issued by the City seeking qualified consultants to conduct an update of the City's Master Plan;
- The three proposals received from the Houseal Lavigne, MKSK and DPZ consultant teams;
- Letters sent to DPZ and MKSK, with approval of each team to extend the term of their proposals by 45 days;
- The contract executed by DPZ;
- Copies of the presentations to the Ad Hoc Master Plan Selection Committee;
- Letter dated September 19, 2018 from DPZ to the City; and
- Letter dated September 26, 2018 from the City to DPZ.

SUGGESTED ACTION:

To APPROVE the contract with DPZ Partners, LLC, as recommended by the Ad Hoc Master Plan Selection Committee, in the amount of \$298,000.00 payable from account # 101-721-000-811.000, to provide professional services to prepare an update to the City's comprehensive master plan, and to direct the Mayor to execute same.

an RFP Preliminary Assessment					
		Dropor	sals Submitted by June 1st, 2018		
	Houseal Lavigne/DLZ/inFORM		DPZ/McKenna/Gibbs/Jacobs	MVCV/UD	A/Nelson Nygaard/F&V
Cavariation	Houseal Lavigne/DLZ/IIIFORM ✓		DPZ /MCKellila/Gibbs/Jacobs ✓	MKSK/UD/	√ Neison nygaaru/r&v
Cover Letter	Y		V		Y
Scope of Work					
Community Engagement	 Press releases, notices and newsletters Interactive project website Multi-day community charrette Business workshop Stakeholder interviews and focus group discussions Do-it-yourself (DIY) worshop kits Immersive outreach Social media map.social Community outreach summary memo 	input • Project w • Social me • 2 online s • Unlimited	dia	phase master plan up engagement efforts w • Page on the City we	bsite is starting at phase 3 including and events
Data Collection & Analysis	 Review of past plans, studies and reports Demographic analysis and market overview Existing land use and development Zoning and development controls Community facilities Issues and opportunities memo Staff coordination meeting Planning Board meeting 	Michigan de analysis of • Update of (visions, ch • Retail ma	rmingham, Oakland County and SE emographic data, future projections, and many demographic groups Firminghams residential housing section anges, typology, character) rket study haracteristics survey	and trends	unity profile - existing situation d focus area identification
Parking and Infrastructure Analysis	Firm has suggested that a separate independent parking study be obtained with a separate professional services firm specializing in parking. The firm has however has outlined a transportation analysis in the proposal. NO PARKING ANALYSIS/PLAN IS PROPOSED.	InfrastrucParking aRecomme	ture analysis	Current resididential identification Zoning requirement Street classifications Traffic volumes and Bike facilities	n Parking Assessment district permit parking zone s v. best practices projections ship and bus stop features
Preparation of Draft Plan	A draft plan will be available for review by City Staff, the Planning Board and Public-at-Large. A follow up staff coordination meeting and community open house will be available for feedback.	up into elev deliverables Phase 1: In Phase 2: Pr	as proposed a four-phase process broken yen tasks with specific agendas, and meeting details for each task: itiation, assessment and analysis eparation of draft master plan update efinement of draft master plan update	master plan update d	s will be combined into a final raft with meetings planned with pard, Multi-Modal Board, and Ci
Presentation and Adoption	 Planning Board public hearing City Commission public hearing Final draft of the Master Plan will be given to the City in both hard copy and digital formats, ensuring low-cost reproduction, revision, direct web and social media posting availabilities. 	Phase 4: Fi	nalization and Adoption	afte the 63-day review meeting with the City are included with all s	made before the Planning Boar v period, with an adoption Commission at the end. Meetin stakeholders before and in n meetings with revision time

Time Schedule		18-23 Months		16	5 Months		12	-16 Month	าร
Cost Proposal	\$134,000		\$298,000		\$289,000				
Additional Services	may be reccom Master Plannin 1. Subarea pla	nas offered two additional services that nended based on findings during the g Process for an added fee: ns and regulations update		al services a	are proposed beyond those	Communit patterns d types, arch	y Pattern Bo escription, u nitectural, la	ook that incli Irban patteri ndscape and	ered in the form of a udes a community ns for infill, building d garden patterns, omeowners guide.
Expertise									
Qualifications of Team	✓			✓		✓			
Project Experience		✓			✓			✓	
Minimum of 3 References				✓		✓			
RFP Deliverables									
1 Digital Copy of Proposa		✓		X (USB Dr	rive does not work)	✓			
10 Hard Copies of Proposal		✓			✓			✓	

Project Elements	MKSK Proposal	DPZ Proposal	H/L Proposal
Comprehensive	\$104,500	\$30,000	\$20,000
Community			
Engagement Plan			
Updated Data	30,000	30,000	34,000
Collection & Analysis			
Infrastructure Analysis	33,000	30,000	17,000
Parking Analysis	35,000	25,000	N/A
Attendance at Meetings	34,600	25,000	15,000
Plan Preparation	29,800	118,000	34,000
Finalization & Adoption	23,000	40,000	14,000
TOTAL:	\$289,900	\$298,000	\$134,000

Interview Scores	MKSK Proposal	DPZ Proposal	H/L Proposal
Aggregate Score	1124	1146	N/A
Percentage	86.46%	88.15%	N/A



MEMORANDUM

Planning Division

DATE: September 7, 2018

TO: Joseph A. Valentine, City Manager

FROM: Jana L. Ecker, Planning Director

SUBJECT: Master Plan Consultant Selection

On May 14, 2018, the City Commission established and Ad Hoc Master Plan Selection Committee ("the Committee") to assist in the selection of a consultant to update the City's comprehensive master plan. The Committee was comprised of the following representatives:

- Two (2) Planning Board members
- Two (2) City residents, at least one of whom should be a former City Commissioner
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- One (1) Parks and Recreation Board member
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Please find attached the following documents for your review:

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On August 29, 2018, the Committee conducted interviews with both MKSK and DPZ, the top two finalists. Each team was given 1.5 hours to conduct a presentation and answer questions from the Committee. The Committee evaluated both teams, and voted 7-1 in favor of recommending to the City Commission that the DPZ team be selected to provide an update to the City's comprehensive master plan.



Sealed proposals endorsed <u>"MASTER PLAN UPDATE"</u>, will be received at the Office of the City Clerk, 151 Martin Street, PO Box 3001, Birmingham, Michigan, 48012; until **June 1, 2018 at 3:00pm** after which time bids will be publicly opened and read.

The City of Birmingham, Michigan is accepting sealed bid proposals from qualified professional firms to conduct a comprehensive master plan update. This work must be performed as specified in accordance with the specifications contained in the Request For Proposals (RFP).

The RFP, including the Specifications, may be obtained online from the Michigan Intergovernmental Trade Network at http://www.mitn.info or at the City of Birmingham, 151 Martin St., Birmingham, Michigan, ATTENTION: Jana L. Ecker, Planning Director.

The acceptance of any proposal made pursuant to this invitation shall not be binding upon the City until an agreement has been executed.

Submitted to MITN: April 11, 2018

Deadline for Submissions: June 1, 2018 at 3:00pm

Contact Person: Jana L. Ecker, Planning Director

P.O. Box 3001, 151 Martin Street Birmingham, MI 48012-3001 Phone: 248-530-1841

Email: jecker@bhamgov.org



REQUEST FOR PROPOSALS FOR MASTER PLAN UPDATE

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INTRODUCTION

For purposes of this request for proposals the City of Birmingham will hereby be referred to as "City" and the private consulting firm or firms will hereby be referred to as "Contractor."

The City of Birmingham, Michigan is seeking a comprehensive update of the City-wide master plan, and is accepting sealed bid proposals from qualified professional planning firms who have experience drafting comprehensive master plan updates. Qualified Contractors must demonstrate experience in conducting strategic visioning sessions, encouraging public participation, community consensus building, demographic and land use analysis, parking analysis, planning best practices, and have a strong background working in traditional, walkable communities.

During the evaluation process, the City reserves the right where it may serve the City's best interest to request additional information or clarification from proposers, or to allow corrections of errors or omissions. At the discretion of the City, firms submitting proposals may be requested to make oral presentations as part of the evaluation.

It is anticipated the selection of a firm will be completed by August 1, 2018. An Agreement for services will be required with the selected Contractor. A copy of the Agreement is contained herein as Attachment A. Contract services will commence upon execution of the service agreement by the City.

The purpose of this RFP is to request sealed bid proposals from qualified parties presenting their qualifications, capabilities and costs to provide a comprehensive update of the City-wide master plan. The City's current comprehensive master plan is entitled The Birmingham Plan, and was adopted in 1980. Since the adoption of the master plan, several sub-area plans have also been adopted for specific sections of the City:

- Downtown 2016 Plan (1996);
- Eton Road Corridor Plan (1999);
- Triangle District Plan (2007);
- Alleys and Passages Plan (2012); and
- Multi-modal Transportation Plan (2013);
- Parks and Recreation Master Plan (TBD)

Each of these sub-area plans continue to be relevant and have essentially acted as updates to the City's comprehensive master plan for portions of the City. The new comprehensive master plan should facilitate a collective utilization of the City's various districts coming together. In addition, the review document produced as a result of Andres Duanys' visit in 2014 should also be considered and incorporated into the development of a new comprehensive master plan.

At this time the City is seeking a comprehensive update of the 1980 Birmingham Plan, and the formal inclusion of each of the subarea plans into an updated comprehensive master plan ("the Plan"). Most of the plans noted above primarily address the City's commercial areas, and thus the updated master plan should provide a clear focus and priority on the City's residential areas which were last studied in the City's 1980 comprehensive master plan. While some portions of the Birmingham Plan may continue to be relevant today, specific areas that need to be updated include:

- Community vision and planning objectives;
- Update of Population section to include current demographic data, future projections and analysis;
- Update of Regional and Surrounding Development section to include current and projected demographic data (residential, retail, office, mix of land uses) and analysis of the region, regional and downtown development trends and regional collaboration efforts;
- Update of Residential Housing section to include neighborhood vision in residential areas, analysis of changes in residential patterns and residential areas from 1980 to now, typology and character of neighborhoods, development trends, future projections and future direction;
- The physical characteristics of neighborhoods should be identified and documented including historic attributes, landscape conditions, housing type and the period of construction for each area;
- Review and update of Transportation section to include current local vehicular, pedestrian and bicycle data, recent and currently budgeted infrastructure improvements, current multi-modal trends, regional transportation projects, and future recommendations based on regional and national best practices;
- Update and review of existing land use, updated recommendations for future land uses and an updated future land use map including the area of Woodward between 14 Mile Rd. and Lincoln, known as the S. Woodward gateway;
- Parking analysis and recommendations for both public and private parking regulations throughout the entire City including consideration of parking requirements, public parking needs, residential parking permitting requirements, accessible parking needs, potential for shared parking and emerging and innovative technologies;
- Review and update of the Policies section to encourage the implementation of the City's vision, current goals, best practices, current technological advances, and innovative policies.

This work must be performed as specified in accordance with the specifications outlined by the Scope of Work contained in this Request for Proposals (RFP). It is anticipated

that the master plan update will commence in August of 2018 and be completed by June of 2020.

PUBLIC PARTICIPATION

Extensive public participation is vital to the success of the master plan update. During the master plan update process, the Contractor will solicit and garner the input of the public on the future vision for the City and build consensus to provide the basis for the overall direction of the master plan update. Extensive public input will also be encouraged throughout the entire master planning process, including specific discussions on residential areas, the downtown and commercial areas, and the transitional areas that connect these zones. The selected Contractor will be required to submit a detailed community engagement plan as a part of this RFP that allows for public input throughout the entire process from visioning to formal adoption of the Plan, utilizing contemporary technologies.

SCOPE OF WORK

The selected Contractor will work with the public, City staff, the Planning Board, and the City Commission to review and update Birmingham's master plan. The Contractor will coordinate with City staff and the City Attorney to ensure compliance with all State and/or Federal laws related to a community master plan update. The scope of services is as follows:

- 1. Comprehensive Community Engagement Plan. Create a detailed and inclusive comprehensive Community Engagement Plan to encourage and facilitate ongoing public participation of all stakeholders in the master planning process, including workshops, charrettes, visioning process, surveys, walking tours and/or other such methods that have been demonstrated to stimulate public discourse to gather input from residents and business owners (property owners and retailers) for integration into the strategic vision for the residential neighborhoods and commercial areas within the Plan. This process is expected to include at a minimum, a multi-day workshop that provides substantial opportunities for various local stakeholders and residents to provide input to achieve consensus on the direction of the City moving forward and ongoing engagement with elected and appointed boards and commissions throughout the entire planning process.
- 2. Updated Data Collection and Analysis. Review and update all demographic, social, economic and market data and provide future projections and trends. Review and update existing land use and zoning patterns and evaluate future land uses (ie. zoning district boundaries, transitional zoning, lot consolidation etc.). Evaluate current trends and best practices in other dense, traditional, walkable communities to make policy recommendations for the future success of Birmingham.

- 3. Infrastructure Analysis. Review existing infrastructure, current construction practices, evaluate future needs and provide recommendations. Specific emphasis should be placed on transportation infrastructure, including analysis of existing vehicular, pedestrian, bicycle and transit facilities, current multi-modal trends, the formulation of recommendations based on future projections, best practices and the incorporation of Complete Streets principles and walkability priorities.
- 4. Parking Analysis. Review current parking regulations in effect in the City of Birmingham for both private and public property. Provide best practice analyses and recommendations for updating current parking regulations for both private developments and on street public parking in residential and commercial areas, including consideration of the following:
 - 1. A review of the Central Business District Parking Assessment District with regards to desired future land use, and the need to consider a restructuring of the Parking Assessment District to consider price variations for future expansion of buildings;
 - 2. A study of build-out capacity as it relates to parking needs and perceived parking issues Downtown;
 - 3. The potential need for a municipal parking system in the Triangle District and parking needs in the Rail District, with reference to recent analysis and recommendations;
 - 4. An analysis of the need for other public parking structures and locations along with ideas on financing strategies;
 - 5. A comprehensive review of the Zoning Ordinance parking regulations that apply outside of the Parking Assessment District;
 - 6. Analysis of the impact of ride sharing, autonomous vehicles and mass transit on future parking needs as it pertains to the Metro Detroit area;
 - 7. The need for a written standard relative to the maximum number of dining decks that can be installed in on street parking spaces per block or other defined distance;
 - 8. The need for demand pricing for parking that would create dynamic hourly rates depending on daily changes in demand both on the street and in the structures;
 - 9. Development of a policy for electric vehicle charging stations;
 - 10. Residential Permit parking and alternatives (City-wide);
 - 11. The need for restricted on-street parking between 2am-6am; and
 - 12. A review of options to transition public parking decks to other uses in the future if demand for parking declines.
- 5. **Attendance at Meetings.** The Contractor shall expect to attend the following meetings and base their fees accordingly:
 - A multi-day charrette as noted in subsection (1) above.

- ➤ One (1) meeting with the Planning Board to discuss process and finalize a schedule to meet the requirements of this RFP.
- ➤ Up to five (5) work sessions with City staff to discuss progress and recommendations.
- ➤ Two (2) progress report meetings with the City Commission during the master planning process.
- > Up to three (3) work sessions/monthly meetings with the Planning Board to discuss updates to key segments of the Plan.
- > One (1) public hearing for review of the final draft at the Planning Board.
- ➤ One (1) public hearing for review of the final draft at the City Commission.

The City reserves the right to reduce or increase the number of meetings depending on the progress of the project with an adjustment in the contract accordingly.

- 6. **Plan Preparation.** The Contractor will prepare a detailed progress report for review by the City Commission upon completion of 50% of the project, and another progress report for review by the City Commission upon completion of 75% of the project. The Contractor shall provide ongoing engagement with respective commissions and boards. The Contractor will prepare drafts of each key segment of the Plan for review by the Planning Board, and shall make changes as directed throughout the process. The Contractor will prepare one draft version of the Plan including updated census information, maps, charts, exhibits and graphics to create a vital and compelling statement of public policy. The Contractor will work with the public and the Planning Board to refine the draft Plan into a final draft for approval by the City Commission.
- 7. **Finalization and Adoption.** A draft of the updated Plan will be presented to the Planning Board for initial recommendation and to the City Commission for their concurrence. The Contractor will participate in the required public hearing(s) and prepare a completed final document with all necessary changes.

This outline is not necessarily all-inclusive and the Contractor shall include in the proposal any other tasks and services deemed necessary to satisfactorily complete the project.

DELIVERABLES

The Contractor shall provide a detailed, master graphic format of the Plan that incorporates all sub-area plans and includes an extensive use of illustrations, photos, before and after examples, charts and tables that clearly depict the plan content, vision and implementation in the following formats upon adoption of the final version of the Plan:

- 1. One (1) reproducible PDF digital file and twenty (20) hard copies of the draft Plan at 50% completion of plan;
- 2. One (1) reproducible PDF digital file and twenty (20) hard copies of the draft Plan at 75% completion of plan;
- 3. One (1) reproducible PDF digital file and twenty (20) hard color copies of the completed plan;
- 4. One reproducible PDF digital file of the final Plan for publication on the web and social media; and
- 5. One page infographic outlining vision, goals and recommendations of the Plan.

All data, illustrations and projections created or compiled throughout the project shall become the sole property of the City of Birmingham.

TIME SCHEDULE AND COST PROPOSAL

All proposals must include a proposed time schedule for completion of the project and a fixed price agreement with an associated fee schedule for extra meeting costs, should they be required. Reimbursable expenses will be billed at direct cost plus a 10% administrative charge. Normal reimbursable expenses including... associated with the project are to be included in the estimated fees as outlined in the proposal.

The Contractor shall perform all services outlined in this RFP in accordance with the requirements as defined and noted herein.

<u>INVITATION TO SUBMIT A PROPOSAL</u>

Proposals shall be submitted no later than Friday June 1, 2018 at 3:00pm to:

City of Birmingham
Attn: City Clerk
151 Martin Street
Birmingham, Michigan 48009

One (1) electronic copy and ten (10) hard copies of the proposal must be submitted. The proposal should be firmly sealed in an envelope, which shall be clearly marked on the outside, <u>"MASTER PLAN UPDATE"</u>. Any proposal received after the due date cannot be accepted and will be rejected and returned, unopened, to the proposer. Proposer may submit more than one proposal provided each proposal meets the functional requirements.

SUBMISSION REQUIREMENTS

All proposals that wish to be considered must contain the following:

- (1) Cover Letter:
- (2) Outline of qualifications of the Contractor and of the key employees that will be involved in the project, including an organizational chart of the roles and

responsibilities of each team member, and references for the team leader(s). The project team should include each of the following skill sets:

- Urban design;
- Multi-modal transportation;
- Sustainability;
- Urban planning;
- Zoning and form-based code;
- Architecture;
- Physical design;
- Landscape architecture;
- Transportation engineering;
- Parking expertise; and
- National Charrette Institute certification and/or training.
- (3) Outline of Contractor(s) experience with the preparation of similar master plan updates, including references from at least two relevant communities where you have completed such plans. (Portions of sample plans prepared by the Contractor should be submitted with the proposal, up to a maximum of twenty-five (25) pages);
- (4) Outline presenting a description of the scope of work to be completed, broken down into the following separate components:
 - (i) Community Engagement Plan;
 - (ii) Data collection and analysis;
 - (iii) Parking and infrastructure Analysis;
 - (iv) Preparation of draft plan;
 - (v) Presentation and Adoption;
- (5) Proposed time frame for completion of each component of the scope of work;
- (6) A statement of any additional services that you recommend, if any. Define hourly rates for additional services by discipline.
- (7) Bidders Agreement (Attachment B);
- (8) Cost Proposal (Attachment C); and
- (9) Iran Sanctions Act Vendor Certification (Attachment D).

INSTRUCTIONS TO BIDDERS

- Any and all forms requesting information from the bidder must be completed on the attached forms contained herein (see Contractor's Responsibilities). If more than one bid is submitted, a separate bid proposal form must be used for each.
- Any request for clarification of this RFP shall be made in writing and delivered to: Jana L. Ecker, Planning Director, 151 Martin Street, Birmingham, MI, or via email to jecker@bhamgov.org. Such request for clarification shall be delivered, in writing, no later than 5 days prior to the deadline for

<u>submissions</u>. Email requests must contain in their subject line "Request for Clarification".

- 3. All proposals must be submitted following the RFP format as stated in this document and shall be subject to all requirements of this document including the instruction to respondents and general information sections. All proposals must be regular in every respect and no interlineations, excisions, or special conditions shall be made or included in the RFP format by the respondent.
- 4. The contract will be awarded by the City of Birmingham to the most responsive and responsible bidder and the contract will require the completion of the work pursuant to these documents.
- 5. Each respondent shall include in their proposal, in the format requested, the cost of performing the work. Municipalities are exempt from Michigan State Sales and Federal Excise taxes. Do not include such taxes in the proposal figure. The City will furnish the successful company with tax exemption information when requested.
- 6. Each respondent shall include in their proposal the following information: Firm name, address, city, state, zip code, telephone number, and fax number. The company shall also provide the name, address, telephone number and email address of an individual in their organization to whom notices and inquiries by the City should be directed as part of their proposal.

EVALUATION PROCEDURE AND CRITERIA

The City will utilize a qualifications-based selection process in choosing a Contractor for the completion of this work. The evaluation panel will consist of City staff, board members, and/or any other person(s) designated by the City who will evaluate the proposals based on, but not limited to, the following criteria:

- Ability to provide services as outlined.
- Experience of the Contractor with similar projects.
- Professional qualification of key employees assigned to the project.
- Public Involvement Process.
- Content of Proposal.
- Cost of Services.
- Timeline and Schedule for Completion.
- References.

TERMS AND CONDITIONS

1. The City reserves the right to reject any or all proposals received, waive informalities, or accept any proposal, in whole or in part, it deems best. The City reserves the right to award the contract to the next most qualified Contractor if

the successful Contractor does not execute a contract within ten (10) days after the award of the proposal.

- 2. The City reserves the right to request clarification of information submitted and to request additional information of one or more Contractors.
- 3. The City reserves the right to terminate the contract at its discretion should it be determined that the services provided do not meet the specifications contained herein. The City may terminate this Agreement at any point in the process upon notice to Contractor sufficient to indicate the City's desire to do so. In the case of such a stoppage, the City agrees to pay Contractor for services rendered to the time of notice, subject to the contract maximum amount.
- 4. Any proposal may be withdrawn up until the date and time set above for the opening of the proposals. Any proposals not so withdrawn shall constitute an irrevocable offer, for a period of ninety (90) days, to provide the services set forth in the proposal.
- 5. The cost of preparing and submitting a proposal is the responsibility of the Contractor and shall not be chargeable in any manner to the City.
- 6. Payment will be made within thirty (30) days after invoice. Acceptance by the City is defined as authorization by the designated City representative to this project that all the criteria requested under the Scope of Work contained herein have been provided. Invoices are to be rendered each month following the date of execution of an Agreement with the City.
- 7. The Contractor will not exceed the timelines established for the completion of this project.
- 8. The successful bidder shall enter into and will execute the contract as set forth and attached as Attachment A.

CONTRACTOR'S RESPONSIBILITIES

Each bidder shall provide the following as part of their proposal:

- 1. Complete and sign all forms requested for completion within this RFP.
 - a. Bidder's Agreement (Attachment B)
 - b. Cost Proposal (Attachment C)
 - c. Iran Sanctions Act Vendor Certification Form (Attachment D)
 - d. Agreement (Attachment A only if selected by the City).
- 2. Provide a description of completed projects that demonstrate the firm's ability to complete projects of similar scope, size, and purpose, and in a timely manner, and within budget.

- 3. Provide a written plan detailing the anticipated timeline for completion of the tasks set forth in the Scope of Work.
- 4. The Contractor will be responsible for any changes necessary for the plans to be approved by the City of Birmingham.
- 5. Provide a description of the firm, including resumes and professional qualifications of the principals involved in administering the project.
- 6. Provide a list of sub-contractors and their qualifications, if applicable.
- 7. Provide three (3) client references from past projects, include current phone numbers. At least two (2) of the client references should be for similar projects.
- 8. Provide a project timeline addressing each section within the Scope of Work and a description of the overall project approach. Include a statement that the Contractor will be available according to the proposed timeline.

CITY RESPONSIBILITY

The City will provide a designated representative to work with the Contractor to coordinate both the City's and Contractor's efforts and to review and approve any work performed by the Contractor.

SETTLEMENT OF DISPUTES

The successful bidder agrees to certain dispute resolution avenues/limitations. Please refer to paragraph 17 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

INSURANCE

The successful bidder is required to procure and maintain certain types of insurances. Please refer to paragraph 12 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

CONTINUATION OF COVERAGE

The Contractor also agrees to provide all insurance coverages as specified. Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the agreement, the City may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the contract amount. In obtaining such coverage, Birmingham shall have no obligation to procure the most cost effective coverage but may contract with any insurer for such coverage.

EXECUTION OF CONTRACT

The bidder whose proposal is accepted shall be required to execute the contract and to furnish all insurance coverages as specified within ten (10) days after receiving notice of such acceptance. Any contract awarded pursuant to any bid shall not be binding upon the City until a written contract has been executed by both parties. Failure or refusal to execute the contract shall be considered an abandonment of all rights and interest in the award and the contract may be awarded to another. The successful bidder agrees to enter into and will execute the contract as set forth and attached as Attachment A.

INDEMNIFICATION

The successful bidder agrees to indemnify the City and various associated persons. Please refer to paragraph 13 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

CONFLICT OF INTEREST

The successful bidder is subject to certain conflict of interest requirements/restrictions. Please refer to paragraph 14 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

EXAMINATION OF PROPOSAL MATERIALS

The submission of a proposal shall be deemed a representation and warranty by the Contractor that it has investigated all aspects of the RFP, that it is aware of the applicable facts pertaining to the RFP process and its procedures and requirements, and that it has read and understands the RFP. Statistical information which may be contained in the RFP or any addendum thereto is for informational purposes only.

PROJECT TIMELINE (MAXIMUM)

Evaluate Respondents
Interview Contractors
Award Contract
Project Kick Off Meeting
50% Completion of draft Plan
75% Completion of draft Plan
February 2020
Final Draft of Plan Completed
June 2018
June-July 2018
August 2018
August 2019
February 2020
June 2020

The Contractor will not exceed the timelines established for the completion of this project. A shorter timeline is encouraged and preferred.

ATTACHMENT A - AGREEMENT FOR MASTER PLAN UPDATE

Stre Inc	This AGREEMENT, made thisday of, 2018, by and ween CITY OF BIRMINGHAM, having its principal municipal office at 151 Martin eet, Birmingham, MI (hereinafter sometimes called "City"), and, having its principal office at (hereinafter called intractor"), provides as follows: WITNESSETH:
con sea	WHEREAS, the City has heretofore advertised for bids for the procurement and formance of services required to complete an update to the City-wide apprehensive master plan, and in connection therewith has prepared a request for led proposals ("RFP"), which includes certain instructions to bidders, specifications, and conditions.
-	WHEREAS , the Contractor has professional qualifications that meet the project uirements and has made a bid in accordance with such request for cost proposals to applete an update to the City-wide comprehensive master plan.
unc 1.	W, THEREFORE, for and in consideration of the respective agreements and dertakings herein contained, the parties agree as follows: It is mutually agreed by and between the parties that the documents consisting of the Request for Proposal to complete an update to the City-wide comprehensive master plan and the Contractor's cost proposal dated, 2018 shall be incorporated herein by reference and shall become a part of this Agreement, and shall be binding upon both parties hereto. If any of the documents are in conflict with one another, this Agreement shall take precedence, then the RFP.
	The City shall pay the Contractor for the performance of this Agreement in an amount not to exceed, as set forth in the Contractor's, 2018 cost proposal.
	This Agreement shall commence upon execution by both parties, unless the City exercises its option to terminate the Agreement in accordance with the Request for Proposals.
	The Contractor shall employ personnel of good moral character and fitness in performing all services under this Agreement.

5. The Contractor and the City agree that the Contractor is acting as an independent contractor with respect to the Contractor's role in providing services to the City pursuant to this Agreement, and as such, shall be liable for its own actions and neither the Contractor nor its employees shall be construed as employees of the

City. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the City nor the Contractor shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The Contractor shall not be entitled or eligible to participate in any benefits or privileges given or extended by the City, or be deemed an employee of the City for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the City.

- 6. The Contractor acknowledges that in performing services pursuant to this Agreement, certain confidential and/or proprietary information (including, but not limited to, internal organization, methodology, personnel and financial information, etc.) may become involved. The Contractor recognizes that unauthorized exposure of such confidential or proprietary information could irreparably damage the City. Therefore, the Contractor agrees to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Contractor shall inform its employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Contractor further agrees to use such confidential or proprietary information only for the purpose of performing services pursuant to this Agreement. The Contractor agrees that it will require all subcontractors to sign a Non-Disclosure Agreement satisfactory to the City Attorney.
- 7. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan. The Contractor agrees to perform all services provided for in this Agreement in accordance with and in full compliance with all local, state and federal laws and regulations.
- 8. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.
- 9. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Contractor without the prior written consent of the City. Any attempt at assignment without prior written consent shall be void and of no effect.
- 10. The Contractor agrees that neither it nor its subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to

employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Contractor shall inform the City of all claims or suits asserted against it by the Contractor's employees who work pursuant to this Agreement. The Contractor shall provide the City with periodic status reports concerning all such claims or suits, at intervals established by the City.

- 11. The Contractor shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with carriers acceptable to the City of Birmingham.
- 12. The Contractor shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:
 - A. <u>Workers' Compensation Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
 - B. <u>Commercial General Liability Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
 - C. <u>Motor Vehicle Liability</u>: Contractor shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
 - D. <u>Additional Insured</u>: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following shall be *Additional Insureds*: The City of Birmingham, including all elected and appointed officials, all employee and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any other coverage that may be available to the additional insured, whether any other available coverage by primary, contributing or excess.

- E. <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance (and Professional Liability Insurance, if applicable), as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal, shall be sent to: Finance Director, City of Birmingham, PO Box 3001, 151 Martin Street, Birmingham, MI 48012-3001.
- F. <u>Proof of Insurance Coverage</u>: Contractor shall provide the City of Birmingham, at the time the Agreement is returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below.
 - 1) Two (2) copies of Certificate of Insurance for Workers' Compensation Insurance;
 - 2) Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance;
 - 3) Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
 - 4) Two (2) copies of Certificate of Insurance for Professional Liability Insurance;
 - 5) If so requested, Certified Copies of all policies mentioned above will be furnished.
- G. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this Agreement, Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least (10) days prior to the expiration date.
- H. <u>Maintaining Insurance</u>: Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the Agreement, the City of Birmingham may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the Agreement amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.
- 13. To the fullest extent permitted by law, the Contractor and any entity or person for whom the Contractor is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall

not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.

- 14. If, after the effective date of this Agreement, any official of the City, or spouse, child, parent or in-law of such official or employee shall become directly or indirectly interested in this Agreement or the affairs of the Contractor, the City shall have the right to terminate this Agreement without further liability to the Contractor if the disqualification has not been removed within thirty (30) days after the City has given the Contractor notice of the disqualifying interest. Ownership of less than one percent (1%) of the stock or other equity interest in a corporation or partnership shall not be a disqualifying interest. Employment shall be a disqualifying interest.
- 15. If Contractor fails to perform its obligations hereunder, the City may take any and all remedial actions provided by the general specifications or otherwise permitted by law.
- 16. All notices required to be sent pursuant to this Agreement shall be mailed to the following addresses:

City of Birmingham Attn: Jana L. Ecker 151 Martin Street Birmingham, MI 48009 248-530-1841 CONTRACTOR

- 17. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.
- 18. <u>FAIR PROCUREMENT OPPORTUNITY:</u> Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This

will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham.

IN WITNESS WHEREOF, the said parties have caused this Agreement to be executed as of the date and year above written.

WIINESSES:	CONTRACTOR
	By:
	Its:
	CITY OF BIRMINGHAM
	By: Andrew Harris Its: Mayor
	By:
	Cherilynn Mynsberge Its: City Clerk
Approved:	
Jana L. Ecker, Planning Director (Approved as to substance)	Joseph A. Valentine City Manager (Approved as to substance)
Timothy J. Currier, City Attorney (Approved as to form)	
Mark Gerber, Director of Finance (Approved as to financial obligation)	

ATTACHMENT B - BIDDER'S AGREEMENT FOR MASTER PLAN UPDATE

In submitting this proposal, as herein described, the Contractor agrees that:

- 1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- 2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

PREPARED BY	DATE
(Print Name)	
TITLE	DATE
AUTHORIZED SIGNATURE	E-MAIL ADDRESS
COMPANY	
ADDRESS	PHONE
NAME OF PARENT COMPANY	PHONE
ADDRESS	

ATTACHMENT C - COST PROPOSAL FOR MASTER PLAN UPDATE

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be itemized as follows:

Project Elements		
1. Comprehensive Community	¢.	
Engagement Plan 2. Updated Data Collection and Analysis	\$ \$	
3. Infrastructure Analysis	\$ \$	
4. Parking Analysis	\$	
5. Attendance at Meetings	\$ \$ \$	
6. Plan Preparation	\$	
7. Finalization and Adoption	\$	
TOTAL AMOUNT	\$	
Additional Meeting Charge	\$	per meeting
Additional Services Recommended (if	\$	/ hour
any):	\$	/ hour
	\$	/ hour

Firm Name			
Authorized signature	Date		

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM

FOR MASTER PLAN UPDATE

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

PREPARED BY	DATE
(Print Name)	
TITLE	DATE
AUTHORIZED SIGNATURE	E-MAIL ADDRESS
COMPANY	
ADDRESS	PHONE
NAME OF PARENT COMPANY	PHONE
ADDRESS	
TAXPAYER I.D.#	

City of Birmingham, Michigan

Master Plan Update Proposal

June 1, 2018









June 1, 2018

Jana L. Ecker, Planning Director P.O. Box 3001 151 Martin Street Birmingham, MI 48012-3001

Dear Ms. Ecker,

Houseal Lavigne Associates is pleased to present this proposal to the City of Birmingham in response to the request for proposals to update its existing Master Plan. We believe our project team is exceptionally qualified to undertake this assignment and provide the City with a relatable, responsive, visionary, and actionable Master Plan that will serve Birmingham for years to come.

Houseal Lavigne Associates is an award-winning community planning, economic development, and urban design firm. Since the firm's inception in 2004, we have received 11 awards for "Best Plan" from several state chapters of the American Planning Association (APA), including the Daniel Burnham Award for a Comprehensive Plan by the Michigan Chapter of the APA and the Mackinac Prize by the Michigan Chapter of the Congress for New Urbanism for our work on the Flint Master Plan. In 2014, we were awarded the APA's National Planning Excellence Award for an Emerging Planning and Design Firm. This prestigious award recognizes our innovative planning approach, targeted implementation strategies, creative and effective outreach, integration of emergent technologies, industry-leading graphic communication, and overall influence on professional planning practice in the region and across the United States.

Our approach to preparing Birmingham's Master Plan Update includes (1) establishing a strong sense of stewardship through creative outreach and community rapport; (2) fully examining plan alternatives by assessing physical constraints, market conditions, and development feasibility; (3) focusing on healthy, walkable, and sustainable solutions; (4) developing visionary, yet pragmatic planning recommendations; and (5) establishing targeted strategies that result in the tangible implementation of projects.

We have assembled a project team comprised of leading experts in the fields of planning, transportation and civil engineering, and urban design. In addition, all members of the project team have significant local and regional experience.

For this assignment, we are joined by staff from the firms **DLZ Michigan**, **Inc.**, who will be providing all services relating to transportation and civil engineering, as well as **inFORM studio**, who will provide all services relating to historic preservation and as-needed design and architectural services.

We will work closely with City staff, officials, and City-retained consultants to ensure that local expertise and insight strengthens the planning process. This coordinated approach will result in a Master Plan that addresses issues of growth and development that have occurred since Birmingham prepared its last Master Plan and that sustains the City's character and quality of life.

We appreciate the opportunity to be considered for this important project and look forward to the prospect of working with the City of Birmingham. Should you have any questions regarding this submittal, please do not hesitate to contact us.

Sincerely,

Houseal Lavigne Associates

HOUSEAL LAVIGNE ASSOCIATES, LLC

CHICAGO, IL 188 West Randolph Street, Suite 200 Chicago, Illinois 60601 (312) 372-1008 John Houseal, FAICP

Principal | Co-founder

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SECTION 1 TEAM QUALIFICATIONS

SECTION 1

TEAM QUALIFICATIONS

Our project team for the City of Birmingham's Master Plan Update project is comprised of a group of planning professionals with specialized expertise in all areas of master planning, land use planning, downtown and corridor planning, neighborhood and special area planning, zoning, economic development, strategic visioning, community outreach and public participation, demographic and market analysis. Our team has been specifically assembled to provide the City of Birmingham with a responsive, effective, creative, and unique Master Plan.



Houseal Lavigne Associates (HLA) is an award-winning community planning, economic development, and urban design firm with extensive experience in a wide range of assignments. Since the firm's inception, we have completed over 350 plans and studies for more than 250 clients, the majority of which are municipalities. We have received 11 awards for "Best Plan" from several state chapters of the American Planning Association (APA), including an award from the Michigan APA for our work on the City of Flint's Master Plan. In 2014, we were awarded the APA's National Planning Excellence Award for an Emerging Planning and Design Firm. This prestigious award recognizes our innovative planning approach, targeted implementation strategies, creative and effective outreach, integration of emergent technologies, industry-leading graphic communication, and overall influence on the planning profession across the United States.



DLZ Michigan, Inc. (DLZ) is a Michigan-based, full-service, multidisciplinary, and minority-owned business enterprise. DLZ wil be assisting Houseal Lavigne Associates with the civil and transportation components of the Birmingham Master Plan Update project.



inFORM Studio is a Michigan-based architectural and urban design firm that will be assisting Houseal Lavigne Associates with all aspects of building preservation, as well as urban design, illustrations and renderings, and architectural services.

Firm Information

Houseal Lavigne Associates, LLC

188 W. Randolph St., Suite 200 Chicago, IL 60601 (312) 372-1008

DLZ Michigan, Inc.

155 W. Congress, Suite 605 Detroit, MI 48226 (313) 961-4040

inFORM Studio

235 E. Main St., Suite 102b Northville, MI 48167 (248) 449-3564

Primary Contact

John Houseal, FAICP

Principal | Co-founder jhouseal@hlplanning.com (312) 372-1008 x 101



SERVICES

Master Planning

Downtown Planning

Transit-Oriented Development

Corridor Planning

Neighborhood & Subarea Planning

Zoning/Regulatory Controls

Design Guidelines

Land Planning & Site Design

Park, Recreation & Trail Master Planning

Market & Demographic Analysis

Fiscal/Economic Impact Analysis

Development Services

Retainer Services

Firm Profile

Houseal Lavigne Associates is an award-winning consulting firm specializing in all areas of community planning, economic development and urban design, with expertise in comprehensive planning, corridor planning, downtown planning, neighborhood planning, zoning, market analysis, project implementation and financing, and citizen engagement. We strive for a true collaboration of disciplines and talents, infusing all of our projects with creativity, realism, and insight.

Houseal Lavigne Associates provides a fresh approach to urban planning, a strong foundation in contemporary development practices, an insightful understanding of market and economic analysis, and an effective ability to conduct engaging community outreach. Our firm is able to meet the unique challenges of any planning assignment and develop creative solutions that ensure compatibility between both the existing and the new, and the built and natural environments.

Houseal Lavigne Associates provides services ranging from detailed economic analysis to long-term community visioning; from smaller site planning and design projects to larger regional studies; from creating exciting new transit-oriented development plans to revitalizing historic downtowns; and from shaping broad community strategies to creating context-sensitive zoning regulations.

Houseal Lavigne Associates consists of a team dedicated professionals experienced in community planning, urban design, and economic development. Our firm has worked with more than 250 communities in states across the country, providing professional planning services for both public - and private - sector clients.

Houseal Lavigne Associates is founded on a set of core principles that, when combined with our professional experience and expertise, create a consulting firm that stands above the rest. These principles include Better Community Outreach, Commitment to Creativity, Graphic Communication, Technology Integration, and Client Satisfaction.

Founding Principles

Houseal Lavigne Associates began with a set of principles that still guide every project we undertake. By continually honoring these principles, we have reliably and repeatedly produced plans that don't just meet our clients' needs but are points of pride in their communities. Our principles result in plans that are recognized as some of the best in the industry. These founding principles are:

Better Community Outreach. Fostering a strong sense of "community stewardship" requires using an inclusive approach to citizen participation and is a foundation of our planning approach.

Commitment to Creativity. Vision and creativity are among the most important components of good planning and design, so we provide fresh, responsive, and intriguing ideas for local consideration.

Graphic Communication. All plans and documents should utilize a highly illustrative and graphic approach to better communicate planning and development concepts in a user-friendly, easy-to-understand, and attractive manner.

Technology Integration. The integration of appropriate technologies should be used to improve the planning process and product—increasing communication and involvement with the public, gathering and assessing vital information, and producing more effective documents and recommendations.

Client Satisfaction. Meeting the needs of our clients is a top priority. We strive to achieve this by developing and maintaining strong professional relationships, being responsive to clients' concerns and aspirations, and always aiming to exceed expectations.



RECENT AWARDS

2017

IL APA - Outreach Award Envision Oak Park Comprehensive Plan

2016

MN APA - Innovation Award St. Cloud Comprehensive Plan

2015

MI APA - Daniel Burnham Award (Best Plan) Imagine Flint Master Plan

Michigan Chapter of Congress for the New Urbanism - Mackinaw Prize Imagine Flint Master Plan

2014

American Planning Association National Planning Excellence Award for an Emerging Planning & Design Firm

MI APA - Planning Excellence Award for Public Outreach - Imagine Flint Master Plan

IA APA - Daniel Burnham Award (Best Plan) Coralville Community Plan

2013

Kane County Plan of the Year Award City of St. Charles Comprehensive Plan

2012

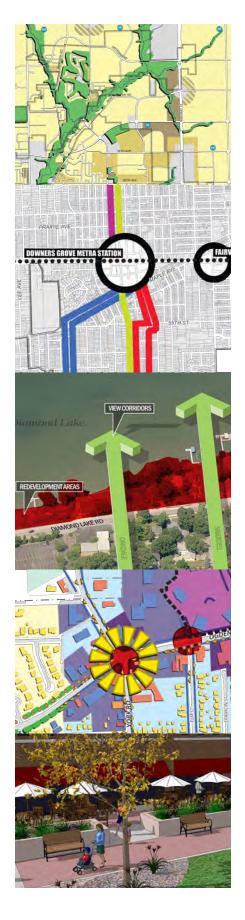
IL APA - Daniel Burnham Award (Best Plan) Village of Downers Grove Comprehensive Plan

ACEC Illinois - Merit Award - Studies & Research IL 47 Corridor Plan

Chaddick Institute - Development Regulation Award Oak Brook Commercial Areas Master Plan

2011

IL APA - Gold Award - Implementation Village of Bartlett Town Center



Approach to Planning

Our philosophy of community planning, visioning, goal setting, and implementation is built on a foundation of professional experience, sound planning and design practices, and a track record of award-winning projects. Our approach combines extensive community outreach and participation, highly illustrative and user-friendly maps and graphics, and innovative utilization of cutting-edge technologies. Our process will help establish a community vision, set community goals, and foster community consensus. Our approach to this assignment will include and be guided by the following core principles, which will allow us to successfully engage the community, develop viable and visionary solutions, and comprehensively respond to local issues and needs.

Focus on Urban Planning and Community Development. Houseal Lavigne Associates specializes in community planning, urban design, and economic development. It is our focus, it is our passion, and it is our primary area of expertise. We are a specialized urban planning firm whose efforts are not diluted or compromised by bureaucracy or competing interests. Our focus and size allow us to provide the creativity, flexibility, and responsiveness needed to meet our clients' needs without wasting precious resources.

Foundation of Experience. Houseal Lavigne Associates has extensive experience in community planning, visioning and goal setting, implementation strategies, comprehensive planning, economic development studies, urban design, and more. We have directed, managed, and assisted with similar planning assignments for communities across the country.

Engaging Community Outreach. One of our greatest strengths is our ability to design and conduct engaging and effective community outreach. It is a vital part of all of our planning projects, and we believe it is a necessary component of any successful planning process. It is important that all interested persons have the ability to participate in the planning process and to know they have been heard. We believe strongly in fostering a stewardship for the community and achieving a high level of community consensus for planning initiatives.

Illustrative Format and Quality Graphics. All our projects incorporate a highly illustrative and graphic approach to communicating planning and development policies and recommendations. We have developed a distinct design approach to urban planning and community development which we incorporate into all of our projects. The results of this approach are reports and plans that are attractive, distinctive, and easy to use and understand.

Technology Integration. Integrating appropriate technologies can greatly improve the planning process and product. We specialize in the use of GIS, designing and hosting project websites, online surveys, keypad polling, and utilizing 3d rendering to improve planning and development concepts. Our maps and graphics are attractive and compatible with existing and developing information systems. When designed and managed appropriately, these technologies greatly improve communication and involvement with the public.

Vision, Creativity, and Innovation. We believe vision and creativity are among the most important components of good planning and design. Too often, vision and creativity are lacking in the planning process and final planning product. With the help of the community, we will establish a "vision" that captures the local spirit and character, while presenting new ideas and concepts for consideration. Our fresh approach to planning and development will broaden the range of available options and maximize the potential of community resources.

Targeted Implementation. Identifying the "next steps" to be taken is an important part of any good plan. Plans are not meant to sit idle, but should be used on a regular and ongoing basis as a foundation for decision-making. Our plans identify key implementation steps that should be taken to "jump start" the ultimate realization of a plan's vision and recommendations. Implementation steps outline the projects and actions to be taken and identify responsibilities, timing, and funding options.

Commitment to Client Satisfaction. Our Firm's primary focus is on client satisfaction. We pride ourselves on our professional relationships, reputation, and client references. We develop strong relationships with our clients and are often considered to be an extension of staff. We are responsive to clients' concerns, we are available at anytime to assist with unforeseen events and issues, and we are committed to doing whatever it takes to serve the client. Many of our initial engagements result in long-term, on-going professional relationships with client communities.







Michigan Offices

Detroit

155 W. Congress, Suite 605 Detroit, Michigan 48226 (313) 961-4040

Lansing

1425 Keyston Avenue Lansing, Michigan 48911 (517) 393-6800

Kalamazoo

535 S. Burdick, Suite 248 Kalamazoo, Michigan 49007 (269) 553-0640

Melvindale

4041 Martel Street Melvindale, Michigan 48122 (313) 383-3216

Saint Joseph

505 Pleasant Street, Suite 204 Saint Joseph, Michigan 49085 (269) 281-0744

Firm Profile

DLZ, a Michigan Corporation, is a multidisciplinary, Minority-Owned Business Enterprise (MBE) that has been providing complete engineering, architectural, environmental, planning, construction, and survey services to both public and private sector clients since 1916. DLZ is an American success story, having graduated in 1984 from the 8(a) Small Disadvantaged Business Program and transforming into the full-service and one of the most reliable and experienced professional consulting firms in the Midwest.

Award-Winning Firm

Consistently ranked as one of Engineering News-Record (ENR)'s Top 150 Design Firms, DLZ's continual growth and success is a testament to their work quality and client satisfaction. The commitment to excellence they provide has resulted in DLZ being ranked by Engineering News Record as the No. 1 Design Firm of the Year in the Midwest and firmly believes that these ratings come from only one source, the trust and confidence our clients have placed in our abilities.

Commitment to MBEs and WBEs

DLZ is very proud of its heritage as a minority-owned business within the state of Michigan and continues to place particular emphasis, in the procurement of subcontractors and suppliers, on small disadvantaged businesses (DBEs), minority-owned businesses (MBEs), and women-owned businesses (WBEs). DLZ is committed to the creation, growth and expansion of DBEs, MBEs and WBEs and currently serves as a mentoring firm for other minority firms through the Michigan Minority Business Development Council.

Office Locations

DLZ operates five full-service offices in Michigan, including: Lansing, Kalamazoo, Detroit, Melvindale, and Saint Joseph. Additionally, DLZ brings the support of its midwest presence, with offices in Indiana, Ohio, Illinois, Kentucky, Wisconsin, and Pennsylvania. Each office is equipped with intranet services and e-mail capabilities allowing for real-time transfer of data and project information, in addition to communication systems to enable production and transfer of documents between offices.



in FORM studio

Firm Profile

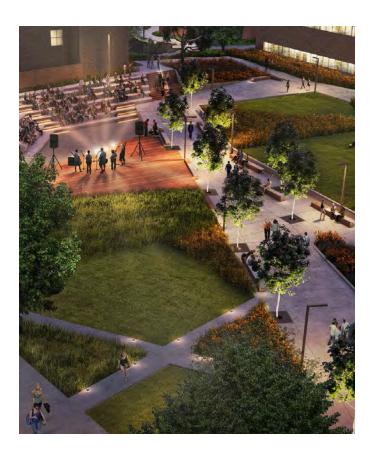
inFORM studio is a an urban and architectural design collective devoted to impacting communities and inspiring culture. Founded in 2000, inFORM is a woman-owned practice with offices in Detroit and Chicago. With over 40 designers representing 13 countries, inFORM works as a multidisciplinary team of architects, interior designers, engineers, and urban designers on projects of varying scales and typologies, all across the globe.

As a human-focused team of designers, they place a strong emphasis on creating connections between people and place. By integrating advanced design technologies throughout the design process, they are able to formulate solutions that go beyond formal expression into client envisioned measurables.

Recognized Design Excellence: inFORM has received continued peer recognition and community attention for design excellence in acquiring numerous state, national, and international design awards, authoring the winning entry for the Bagley Street Pedestrian Bridge as part of the \$170 million Michigan Department of Transportation Ambassador Gateway Project and in June of 2003, was selected as one of eight international finalists out of 1,557 entries to present at the Grand Egyptian Museum Competition Symposium in Cairo, Egypt. In 2004, the firm was invited to participate, as one of 30 firms from around the world, in the prestigious Canadian Museum of Human Rights competition and recently received an honorable mention in the world-wide competition for the Museum of Contemporary Art and Planning Exhibition in Shenzhen, China.

Experienced Personnel: in FORM's staff expertise and diversity is apparent in their work. Their staff maintains the highest expectations of all their work products, which result in consistent quality to design, planning, document preparation and detailing.

LEED-Accredited Professionals: inFORM staff also includes six LEED Accredited Professionals and a sustainability expert that has lectured extensively worldwide leading various support staff. Furthermore, the firm possesses the ability, through 3-dimensional representation and AutoCAD workstations, to provide all deliverables necessary for heightened graphic materials and final building design documentation.



Virtual Reality Experiences: in FORM has always pushed the boundaries of the architectural design process. While applications like Revit, Grasshopper, Dynamo and Rhino help create accessible graphics, work has traditionally been limited by a two-dimensional plane/ static environment. Virtual reality headsets break beyond this barrier, and present an opportunity for design to become immersive. Working through our 3D software we are now capable of exporting development models and visualizations into InsiteVR and stepping into them with the HTC ViveVR headset. This allows designers and clients to engage in a fully immersive experience, while gaining a more complete understanding of the scale, aesthetics and overall feel of what will emerge as reality upon a project's completion.

Computation & Analytics: The design industry is currently experiencing a disruption as a result of rapid technological advancements. We are in an era of building information modeling (BIM), which is embedding real world data into digital representation of the building element. While the industry is still embedding data, inFORM studio has moved into an era of building information optimization. They can leverage large amounts of data through the development of computational algorithms that establish a direct relationships between project stakeholder data and parameters, inclusive of construction, economic and fabrication constraints. Our data driven process allows us to run several environmental and performance analyses which are presented via interactive project dashboards that provide insight for better design decision making.

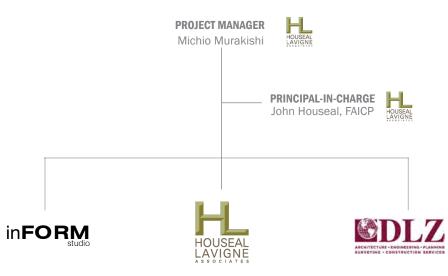
SECTION 2 KEY STAFF RESUMES

SECTION 2

KEY STAFF RESUMES

Our professional staff provide specialized expertise in a multitude of disciplines to benefit the City of Birmingham's Master Plan Update, including community visioning, land use planning, market analysis, economic development, transportation planning, urban design, architecture, graphic design, visualizations, development strategies, fiscal impact analysis, corridor planning, and community outreach. We are committed to developing creative solutions for the Master Plan to ensure compatibility between the existing, new, built, and natural environments. Most importantly, our proposed team possesses the skills necessary to create a responsive, detailed, visionary, and achievable Master Plan for the City of Birmingham.

Resumes for the key personnel from **Houseal Lavigne Associates**, as well as from our subconsultant team members, can be found on the following pages.



URBAN DESIGN & ARCHITECTURAL SERVICES

Cory Lavigne, AIA, LEED AP Michael Guthrie, AIA, LEED AP

MARKET & ECONOMIC ANALYSIS

TRANSPORTATION PLANNING

Wesley Butch

Jason Whetton

Dan Gardner

VISUALIZATIONS, GRAPHICS & PLAN COMPOSITION

Devin Lavigne, AICP, LEED AP Nikolas Davis, ALSA

URBAN PLANNING & LAND USE PLANNING

Todd Meyer, PLA, CNU-A, LEED AP

OPTIONAL ZONING CODE & REGULATIONS UPDATE

Jackie Wells





Education

Bachelor of Environmental Sciences University of Michigan

Master of Environmental Planning
Arizona State University

Memberships

American Planning Association

American Institute of Certified Planners inducted Fellow

Lambda Alpha International

OPRF Community Foundation

Board of Directors

Awards

2017 APA-IL Outreach Award Envision Oak Park Comprehensive Plan

2014 APA National Award for Excellence Emerging Planning and Design Firm

2014 APA-MI Public Outreach Award Imagine Flint Master Plan

2014 APA-IA Daniel Burnham Award Coralville Community Plan

2012 APA-IL Daniel Burnham Award Downers Grove Comprehensive Plan

2010 APA-IL Strategic Plan Award River Forest Corridors Plan

2009 APA-IL Implementation Award Ogden Avenue Enhancement Initiative

2007 APA-IL Daniel Burnham Award Carpentersville Comprehensive Plan

2007 APA-IL Implementation Award Palos Park Strategic Plan

DePaul University's Chaddick Institute for Metropolitan Development Award 2012 Oak Brook Commercial Areas Plan 2008 Algonquin Downtown Plan

> Commercial Revitalization Award Oak Brook Commercial Areas Plan Greater OBCC 2009

AICP Certification Instructor

APA National and APA State Chapters 2005 to present

John A. Houseal, FAICP

Principal | Co-Founder

John is a Principal and Co-founder of Houseal Lavigne Associates and has established himself as one of the region's top urban planning professionals. John's reputation and expertise within the profession as a leader in urban planning, contemporary development practices, and community outreach has garnered him wide recognition and numerous planning awards. John has been a featured speaker at national, regional, state, and local events and conferences for issues related to urban planning, zoning, transportation, context sensitive design, and the environment. John is recognized as one of the top community facilitators, consensus builders, and citizen participation experts in the region.

John maintains professional memberships with Lambda Alpha International, American Planning Association, the American Institute of Certified Planners, the National Trust for Historic Preservation, and Urban Land Institute. John received a Bachelor of Science in environmental sciences from University of Michigan and a Master of Environmental Planning for environmental and urban planning from Arizona State University. John is also an AICP inducted Fellow and certification instructor and has been responsible for preparing planners for professional certification since 2005.

Prior to co-founding Houseal Lavigne Associates, John was a Principal and the Director of Urban Planning for URS Corporation, a global multi-disciplinary engineering firm based in San Francisco, California. Working from the Michigan Avenue office in Downtown Chicago, John oversaw and directed the firm's urban planning and community development projects, often coordinating on assignments throughout the country. Prior to being the Director of Urban Planning for URS Corporation, John was a Principal with Trkla, Pettigrew, Allen and Payne (TPAP), a prominent planning and economic development firm in Chicago. While a Principal at TPAP, John directed a wide range of urban planning and community development assignments throughout the Midwest.

From revitalization plans for Chicago's south side neighborhoods to regional highway corridor studies, John has directed, managed, and assisted with a wide range of planning assignments. John has directed a number planning and development related assignments in several states, including comprehensive plans, corridor plans, downtown plans, neighborhood plans, master development/site plans, and more. John has also directed the zoning updates and amendments, as well as the creation of entirely new zoning ordinances, sign ordinances, planned unit development ordinances, overlay districts, and design and development guidelines.

Several unique and very significant assignments have been directed by John and provided significant momentum in his career, including the IDOT SWS Tools for Balanced Growth Study, which was the State of Illinois' first balance growth initiative; the Cap the Ike Study, which was a study examining the creation of "new land" by capping the Eisenhower Expressway for approximately 1.5 miles; and an FAA funded study to examine land use compatibility and the O'Hare Modernization Project (OMP). As project director, John's leadership skills and planning and design expertise were pivotal to the success of these, and many other assignments.

John has received several professional planning awards and distinctions, including an ILAPA Gold Award for Planning; an ILAPA Silver Award for Plan Implementation; an ILAPA Award for Planning Education; ILAPA Awards for Strategic Planning; the DePaul University Chaddick Institute Development Award; the Greater OBCC Commercial Revitalization Award, APA National Excellence Award, and induction into Lambda Alpha International, an international honorary fraternity for professional excellence in the field of land economics.

John A. Houseal, FAICP

Project Experience

Comprehensive Plans

60+ Comprehensive Plans including:

- · Benton Harbor, MI
- Brookfield
- Brownsburg, IN
- Byron
- Carpentersville
- Coralville, IA
- Council Bluffs, IA
- Countryside
- Davis Junction
- **Downers Grove**
- Edinburah, IN
- Evergreen Park
- · Fairview Heights
- Flint, MI
- Frederick, CO
- Forest Park
- Geneva
- Glen Ellvn
- Greater Bridgeport Region, CT
- Hammond, IN
- Harwood Heights
- Homer Glen
- Jackson, MO
- Jackson, TN
- Kenilworth
- Lynwood
- Lansing
- Marion, IA
- Mattoon
- Maywood
- Melrose Park
- Montgomery
- Morton Grove
- Mundelein
- Niles
- Oakbrook Terrace
- Oak Park
- Palos Heights
- Palos Park
- Pleasant Hill, IA
- Prairie Grove
- River Forest
- St. Charles St. Cloud, MN
- Sugar Grove
- Tipton, IN
- Tipton County, IN
- Westmont
- · Whiting, IN
- · Windsor, CO

Downtown Planning

30+ Downtown Plans including:

- · Algonquin Downtown Plan
- · Downers Grove Downtown
- Forest Park Madison Street Corridor
- Geneva Downtown Master Plan
- **Huntly Downtown Master Plan**
- · McHenry Downtown Plan
- Melrose Park Historic Broadway Avenue District Plan
- Morton Downtown Master Plan
- Murray, KY Main Street Plan
- Round Lake Downtown Plan
- · Oshkosh, WI Downtown Plan
- · Winfield Downtown/TOD Plan

Special Area Planning

50+ Special Area Plans, including:

- Bellwood TOD master Development Plan
- Bellwood St. Charles Road Corridor/TOD Plan
- Countryside Dansher Industrial Park Subarea Plan
- Glenview The Glen Parcel 24 Master Plan
- Island Lake Commercial Areas Master Plan
- Marengo TOD & Western Corridor Planning Area
- Melrose Park Rose trail Neighborhood Master Plan
- Montgomery Preserve Subarea Master Plan
- Naperville Martin Mitchell Campus Master Plan
- Oak Brook Commercial Areas Master Plan
- Oakbrook Terrace Unit 5 Area Master Plan
- Palos Park Commercial Areas Master Plan
- Prairie Grove River Front Vision
- Rolling Meadows Golf Road Corridor Mobility
- South Chicago Heights Station Area Plan
- Skokie Dempster Station Area Plan

Corridor Planning

70+ Corridor Plans including:

- · Bellwood -Mannheim Road Corridor: 25th Avenue Corridor Plan
- Brookfield -Ogden Ave. Corridor Plan; 47th Street Corridor Plan; 31st Street Corridor Plan
- Carpentersville -IL Route 31 Corridor Plan; IL Route 25 Corridor Plan; Randall Road Corridor Plan
- Countryside -LaGrange Road Corridor Plan; Joliet Road Corridor Plan; Road Corridor Plan
- Davis Junction -IL Route 172 Corridor Plan
- Hinsdale -Odgen Avenue Corridor Plan
- IL 47 Corridor Study
- Kenilworth -Green Bay Road Corridor Plan
- Lockport -I-355 Corridor Master Plan
- Melrose Park -Lake Street Corridor Plan: Broadway Avenue Corridor
- North Avenue Corridor Plan Melrose Park Broadway Avenue Corridor Plan
- Montgomery -Montgomery Road Corridor Plan; Blackberry Creek Corridor
- Naperville -Ogden Avenue Enhancement Study
- Oak Brook -22nd Street Corridor Plan
- Palos Heights -Harlem Avenue Corridor Plan
- Portage, IN -Highway 20 Corridor Plan
- River Forest Corridors Plan-Madison Street Corridor Plan; North Avenue Corridor Plan; Lake Street Corridor Plan; Harlem Avenue Corridor Plan
- Traverse City, MI-Eight Street Corridor Plan; East Front Street Corridor Plan West Front Street Corridor Plan Garfleld Avenue Corridor Plan 14th Street Corridor Plan

Zoning & Design Guidelines

30 Zoning & Design Guidelines Assignments, including:

- · Benton Harbor, MI
- · Bloomington
- Brookifield
- Carpentersville
- Cary
- Chicago
- Dunwoody, GA
- Fairview Heights
- Flint, MI
- Geneva
- Harwood Heights
- Hinsdale
- Kenilworth
- Marion, IA
- McHenry
- Melrose Park
- Montgomery Muskogee, OK
- Murray, KY
- Northbrook
- Oak Brook
- Oakbrook Terrace
- Pace TOD Guidelines Manual
- Palos Park
- Palos Heights
- Prairie Grove
- Richton Park
- River Forest Wilmette

- **Strategic Planning** · Fond du Lac, WI
 - Morton Grove
 - Palos Park Warrenville
 - · West Chicago

Retainer Services

- Brookfield **Davis Junction**
- Forest Park
- Harwood Heights
- Kenilworth
- Lockport
- Melrose Park
- Montgomery
- Oakbrook Terrace
- Palos Park
- Prairie Grove
- River Forest Round Lake
- Winnetka



Education

Bachelor of Science School of Urban and Regional Planning Ryerson Polytechnic University

Memberships

American Planning Association
American Institute of Certified Planners
National Trust for Historic Preservation
Congress for the New Urbanism
Urban Land Institute

Awards

American Planning Association National Planning Excellence Award for an Emerging Planning & Design Firm;

> Daniel Burnham Award Downers Grove Comprehensive Plan American Planning Association Illinois Chapter, 2012

Daniel Burnham Award McHenry County 2030 Comprehensive Plan American Planning Association Illinois Chapter, 2010

> "Best Practice" Gold Award Planning Mapper American Planning Association Illinois Chapter, 2010

SketchUp Design Award Google.com

"Plan" Gold Award Carpentersville Comprehensive Plan American Planning Association Illinois Chapter, 2007

"Project, Tool, or Program" Gold Award Planningprep.com American Planning Association Illinois Chapter, 2007

Lecturing/Instruction

UP 426 Urban Design Studio University of Illinois at Urbana Champaign 2012 to present

AICP Certification Instructor

2005 to present APA Illinois Chapter 2008 APA Missouri & Kansas Chapters 2012 to Present National (D.C.) APA Chapter

www.planningprep.com - site co-creator

Devin J. Lavigne, AICP, LEED AP

Principal | Co-Founder

Devin is a Principal and Cofounder of Houseal Lavigne Associates with special expertise in urban design, land-use planning, site planning, land planning, land-use regulation, graphic illustration and development visualization, geographic information systems, and web development. Devin received his Bachelor of Science from the School of Urban and Regional Planning at Ryerson Polytechnic University in Toronto Ontario.

Devin is regarded as one of the profession's top designers and graphic specialists. Devin has presented at both national and state planning conferences about the importance in graphics and instructed on how best to communicate plans and planning concepts as well as the importance of development visualization. Devin has garnered national attention and has helped distinguish the firm's body work. At the American Planning Association's 2010 National Conference his presentation Better Graphics, Better Plans was regarded as "best in show" and at 2008 National Conference, Devin's SketchUp! portfolio was presented by Google to show planners how the software can be used by the profession.

In 2005 Houseal Lavigne Associated completed a project for NAVTEQ (Chicago Landmarks & Districts Study), the world's largest employer of map making professionals. Houseal Lavigne Associates was hired to identify key corridors and community areas for more detailed mapping in portable GPS devices. NAVTEQ used the final product to secure additional capital for research and development, and has applied mapping styles presented by Houseal Lavigne Associates into mapping programs to better present data.

Prior to co-founding Houseal Lavigne Associates, Devin was the Senior Planning Manager for URS Corporation, a global multi-disciplined engineering firm based in San Francisco, California. Working from the Michigan Avenue office in Downtown Chicago, Devin managed, directed and provided technical assistance to numerous studies. Devin joined URS through their acquisition of Trkla, Pettigrew, Allen and Payne (TPAP) a prominent planning and economic development firm in the City of Chicago.

Devin has managed, directed, authored and contributed to more than 100 planning studies, including a number of downtown plans, corridor plans, subarea plans, park master plans, and comprehensive plans throughout the country.

In addition to his responsibilities at Houseal Lavigne Associates, Devin is an adjunct lecturer at the School of Urban and Regional Planning at the University of Illinois in Champaign-Urbana. In 2011 Devin was asked by the school to revive the program's urban design studio, UP 426. The program introduces both graduate and undergraduate students to urban design and includes instruction on urban design analysis and planning graphics.

Devin maintains professional memberships with the American Planning Association, the American Institute of Certified Planners, the Congress for New Urbanism, the National Trust for Historic Preservation, Urban Land Institute and the National Association of Photoshop Professionals.

Devin J. Lavigne, AICP, LEED AP

Project Experience

Comprehensive Plans

40 Comprehensive Plans Including:

- · Brookfield
- Brownsburg, IN
- · Carpentersville
- · Coralville, IA
- · Countryside
- · Council Bluffs, IA
- · Downers Grove
- · Flint, MI
- Itasca
- · Kenilworth
- · Machesney Park
- · Marion, IA
- · McHenry County
- · Melrose Park
- Montgomery
- · Muskogee, OK
- Niles
- Oakbrook Terrace
- · North Aurora
- · Palos Park
- · Prairie Grove
- · Plainfield, IN
- · River Forest
- Sugar Grove
- · St. Charles
- · St. Cloud

Downtown Planning

20 Downtown Plans including:

- Carbondale
- Downers Grove
- Downers Grove Pattern Book
- St. Charles
- St. Cloud
- Geneva
- Huntley
- McHenryMurray, KY
- Morton
- Round Lake
- · Winfield, Downtown

Design and Development Guidelines

15 Guidelines including:

- · Downers Grove
- · Prairie Grove
- · St. Charles
- Kenilworth
- McHenry
- · Huntley
- · IL Route 47
- Brookfield
- · Round Lake
- Westmont
- Hinsdale
- · Traverse City, MI

Corridor Planning

50 Corridor Plans including:

- Brookfield, Ogden Avenue Corridor Plan
- Carpentersville, IL Route 31 Corridor Plan
- Countryside, LaGrange Road Corridor Plan
- Downers Grove, Ogden Avenue Corridor Plan
- Hinsdale, Ogden Avenue Corridor Plan
- Homer Glen, 159th Street Corridor Plan
- Illinois Route 47 Corridor Plan
- Kenilworth, Green Bay Road Corridor Plan
- Melrose Park, Broadway Avenue Corridor Plan
- Montgomery, Orchard Road/ Blackberry Creek Corridor Plan
- Naperville, Ogden Avenue Enhancement Study
- Oak Brook, 22nd Street Corridor Plan
- · River Forest, Corridors Plan
- St. Charles, Main Street & Randall Road
- Westmont, Ogden Avenue Corridor Plan
- Traverse City Corridors Master Plan

Visualization & Illustration

25 assignments including:

• Carson City, NV Carson City

- Carson City, NV Carson City Center
- · Firestone Retail Development
- Westfield, Old Orchard Signage
- Naperville Park District, Naperville Riverwalk 3D Illustration
- Peoria River Trail
 Development Visualization
- Forest Park Shopping Plaza Redevelopment Sketch
- Center, Chicago Grove Shopping Center Redevelopment Sketch
- Plaza, Maywood River Pointe Plaza Rendering
- HOA, Las Vegas, NV, Taos Estates Entry Monument Render
- Machesney Park, Machesney Mall Redevelopment Concept
- Kenilworth, Green Bay Road Redevelopment Site Illustration
- Bellwood, TOD Development Visualization
- Hanover Park/Irving Park Road Development Concepts

Zoning & Regulatory 10 Studies including:

- Chicago, Broadway Avenue Zoning & Market Study
- City of Countryside Landscaping Ordinance
- City of Hammond, IN Landscaping Ordinance
- Westfield Old Orchard Signage Plan
- Westifield Hawthorn Woods Signage Study
- Green Bay Road Shadow Study
- Oakbrook Terrace Zoning Revisions

Parks & Recreation

10 Parks and Recreation assignments including:

- Geneva, Open Space & Recreation Master Plan
- Naperville Park District, Parks, Open Space & Recreation
 Master Plan
- Homer Glen, Open Space & Recreation Master Plan
- Naperville Park District, Naperville Trails Master Plan
- Robbins Green, Community

 Plan
- Machesney Park, Open Space

Special Area Planning (TOD, Neighborhoods, Special District)

8 Special Area Plans including:

- Chicago, Stockyards Market & Land Use Analysis
- Countryside, Dansher Industrial Park Subarea Plan
- Oak Brook, Oak Brook
 Commercial Areas Master Plan
- South Chicago Heights, Station Area Plan
- Marengo, Transit Oriented Development Plan
- Naperville, Martin Mitchell Campus Master Plan
- Oakbrook Terrace, Unit 5 Area Master Plan
- Winfield, Downtown Winfield Marketing & Capacity Study
- Dunwoody, Village Master Plan
- Dunwoody, Georgetown/North Shallowford Road Master Plan
- Tulsa, OK Sector Plans

Special Projects

- NAVTEQ Chicago Landmarks & Districts Study
- IDOT Tools for Balanced Growth
- Healthy Chicago 2.0
- Chicago Neighborhoods Now

Strategic Planning

3 Strategic Plans, including:

- Oak Brook
- Palos Park
- Warrenville



Education

Bachelor of Science, Loyola University

Masters of Public Administration,

Illinois Institute of Technology

Boards and Commissions

Served on Executive Committee
Du Page County Community Development
Commission

Du Page County HOME Advisory Group

Village of Glen Ellyn Board of Trustees Village of Glen Ellyn Plan Commission

Memberships

Urban Land Institute
Illinois City/County
Management Association
Illinois Development Council
Lambda Alpha International
National Charrette Institute Certified

Publications

"The Importance of Intergovernmental Relationships" for ILCMA August 2008

"Incorporating Technology into Community Outreach" for ILCMA October 2009

Daniel T. Gardner

Principal

Dan Gardner has over twenty years of experience in planning, development, and real estate, with experience in both the private and public sectors. Prior to joining Houseal Lavigne Associates in 2007, Dan was the Director of Consulting Services for a prominent Chicago based real estate advisory firm where he directed numerous complex municipal projects related to fiscal, economic, and market analysis. Dan was also a Senior Manager with the Chicago office of Economics Research Associates (ERA), an international economic and real estate consulting firm where he was responsible for business development and overseeing both national and international projects.

His professional experience has involved projects ranging from the revitalization of large urban areas in Chicago, Milwaukee, and Omaha to small rural communities throughout the Midwest. His past projects include: analyzing market potential for residential, retail, office, entertainment and industrial development; instituting economic development programs and incentives; preparing grant applications for state and federal funds; facilitating community outreach; preparing developer requests for proposals and a range of related assignments.

In addition to his professional experience, Dan has served on several elected and appointed boards, commissions and advisory committees. His combination of professional and government experience gives him a unique perspective that is beneficial to clients. He understands and can relate to issues and concerns facing both private developers and public officials.

Dan was an elected Trustee for the Village of Glen Ellyn, Illinois (population 27,000) from 2003 to 2007, and prior to that served as the Chairman of the Village's Plan Commission. He currently serves on a Process Improvement Team to improve the business and economic climate in the Village. Throughout his tenure the Village maintained a balanced budget and significant cash reserves. From 2007 to 2012 he was a member of the Executive Committee of the Du Page County Community Development Commission and the Du Page County HOME Advisory Group, preparing policy recommendations and overseeing the allocation of millions of dollars in CDBG and HUD funds.

Dan has a Masters Degree in Public Administration (MPA) from the Illinois Institute of Technology (IIT) and a Bachelors of Science from Loyola University Chicago. In 2007 he was inducted into Lambda Alpha International, an organization recognizing career accomplishments in land economics. He is a member of the Urban Land Institute (ULI) where he formerly served on the Chicago Policy Committee and he is an active member of Illinois City/County Management Association (ILCMA) and the Illinois Development Council (IDC). Additionally he is certified with the National Charrette Institute.

He is well versed in public speaking and meeting facilitation, having conducted hundreds of meetings throughout his professional and civic career. He routinely presents to professional organizations and serves as a guest speaker on a variety of topics related to planning and development issues. He has also authored or coauthored articles for professional publications and journals.

Daniel T. Gardner

Project Experience

Comprehensive Plans

- Benton Harbor, MI
- Brownsburg, IN
- Marion, IA
- · Downers Grove
- Freeport
- Mundelein
- Highwood
- Glen Ellyn
- Jackson, MO
- Kenilworth
- · Machesney Park
- · Muskogee, OK
- Palos Heights
- · Palos Park
- · St. Charles

Downtown Planning

- Clarendon Hills
- Franklin Park
- Geneva
- Huntley
- Morton
- Round Lake
- · Shorewood, WI
- Skokie
- Winfield

Zoning & Regulatory

Zoning and Regulatory Studies including:

 River Forest Zoning Ordinance Updates

Strategic Planning

- Oak Brook
- Lombard

Special Area Planning (TOD, Neighborhoods, Special District)

- Oak Brook, Oak Brook Commercial Areas Master Plan
- South Chicago Heights, Station Area Plan
- Marengo, TOD & Western Corridor Planning Area
- · Lincolnwood Business Park
- · Lake Barrington Business Park
- Bartlett Town Center

Corridor Planning

- · City of Bellevue, NE
- Bellwood, Manheim Road Corridor
- · City of Chicago, Lincoln Square
- City of Chicago, Commercial Avenue
- · Freeport, West Galena Avenue
- Kane and McHenry Counties, Illinois Route 47
- Lockport, I-355 Corridor Master Plan
- · Milwaukee, WI, 27th Street
- Naperville, 75th Street Market Study
- Oak Brook, 22nd Street Corridor Plan
- · Omaha, NE, Maple Street
- River Forest, Village Corridors Plan
- Traverse City, MI (Study of 5 corridors)
- · Rolling Meadows, Golf Road

Fiscal & Economic Impact Analysis

- Du Page County, Impact of O'Hare Airport expansion
- · Village of Channahon
- · City of Chicago
- Village of Glenview
- · Village of Hoffman Estates
- · Village of West Dundee
- · Village of Plainfield
- · City of Naperville
- · Village of North Barrington

Special Projects

- Du Page County, Impact of Airport expansion
- · Lombard, Downtown Vision
- New Urbanism Analysis of mall redevelopment sites
- IL Housing Dev. Auth. (IHDA) Tax Credit Studies
- Commonwealth Edison Valuation for easements

Market & Demographic Analysis

- Chicago
- · Clarendon Hills
- · Du Page County
- IL Housing Dev. Auth. (IHDA)
- Jackson, MO
- Kane County
- Marion, IA
- McHenry County
- Milwaukee, WI
- · Mount Prospect
- · Naperville
- North Barrington
- Oak Brook
- · Omaha, NE
- · Oklahoma City, OK
- Park Forest
- Skokie
- Mundelein
- Lockport
- · South Chicago Heights
- Benton Harbor, MI
- Madison, AL
- Downers Grove
- Highwood
- Lombard
- Huntley
- River Forest
- · Freeport
- · Jackson, MO
- Marion, IA
- MacombPeoria
- Bellevue, NE
- Carpentersville
- · Cleveland, OH
- · Colorado Springs, CO
- · Coppell, TX
- · Council Bluffs, IA
- · Denver, CO
- Dubuque, IA
- East Dubuque
- Grayslake
- International development in Asia
- · Indianapolis, IN

Market & Demographic Analysis Continued

- Channahon
- Flint, MI
- Johnsburg
- · Kalamazoo, MI
- · Lake Barrington
- Mount Prospect
- Nassau County, NY
- Palos Heights
- Palos Park
- Park Ridge
- Philadelphia, PA
- Rockford
- Round Lake
- Savanna
- Shorewood, WI
- Skokie
- Troy, OH
- West Dundee

Development Services

Assessment of development potential and review of developer proformas for municipal and private sector clients in several municipalities including:

- Chicago
- Milwaukee, WI
- Omaha, NE
- Wheaton
- Hoffman EstatesPrairie Grove
- Naperville
- River Forest

Department of Defense Projects

Base Redevelopment and Closure (BRAC) and United States Air Force base feasibility studies in:

- Alaska
- Texas
- Georgia
- Texas
- Florida
- Washington D.C.
 Idaho



Education

Bachelor of Science in Landscape Architecture, Purdue University

Memberships

American Society of Landscape Architects

ASLA Positions

ILASLA Allied Professionals Liaison
ILASLA Legacy Project Co-Chair
Past ILASLA Public Awareness Chair
Past ILASLA External

Communications Officer

Presentations
A Pedestrian's PedPeeves
Fast and Funny Planning Presentation
2015 National APA Planning Conference
New Tools for Zoning &

Development Visualization
2013 National APA Planning Conference
Putting Zoning on the Map

APA-CMS January, 2012
Integrating Sustainability
Into Development Regulations

October 2011, APA-IL State Conference

Awards

2014 APA-MI Public Outreach Award Imagine Flint Master Plan

Winnebago County 2030 Land Resource Management Plan, Honor Award for Environmental Stewardship, Illinois American Society of Landscape Architects, 2009

Nik Davis, ASLA

Principal

Nik brings more than 10 years of professional design and planning experience to Houseal Lavigne Associates and as a Principal manages much of the firm's versatile studio work, as well as hones skill specializations in urban design, landscape architecture, site plan development, streetscape design, and sustainability planning, from the individual lot level up to the regional scale. He provides the connection between the planmaking process and document creation, focusing on concept and site design, graphics, document layout, geographic information and cartographic renderings, and urbanform 3d modeling, using a breadth of software tools and drafting techniques.

Nik has a diverse background in urban planning and design with experience in the preparation of research and inventory materials, site analysis maps, framework plans, preparation of conceptual development plans for a full range of residential, commercial, mixed-use, office and industrial park developments, and commercial corridors. Nik has extensive experience in landscape and planting design which includes conducting site visits and creating inventory and analysis maps, developing project bases, drafting general development and preliminary plans, producing hand and computer rendered sketches and plans, and submitting construction documents, specifications, plant list schedules, and cost estimates for review and installation.

Prior to joining Houseal Lavigne Associates, Nik worked for consulting firms specializing in landscape architecture, streetscape design, urban design, zoning, and development planning. Nik has a Bachelor of Science in Landscape Architecture from Purdue University. He is a member of the American Society of Landscape Architects (ASLA), and some of his past work has been awarded recognition in sustainability and environmental stewardship.

Nik Davis, ASLA

Principal

Comprehensive Plans

30+ Comprehensive Plans including:

- · Aurora, CO
- · Bentonville, AR
- Bristol, VA
- · Buffalo, NY
- Cary
- · Chicago Neighborhoods Now
- Council Bluffs, IA
- · Eden Prairie, MN
- Elgin
- Flint Master Plan, MI
- · Fort Dodge, IA*
- · Frederick, CO
- · Hudson, OH
- Lynwood
- Maywood
- · New Buffalo, MI
- · Pingree Grove
- · Richton Park
- St. Charles
- · St. Cloud, MN
- Westmont
- · Windsor, CO

Downtown/TOD Plans

- · Buffalo, NY BOAs*
- Chicago Pilsen, South Chicago, North Lawndale
- Carbondale
- · Carson City
- Elmhurst
- · Fort Dodge, IA
- · Geneva, IL
- Hopkinsville, KY
- Hudson, OH
- Lisle
- · Oshkosh, WI
- · Peoria Heights
- · Rolling Meadows
- Terre Haute*

Corridors

25+ Corridors Plans including:

- · Ames, IA
- · Bentonville, AR
- · Des Plaines*
- Elmhurst
- · Island Lake
- Homer Glen
- · Kenilworth
- · New Lenox
- Oak Brook
- Park Ridge*
- Peoria HeightsPortage, IN
- Rolling Meadows
- Traverse City, MI

Design Guidelines &

Standards

- Chicago Archer & Halsted
- · Council Bluffs, IA
- · Fort Dodge, IA*
- Mundelein
- · Pace TOD Guidelines Manual

Zoning/Form-Based Codes

25+ Zoning/Form-Based Codes including:

- Baltimore, MD*
- · Bentonville, AR
- Buffalo, NY*
- · Cleveland Heights, OH*
- · Council Bluffs, IA*
- · Dunwoody, GA
- Flint, MI
- · Fort Dodge, IA*
- Hinsdale*
- · LaGrange Park*
- · Mundelein*
- Muskogee, OK
- New Orleans, LA*
- Park Ridge*
- Riverside*
- · Wilmette*
- Winnebago County*

Design Development & Concept Designs

50+ Design Development & Concept Designs including:

- Bensenville*
- Chicago
- · Crystal Lake
- Deerfield*
- Grayslake*
- Linconlwood*
- Mokena*
- New Lenox*
- Richton Park*
- St. Cloud, MNOlympia Fields*
- Oswego Prairie Market*

Streetscape Designs

25+ Streetscape Designs including:

- · Bourbonnais
- · Bradley Broadway Street
- Chicago 87th & Stony, Lake Street, Uptown-Broadway Avenue, Auburn Gresham-79th Street
- · Des Plaines
- Elmhurst North York
- Glen Ellvn
- · Grayslake
- Huntley
- · New Buffalo, MI
- Richton Park

Landscape Designs

30+ Planting Designs including:

- · Burr Ridge
- Chicago Shetland, Metraflex, Dima Properties
- Deerfield
- Glenview
- Huntley
- New LenoxOlympia Fields
- Oswego
- St. Charles*
- Yorkville
- Rockford



Education

Bachelor of Landscape Architecture Kansas State University

Urban Design Studies Centro Studi Santa Chiara, Italy

Memberships

American Planning Association

American Society of Landscape Architects

Congress for the New Urbanism

Past Chair, Kansas State University Landscape Architecture / Community Planning Advisory Board

Urban Land Institute

ULI Urban Development / Mixed-Use Product Council (Red Flight) - Chicago

ULI Urban Development / Mixed-Use National Product Council (Purple Flight)

Awards

ASLA Saint Louis, Riverfront Fort Wayne Phase 1 Schematic Design Document, Merit Award, Planning & Communications

ASLA Texas, Riverfront Fort Wayne Master Plan, Honor Award, Planning & Analysis

ASLA Texas, Nanguo Peach Garden Master Plan, Honor Award, Planning & Analysis

> ASLA Merit Award, Yuan Dang Lake Conceptual Master Plan, Texas ASLA

> Congress for New Urbanism Charter Award, Dasve Village Master Plan

> > ASLA National Honor Award, Dasve Master Plan

ASLA Merit Award, Yuan Dang Lake Conceptual Master Plan, Texas ASLA

ASLA Merit Award, East Taihu Lakefront Master Plan, Illinois Chapter

Publications

"Exploring Cultural Urbanism: A rational approach to creating authentic places..." Planning Magazine, April 2014

"Cultural Urbanism: Studying local traditions to create socially relevant design" SWA Ideas | Praxis, October 2012

"Ten ways to climb the ladder: How to succeed as a consultant..." Planning Magazine, November 2006

Todd Meyer, PLA, CNU-A, LEED AP

Principal Associate

As a senior urban planning and design professional, Mr. Meyer began his career designing and implementing commercial and residential projects in a self-employed capacity in the Greater Saint Louis area. After graduating from Kansas State University, he worked on the West coast and in the Midwest for professional planning and design firms including EDAW, HOK and SWA on a wide variety of community planning and development projects. He has continued to work with public and private sector clients on projects of all types and scales including new towns, residential communities, districts, neighborhoods, corridors, mixed-use and transit-oriented development, urban infill, parks, open spaces, waterfronts, redevelopment strategies and smart growth initiatives.

As a Principal Associate with Houseal Lavigne Associates, Mr. Meyer's responsibilities include client communication, agency coordination, project management, planning and design oversight as well as business development activities. With project work across the U.S. and globally — including Latin America, Asia and the Middle-East — he has a broad range of professional experience on a variety of assignments. He possesses a strong knowledge of land planning and urban design issues and is excellent in communicating with clients to understand their needs and to help them to achieve their goals and objectives.

A common theme of Todd's work is to promote a 'triple bottom line' approach, including ecological, social and economic goals – as well as to integrate sustainable planning principles in his projects, including the U.S. Green Building Council's LEED-ND™ criteria. Inspired by Janine Benyus and Biomimicry 3.8, Todd has participated in the process of learning from and then emulating nature's forms, processes, and ecosystems to create more sustainable master plans and designs. This includes studying the ecology of a site and then working to emulate the native characteristics of the land in the post-development condition.

His professional interest is also to promote 'Cultural Urbanism' in his projects, working to celebrate our regional differences and create unique places for social interaction. As a daily part of his work with clients and project teams, he is committed to creating beautiful, functional and high-quality environments for people. This in part addresses physical infrastructure, but also considers the natural systems that shape our urban areas, using appropriate materials and making the right choices for the environment. He also seeks to stimulate cities, neighborhoods and districts to be active and energetic in economic investment and unique cultural expression.

Todd is an active member of several professional organizations, particularly the Urban Land Institute (ULI). As a result of frequent interaction with public officials and private investors, he understands real estate development, including project planning, site selection, feasibility analysis, entitlements, design and construction. This includes balancing the desire to create high-quality places with the fact that many investment decisions are driven by ROI and IRR from a cost-benefit perspective. In an era of public-private partnerships, this approach of including all parties in the master-planning process and conversation about prospective projects has proven critical to success.

Mr. Meyer subscribes to the principles of the Charter for the New Urbanism, which seeks to curb suburban sprawl and promote authentic urban neighborhoods that are compact, walkable, provide an interesting mix of uses and promote a strong sense of identity and community for both visitors and residents. He believes as a society that we should promote our unique qualities and that not all places should look the same – or function in the same manner. His approach to planning is to be as rooted in the unique context and characteristics of the place as much as possible. Todd is fun, has a sense of humor and is easy to work with!

Todd Meyer, PLA, CNU-A, LEED AP

Selected Project Experience

191st Street Corridor,

Mokena, Illinois

Land use plan update and form-based code overlay for a large land area adjacent to the freeway

36th & Center Redevelopment,

Omaha Nebraska

Conceptual master plan for redevelopment and densification of a mixed-use suburban corridor

Argyle + Bryn Mawr CTA Stations Chicago, Illinois

Detailed Design + Construction Documents for viaducts and station area improvements

Aurora Riverfront Park

Aurora, Illinois

Conceptual landscape design for a riverfront park including ecological areas and recreational venues

Avanyu Community Hurricane, Utah

Conceptual master plan for a new residential community nestled into the hillside

Barksdale Redevelopment District Bossier City, Louisiana

A redevelopment plan for existing a commercial corridor, residential neighborhoods and open land

Basinview Planned Unit Development Klamath Falls, Oregon

A master plan for a large master-planned community on a steep hillside site with strong natural features

Centennial Celebration of Flight Dayton, Ohio

Event plan and strategy for the 100-year celebration of the most notable invention of the Wright Brothers

Children's Memorial Hospital Chicago, Illinois

Site redevelopment options with extensive public input for a facility that was to be relocated

City Government Center Thousand Oaks, California

Detailed design and construction documents around a new building designed by Antoine Predock

CMAP GOTO 2040

Arlington Heights, Illinois

Conceptual redevelopment plan for a primary arterial corridor located just north of Interstate 90/94

Desert Mountain Resort Community Scottsdale, Arizona

Master plan amendment for the last phases of development of a large golf-oriented community

Elyson Master-Planned Community West Houston, Texas

Detailed landscape design for Phase 1 of a new 5,000 acre development for Newland Communities

Ewing Waterfront Park

Chicago, Illinois

Conceptual site plans to redevelop an urban site on the Calumet River with Metropolitan Planning Council

Grand Basin + Post Dispatch Lake Saint Louis, Missouri

Master plan and detailed design for a 76-acre historic site built for the 1904 World's Fair in Forest Park

Garfield Boulevard corridor

Chicago, Illinois

Corridor plan for the original Burnham-designed boulevard from Washington Park to Western

Green Valley Ranch

Henderson, Nevada

Master land plan and detailed landscape design for a new residential community outside Las Vegas

Homestead Market Plaza

Houston, Texas

Conceptual redevelopment plan options for an inner-city site in a disadvantaged neighborhood

Lincoln, Ashland + Belmont

Chicago, Illinois

Detailed design and CD's for 12 blocks of urban streetscape in the Lakeview neighborhood

Marriott Multi-Hotel Complex Indianapolis, Indiana

Detailed master plan near the ballpark with views to the river and various hospitality product types

Metro Tourism Vision

Detroit, Michigan

A brochure and renderings to indicate the variety of tourism options located throughout the City

Mid-America Center

Council Bluffs, Iowa

Conceptual master plan for public realm improvements including streetscapes and

Moorpark Specific Plan #2

Moorpark, California

Land use plan for submittal to the City of Moorpark for zoning board review and approval

Motorola Headquarters

Schaumburg, Illinois

Conceptual campus plan for perimeter landscape improvements and adjacent to various buildings

Obama Presidential Center Chicago, Illinois

Site analysis and site evaluation studies for potential sites including Washington and Jackson Parks

Old River Park

Dayton, Ohio

Conceptual master plan for a private park originally designed by Frederick Law Olmstead, Jr.

Ovation Riverfront Development Newport, Kentucky

Master plan for a mixed-use project on a former public housing site with views to downtown . Cincinnati

Park Lane Redevelopment Reno, Nevada

Conceptual plan options for the redevelopment of a former mall into a mixed-use town center

Planned Manufacturing Districts Chicago, Illinois

A study of policy options for districts to promote preservation of assembly jobs within special areas

Penn State Behrend Erie, Pennsylvania

Conceptual development plans for three (3) parcels of land owned by and adjacent to the university

Peterkort TOD Development

Beaverton, Oregon

Conceptual master plan for a private development adjacent to a light rail station and bus plaza

Police + Fireman's Memorial Plaza

Clayton, Missouri

Detailed design and construction documents for an urban park as a tribute to fallen public servants

Post Hurricane Katrina recovery Moss Point, Mississippi

Master plan and form-based code for a small town that was flooded by storm surge during the storm

Redmond Ridge Community Redmond, Washington

Conceptual master plan for a new residential community located on a hillside site east of town

Richland Master Plan

Belleville, Illinois

Conceptual master plan for new residential community on a former coal strip mine site

Riverfront Fort Wayne

Fort Wayne, Indiana

Conceptual master plan for the riverfront district and promenade just north of the downtown CBD

Seattle Commons

Seattle, Washington

Conceptual master plan for a redevelopment district at the south end of Lake Union focused on mixed-use

Saint Louis University High School Saint Louis, Missouri

Campus master plan for a private high school focused on expansion and new sports facilities

University of Chicago

Chicago, Illinois

Landscape design for the project entry and quad of the new Center for Physical + Computational Science

Upper Kirby Mixed-Use Houston, Texas

Conceptual development options and massing studies for redevelopment of an urban site

Vermillion Village

Kanab, Utah

Conceptual master plan for a new residential community featuring a commercial town center

Walker Place

Bossier City, Louisiana

Conceptual master plan options for a mixed-use town center development including retail and residential

Whirlpool Corporation Benton Harbor, Michigan

Campus master plan for expansion and enhancement of existing corporate R&D and distribution facilities

William Rainey Harper College

Palatine, Illinois

Campus master plan in preparation for new building construction and landscape enhancements

Woodson's Reserve

Montgomery County, Texas

Detailed landscape design for a new Toll Brothers community focused on outdoor recreation



Michigan State University, Bachelor of Arts University of Cincinnati, Master of Community Planning

Publications

"Amazon HQ2: Lessons for local economic development" Illinois City County Management Association

Presentations

"Promises in the Dark: How to evaluate economic development proposals" Government Finance Officers Association

Michio Murakishi

Senior Associate

Michio is a Senior Associate at Houseal Lavigne Associates bringing over 15 years of experience in community planning and economic development. Recognizing the significance of economic viability, he feels strongly that professional planning practices must be firmly rooted in financial and market realities, as well as pragmatic fiscal policies. To this end, Michio brings special expertise to the firm in the areas of economic development strategy, public-private deal negotiation, financial feasibility analysis, fiscal impact analysis, and market analysis. In addition to his practice leadership in these areas, Michio is responsible for the management of comprehensive, corridor, and subarea plan assignments in his role at Houseal Lavigne Associates.

Michio's consulting experience has concentrated principally on structuring complex real estate financial transactions for numerous public- and private-sector clients. He guides real estate development projects from the visioning stage through project implementation and construction, working closely with both municipalities and developers. His representative work includes the negotiation of a public-private financing structure for the \$110 million Wheeling Town Center mixed-use development project, providing development advisory services to the ownership group of the iconic Cermak Plaza shopping center, securing public funding in support of a LEED-certified renovation of the historic Inland Steel Building, and serving as lead TIF analyst on the Olympic Village financing plan included in the Chicago 2016 bid book submitted to the International Olympic Committee.

Prior to joining Houseal Lavigne Associates, Michio worked at the Bureau of Economic Development in the City of Chicago's Department of Planning and Development. Before that, he spent several years operating his own consulting practice, worked in the national Capital Markets group at Jones Lang LaSalle, and held a senior position at a Chicago-based development advisory firm. Michio received a Bachelor of Arts degree in Sociology from Michigan State University and attended the University of Cincinnati, where he earned a Master of Community Planning degree as a HUD Fellow.

Project Experience

Development Advisory Services

- Chicago, IL
- Evanston, II
- Hanover Park, IL
- · Lincolnshire, IL
- Milwaukee, WI
- · Oak Park, IL
- · Palatine, IL
- · Park Ridge, IL
- · Prospect Heights, IL
- · St. Charles, IL

Comprehensive Plans

- · Ardmore, OK
- Aurora, CO
- Bentonville, AR
- · Brentwood, MO
- · Sioux City, IA

Subarea Plans

- Huntley, IL
- · Oshkosh, WI
- · Peoria Heights, IL

Public-Private Partnerships

· Capital Properties, Chicago,

- · Cermak Plaza Properties, LLC, Berwyn, IL
- · UJAMMA Construction, Inc., Chicago, IL
- · The Lynmark Group, Wheeling, IL

Market Analysis

- Batavia, IL
- · Franklin Park, IL
- · Oak Creek, WI
- Palos Park, IL

Special Projects

- Chicago 2016, Olympic Village Financing Strategy
- Du Page County, O'Hare Airport Western Access
- Palos Park, IL, Fiscal Impact **Analysis**
- · Prairie Grove, IL, Impact of Annexation



Master of Urban Planning, University of Kansas

Bachelor of Arts in Architecture, University of Kansas

Memberships

American Planning Association, VA American Planning Association, National Rotary International

Presentations

APA Quad State Conference: Economic Argument for Flexible Parking Requirements

Jackie Wells

Associate

Jackie's Houseal Lavigne Associates experience includes a wide variety of planning and zoning-related projects for communities throughout the Midwest and beyond. Jackie's consulting experience includes projects ranging from parks and recreation and comprehensive plans to zoning updates and corridor studies. Jackie instills detail into all of her projects and is passionate about the communities in which she works. She is focused on the development of responsive and detailed planning and zoning recommendations that are actionable and which meet the specific and unique needs of each community.

Prior to joining Houseal Lavigne Associates, Jackie was the Housing and Development Planning Specialist for Danville, Virginia, a community of approximately 45,000. There, Jackie was responsible for: developing, implementing, and monitoring the City's five-year Consolidated Plan and Annual Plans, applying for and administering local, state and federal grant funding, acting as a liaison between the City and neighborhood and non-profit groups, spearheading the City's targeted efforts in the School-field and Edgewood neighborhoods, planning and managing community engagement campaigns and events, and in this capacity, she gained valuable experience in developing programs and policies, applying for and administering local, state, and federal grants, and engaging community groups and supporting the establishment of new neighborhood associations.

Jackie is fluent in all regulations associated with the Community Development Block Grant and Home Investment Partnerships funding programs. Jackie uses her experience in local government to develop data-driven solutions that manage the needs of elected and appointed officials, department heads, non-profit partners, and residents of the community.

Project Experience

Zoning Ordinance Development

- Ardmore, OK UDC
- Cary, IL UDO
- Jackson, TN Zoning / Regulatory Controls
- Chicago, IL Roscoe Zoning / Regulatory Controls
- Sunset Hills, IL Zoning / Regulatory Controls

Comprehensive and Master Planing

- Bensenville, IL Parks & Recreation Master Plan
- Walker, MI Master Plan
- Lawrence
- · Oak Creek
- · Fairfield, CT Strategic Plan
- Northfield, IL -Comprehensive Plan
- Greenwich, CT -Comprehensive Plan
- Sioux City, IA -Comprehensive Plan
- Eden Prairie, MN -Comprehensive Plan

Corridor Planning

 Hasting, MN - Vermilion Street Corridor Plan



Master of Public Affairs, Indiana University, 1994

B.A., Albion College, 1991

Advanced Training

Public Involvement Techniques for Transportation Decision-Making, National Highway Institute, 2000

Modern Roundabout Design, R. Barry Crown (Rodel Software), 2002

Reducing Traffic Congestion and Improving Traffic Safety Through Access Management, MDOT and Michigan Society of Planning, 2002

Environmental Justice Workshop, FHWA and FTA, 2001

Designing Streets for Walkable Communities, Oakland County, 2000

Pedestrians and Bicycles: Safety, Planning & Design, Michigan State University, 2000

Wesley A. Butch

Senior Transportation Planner

Mr. Butch has been involved with many dozens of complex traffic and road improvement projects. His transportation planning expertise, extensive knowledge, and experience span numerous disciplines including traffic analysis, signal analysis, non-motorized facilities, transit facilities, road concept designs, construction cost estimating, funding source investigation, public involvement, community and stakeholder engagement, access management and land use planning, preparation of plans and technical reports, environmental clearance documentation, and traffic signal and roundabout design. He has extensive experience planning and implementing inclusive community engagement programs for transportation projects, including many that were controversial. Mr. Butch has extensive experience working on MDOT and local agency traffic studies.

Project Experience

Dearborn West Downtown Streetscape Study and Design, City of Dearborn, Michigan. Senior Transportation Planner. This project involved a detailed study and design for streetscape improvements on Michigan Avenue in Dearborn. Services included traffic studies, public/stakeholder engagement, concept design, design development plans, construction documents, and geotechnical analysis.

Midland Downtown Streetscape Study and Design, City of Midland, Michigan: Senior Transportation Planner, Public Outreach Specialist. This project involved a detailed study and design for streetscape improvements on Main Street in Midland. Services included traffic studies, public/stake-holder engagement, surveying, concept design, design development plans, construction documents, and geotechnical analysis. Design process was completed on a very expedited schedule.

Marquette Hospital Transportation Improvements Study and Design – City of Marquette, Michigan: Project Manager. Comprehensive studies and design for major road and non-motorized improvements to support relocation of regional hospital. Infrastructure improvements were designed for US-41 and local roads. Main tasks included preparation of an Environmental Assessment, survey, geotechnical engineering, utility relocation and design, roadway design, traffic signal design, drainage design, complex hydraulic analysis, structural design, lighting design, design of non-motorized facilities, and construction cost estimates. Work also included extensive public/stakeholder coordination and obtaining MDOT ROW permit.

Traverse City Corridors Master Plan, City of Traverse City, Michigan: QA/QC Reviews. Performed reviews for roadway and non-motorized transportation improvements in four corridors in the City of Traverse City. Project included review of implementation of complete street elements and context sensitivity analysis.

East Lansing As-Needed Traffic Engineering Services, East Lansing, Michigan: Project Manager. Since 2012, DLZ has provided traffic engineering services to East Lansing. Assignments have included performing traffic studies, review of Traffic Impact Studies (TIS), preparation of updated TIS ordinance, preparation of technical memoranda, and presentations to the City's Transportation Commission. (Ongoing)

City of Marquette, City-Wide Traffic Study & Truck Corridor Study — City of Marquette, Michigan: Project Manager. Comprehensive traffic study for all of the main roads and intersections in the City to address vehicular and non-motorized travel. Study tasks included traffic data collection, analysis of existing and future conditions to identify deficiencies with the transportation network, recommendation of mitigation measures and coordination with stakeholders.

Capitol Region East Towne Gateway Feasibility Study and Roundabout Design, Lansing, Michigan: QA/QC. Developing conceptual roundabout designs and evaluating road and intersection improvements along Lake Lansing Road and at the Lake Lansing Road Interchange at U.S. Route 127 (US-127). The main elements of the study process include compilation of traffic data, trip generation and distribution for new developments, crash data analysis, traffic operational analysis using Rodel, development of roundabout concepts, access management investigation, coordination with MDOT, and preparation of a report. DLZ also prepared a landscaping concept for this gateway.



B.S. Urban Planning, Northern Michigan University, 1999

Certifications

Categorical Exclusion, ODOT, #12-061-CE, 2017

Special Training

PSMJ Project Manager Training, 2015

Level I Community Planning Workshop Certificate, Michigan Society of Planning Officials

> Wilderness Steward Program, Wilderness Education Association

Introduction to Traffic Modeling and Practical Applications for Synchro/ Corsim, Highway Traffic Safety Programs, Michigan State University, 2006

DLZ Roundabout Seminar, Lansing, Michigan, 2001, 2002 and 20030

Jason T. Whitten

Project Planner

Mr. Whitten has 17 years of experience working as a Senior Transportation Planner and Project Manager for various transportation projects. He has been involved in more than 35 transportation planning projects for local agencies. His transportation expertise, extensive knowledge, and experience span numerous disciplines including traffic analysis, signal analysis, capital planning, transit facilities, road design, construction cost estimating, funding source investigation, public involvement, community and stakeholder engagement, access management and land use planning, preparation of plans and technical reports. Mr. Whitten has been involved with several city-wide transportation studies, complex corridor studies, and multi-modal studies.

Project Experience

Michigan Department of Transportation US-10 Business Route Corridor Study – Midland, Michigan: Project Manager. A comprehensive traffic study for the US-10 Business Route (BR) corridor through the City of Midland from Washington Street to the US-10 and US-10 BR/Eastman Avenue interchange. The purposes of the project were to identify potential corridor improvements that would accommodate future traffic volumes, alleviate current and anticipated traffic congestion, enhance safety and reduce crashes for all modes of transportation, increase connectivity to Downtown Midland and Discovery Square, improve non-motorized mobility and eliminate barriers for bicyclist/pedestrians without impacting traffic flow, make the one-way pair roadway system feel like part of the Downtown District, and support economic development within the corridor.

Traverse City Corridors Master Plan, City of Traverse City, Michigan: Planner. As a subconsultant to Houseal Lavigne Associates, responsible for review and analysis of roadways and non-motorized transportation improvements in four corridors in the City of Traverse City. Included review of implementation of complete street elements and context sensitivity analysis.

City of Marquette, City-Wide Traffic Study & Truck Corridor Study – City of Marquette, Michigan: Transportation Planner. Comprehensive traffic study for all of the main roads and intersections in the City to address vehicular and non-motorized travel. Study tasks included traffic data collection, analysis of existing and future conditions to identify deficiencies with the transportation network, recommendation of mitigation measures and coordination with stakeholders.

Marquette Hospital Transportation Improvements Project, Marquette, Michigan: Senior Planner. Worked on comprehensive traffic and road alternatives study for major road improvements to provide access to new regional hospital. Improvements included both auto and non-motorized facilities as well as utility work. Traffic Impact Study and Environmental Assessment were prepared to obtain MDOT and FHWA approval of the project. Project also included significant outreach to stakeholders and the general public as well as presentations to City Commission.

Lundin Truck Corridor Study – City of Marquette, Michigan: Senior Planner. The City of Marquette Lundin Truck Corridor Study was commissioned by the City of Marquette (City) in cooperation with the Lundin Mining Corporation and Northern Michigan University (NMU). The purpose of the study was to evaluate the existing transportation system in the study area and develop a prioritized list of potential capital improvements in relation to heavy truck traffic. The study process included data collection, field reconnaissance, traffic and safety analyses, development of potential improvement options, various engineering assessments, development of construction cost opinions; and stakeholder engagement.

State Road Improvement Project Early Preliminary Engineering Study, Pittsfield Township, Michigan, Washtenaw County Road Commission: Senior Planner, Roundabout Designer. Engineering study and environmental clearance for a 3-mile segment of State Road (from Ellsworth Road to Michigan Avenue). DLZ services included traffic studies, development of multi-modal road improvement alternatives, preparation of Environmental Assessment documentation and studies, and community engagement. Complete street elements and context-sensitive solutions included identifying potential bus routes and stops, on-street bike lanes, non-motorized pathways, boulevards, bioswales, lighting, wetland impact minimizations, and access management. Preferred alternative was a four-lane boulevard cross section with bicycle lanes, a multi-use path, and roundabout intersections.

inFORM studio

Cory Lavigne, AIA, LEED AP

Principal / Architectural Design Lead

Years of Experience

Education

Bachelor of Architecture, Lawrence Technical University

> Bachelor of Science, Ryerson University

Registrations & Certifications

NCARB Certified & Registered: Michigan American Institute of Architects United State Green Building Council

Awards

2016 AIA Michigan Firm of the Year 2011 AIA Michigan Firm of the Year 2010 AIA Detroit Young Architect Award 2010 AIA Michigan Young Architect Award 2003 AIA Detroit Honor Award, Howe Elementrary, Detroit Public Schools 2003 'M' Award Howe Elementary, **Detroit Public Schools** 2003 Learning by Design 2003 - Significant Project in Progress - Howe Elementary 2000 "2000 Laboratory of the Year" - Crawford Hall - Lake Superior State University2000 IESNA Design Award-Karmanos Cancer Center 2000 IESNA Design Award, **DRH Surgery Department** 2000 IESNA Achievement Lighting, North Oakland 2000 Healthcare Media Award. Karmanos Bone Marrow Unit 2000 Lighting Media Award, Karmanos Bone Marrow Unit 1997 Gypsum Association's Excellence in Gypsum Board Design 1997 North Oakland Medical Centers, **Emergency Department Renovation** 1997 Michigan Chapter of Illumination Engineering Society of North America 1997 North Oakland Medical Centers -**Emergency Department Renovation** 1997 Illumination Design Award



Cory is the Design Director and a principal at inFORM studio. His commitment and direction is illustrated within a broad range of projects which have achieved several professional distinctions. He leads holistic design on all projects, ensuring solutions achieve design excellence, and that teams are pushing ideas with a collaborative process. Cory's achieved several professional awards and distinctions, including 21 AIA Design Awards, and has played key roles in 8 competition entries receiving commendation including 3 winning projects which have been constructed.

Relevant Projects

Beacon Park, New Urban Park, Urban Design / Detroit, MI
Bagley Pedestrian Bridge, New Pedestrian Bridge, Urban Design / Detroit, MI
Providence Pedestrian Bridge, New Pedestrian Bridge, Urban Design / Providence, RI
Lansing Community College, New Campus, Quadrangle, Urban Design / Lansing, MI
411 Piquette Place, Visioning, & Conceptual Design, Urban Design & Architecture / Detroit, MI
St. Regis, Mixed-use development Master Plan, Urban Design & Architecture / Detroit, MI



Michael Guthrie, AIA, LEED AP

Principal / Urban Design Lead



Education

Master of Architecture, University of Michigan

Bachelor of Science in Architecture, Lawrence Technological University

Registrations & Certifications

NCARB Certified & Registered:
Michigan, Ohio, North Carolina,
South Carolina
American Institute of Architects
United State Green Building Council
Association of Collegiate Schools of
Architecture

Academic Experience

Adjunct Assistant Professor: Lawrence Technological University 2005-2006

Adjunct Assistant Professor:
University of Michigan,
Taubman College of
Architecture & Urban Planning
2001-2004

Visiting Critic:
University of Michigan
University of Detroit-Mercy
Lawrence Technological University
State University of New York
University of Illinois Urbana-Champaign

Awards

2016 AIA Michigan Firm of the Year 2011 AIA Michigan Firm of the Year 2004 AIA Michigan Young Architect Award 2003 AIA Detroit Young Architect Award 1997 Alumni Society Award, University of Michigan



As a founding design principal, Michael is inFORM studio's strategic lead who provides strategic direction for the firm, and fuses client and design ambition on all projects. His accomplishments range from professional to academic; and his commitment to the firm's progressive work is illustrated by a broad range of projects including museums, libraries, cultural arts facilities, urban designs, and bridges. Additionally, Michael has been an adjunct lecturer in architecture at the University of Michigan for 10 years and served on juries for design studios at numerous universities throughout the country. He has been credited with over 30 design awards for projects and competitions all over the world.

Relevant Projects

Beacon Park, New Urban Park, Urban Design / Detroit, MI
Bagley Pedestrian Bridge, New Pedestrian Bridge, Urban Design / Detroit, MI
Providence Pedestrian Bridge, New Pedestrian Bridge, Urban Design / Providence, RI
Lansing Community College, New Campus, Quadrangle, Urban Design / Lansing, MI
411 Piquette Place, Visioning, & Conceptual Design, Urban Design & Architecture / Detroit, MI
St. Regis, Mixed-use development Master Plan, Urban Design & Architecture / Detroit, MI

SECTION 3 PROJECT EXPERIENCE & REFERENCES

SECTION 3

PROJECT EXPERIENCE & REFERENCES

Project Experience

Houseal Lavigne Associates strengthens communities through creative, dynamic, and viable approaches to planning, design, and development. From revitalizing downtowns to creating context-sensitive zoning regulations, Houseal Lavigne Associates provides the expertise necessary to improve the relationship between people and their environment.

Houseal Lavigne Associates has worked with more than 250 communities throughout the country. In the last 14 years, we have directed more than 70 comprehensive plans, 90 corridor plans, 35 downtown and TOD plans, 40 special area plans, 25 traditional and form-based zoning ordinances, 17 design guideline assignments, and much more. Our national experience includes planning, design, economic, and zoning assignments in Michigan, Illinois, Indiana, Iowa, Wisconsin, Alabama, Arkansas, Colorado, Connecticut, Georgia, Kansas, Kentucky, Minnesota, Missouri, Nebraska, Nevada, North Carolina, Ohio, Oklahoma, Tennessee, and Virginia.

Master Planning Experience

The comprehensive and master plans developed by Houseal Lavigne Associates have proven to skillfully protect our clients communities' important existing assets and resources, coordinate new growth and development within their boundaries, and establish a strong, positive community image and identity—all while administering sound implementation strategies.

Birmingham's Master Plan Update should provide a foundation for decision-making that is based on an understanding of existing plans and conditions as well as future potential, community consensus, and a shared vision. In addition, we see the Master Plan as an important tool to promote the community's unique assets and advantages.

Michigan Experience

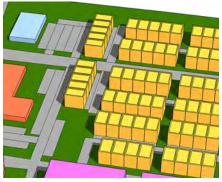
The list below outlines Houseal Lavigne Associates' experience in the State of Michigan:

- Battle Creek
- Livonia
- Saginaw

- Benton Harbor
- New Buffalo
- Traverse City
- Flint Shoreham
- · West Bloomfield







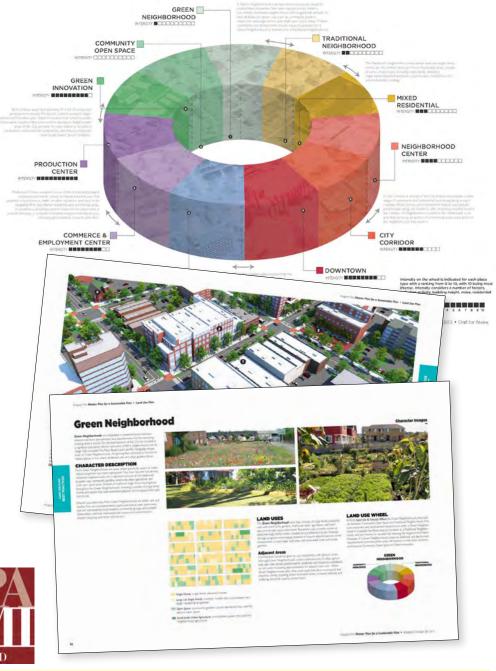




City of Flint, Michigan Flint Master Plan

Undertaking a planning effort the scale of which the City has never experienced, the Flint community is developing it first comprehensive plan in nearly 65 years -Imagine Flint. The Master Plan, developed by Houseal Lavigne Associates, focuses on the neighborhood unit as the essential and most important community building block, the City of Flint is forging a new direction for the community that has lost 50% of its population in the last 50 years (from 200,000 to 100,000). A central feature of the Imagine Flint Master Plan is the use of an innovative 'placemaking' approach to land use planning that builds on the idea of establishing unique and desirable places.

The City of Flint is in the process of updating its zoning ordinance and the placemaking approach has enabled a more seamless integration of land use and development regulations with Master Plan recommendations. The place types identified in the Land Use Plan are now serving as the foundation for future zoning districts and form-based overlays that together, prescribe the desired development, permitting it to occur in appropriate areas throughout the City.







IMAGINE FLINT

MASTER PLAN FOR A SUSTAINABLE FLINT

ADOPTED OCTOBER 28, 2013 • HOUSEAL LAVIGNE ASSOCIATES

West Bloomfield Township, Michigan **Township Center Framework Plan**

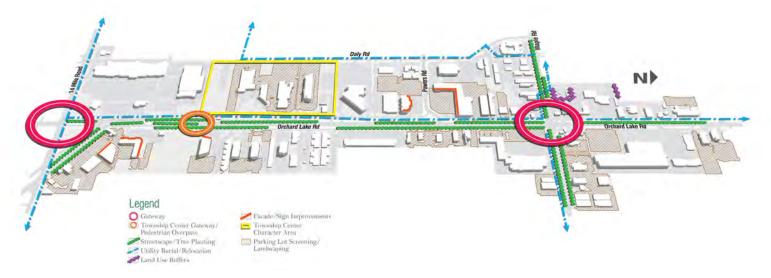
The Orchard Lake Road corridor is the spine of the West Bloomfield Township, a prosperous community northwest of Detroit. The corridor includes significant retail, office, and service uses. However, existing development and current zoning regulations are not aligned with the community's vision for the area. Through prior planning, residents expressed a vision for a walkable, mixed-use environment with a distinct local character.

The Township hired Houseal Lavigne Associates to assess its current plan and identify policy and regulatory actions that can be taken to help the community realize its vision. The resulting Township Center Framework Plan breaks the corridor into two categories. The first addresses current development that can be improved through corridor-wide land use policies, access management, site design enhancements, and public streetscaping. The second is a redevelopment concept for a specific portion of the corridor that would include walkable mixed-use blocks, strategic access and parking management, active open spaces, and phased implementation.



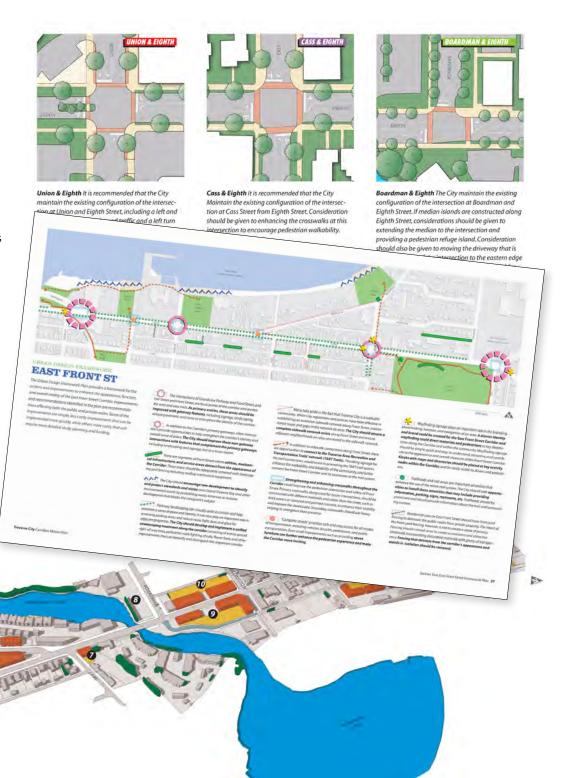
Urban Design Framework West Bloomfield Township Center District

The Urban Design Framework highlights ways that the Township can enhance the aesthetic character and identity of the Town Center District and Orchard Lake Road Corridor. By improving public areas such as rights-of-way with streetscaping, gateways, and attractive open space, and guiding development and sile amenities such as landscaping and building orientation, the Urban Design Framework seeks to improve the overall appearance of the corridor, distinguish it from other nearby commercial areas, and help to "brand" the area as uniquely West Bloomfield Township Center.



City of Traverse City, Michigan Corridors Master Plan

The Traverse City Corridors Master Plan is designed to improve the appearance, function, and vitality of the City's key commercial corridors. The Corridors Master Plan focus on restoring economic vitality by identifying opportunities for housing, commercial activity, and improvements to public infrastructure, including both the vehicular and pedestrian networks. An overarching goal of the project is to facilitate progress toward becoming a city of healthy and sustainable neighborhoods. Every aspect of the plan is aimed at improving livability and sense of place as the community strives to balance transportation and economic development interests.



A narrow development opportunity exists on the south side of the parking garage, between the parking deck and Eighth Street. Development of this Cityowned parcel should explore a shallow multi-story building that could ite to the parking deck with bridges or catwalks. Ideal uses would include ground floor commercial uses, with office or residential above. Additionally, it is important that the design of the building complement the appearance of the attractive parking deck.

On the south side of Eighth Street, between the Playhouse Theotre and Randy's Service Station there are four houses with redevelopment potential. Some have already been converted to business uses while and some remain residential. The praximity to the parking garage allow these sites to maximize their building envelope, accommodating in the parking garage. Although the current uses are appropriate, mixed-use redevelopment would better contribute to the character and synergy of the Corridor. As another option, the addiction recovery facility at 116 E. Eighth Street may represent an apportunity for lodging, such as a bed and breedfast or boutique hote!

A Close to Downtown, Boardman Lake, Boardman River, the new parking garage, and the Hagarty insurance development, this site represents one of the largest development opportunities in the Clig. To achieve full potential however, this opportunity will require parcel assembly, which an be difficult, ideally the development would include all property between Lake Avenue and Eighth Street and strengthen the connection between Old Town and Downtown. The parking garage could accommodate some of the parking needs for this development that should consist of mixed-use buildings, with commercial uses on the ground floor and residential and/or office above.

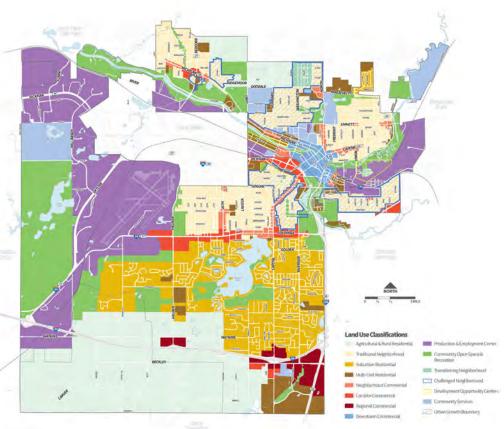
The Old Town Playhouse Theatre is exploring redevelopment of its site or expansion of their existing building. Similar to properties to the west, redevelopment of the theatre site should capitalize on the parking garage that is within close proximity and maximize full use of the site. Any new building should be located at or near the street, creating a street wild and establishing a pedestrian scale. The Theatre should be erigaing and interesting from the street. It should provide opportunities for pedestrian interest, such as the State Theatre that has exhibits and posters in their display windows along 'Main Street'.

The Thiriby property is a highly wisible site within close proximity to Downtown and Old Town. The Thiriby family, and their businesses, have been in the community for many years, and it is important that the Plan recognize that any redevelopment should happen when the owners are reday to leave the site. The triangular site would allow for interesting commercial redevelopment that could contribute to activity, synergy, and the overall character of the area, providing an apportunity for an interesting vista and icon for the Old Town District. The potential Boardman Lake Avenus would intersect with Eighth Street east of Lake Street and create a development opportunity at its intersection. Development of this site should have primary orientation to Eighth Street with parking in the rear accessed by either Lake Street or the new Boardman Lake Avenue. Given proposed rum restrictions on Lake Avenue, development should mindful of the cuthrough potential of this parcel if Boardman Lake Avenue is constructed.



City of Battle Creek, Michigan **Master Plan**

Battle Creek, dubbed "Cereal City", is a regional economic center in Western Michigan and is the location of Kellogg's Cereal global headquarters. In 2015, the City of Battle Creek partnered with Houseal Lavigne **Associates** to update their Master Plan to provide direction for future development and investment. The new Master Plan places strong emphasis on land use and development in a post-recession era, and promotes an urban growth boundary to combat sprawl and direct investment to the city's established core. A detailed corridor plan provides specific actions and improvements for Columbia Avenue, an aging auto-oriented corridor, including a redevelopment concept for a key intersection. The Master Plan also includes recommendations for Battle Creek's green infrastructure, helping the City address stormwater and local flooding.

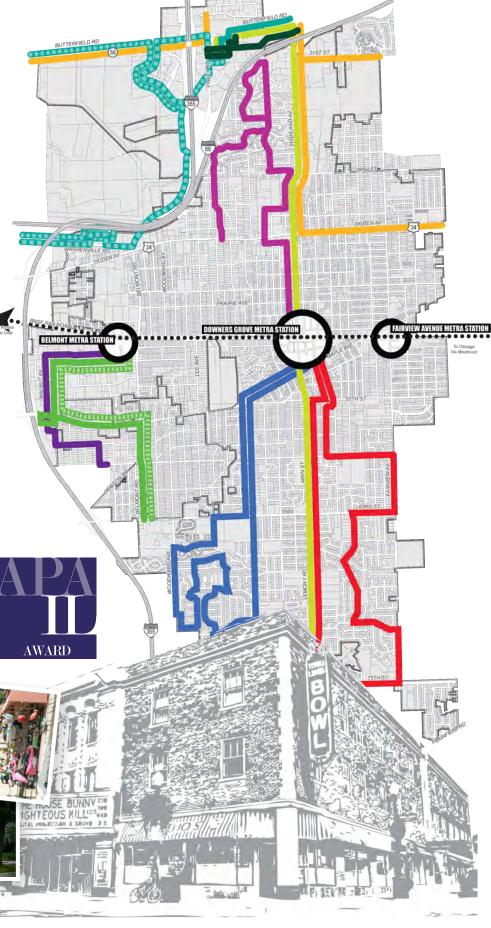




Village of Downers Grove, Illinois **Comprehensive Plan**

Building on the success of the Total Community Development 3 (TCD3) process, an extensive eight-month community outreach campaign involving more than a thousand residents and used as a foundation for prioritizing community issues and objectives, Houseal Lavigne Associates directed the update of the Downers Grove Comprehensive Plan. The Plan provides detailed recommendations for several sub-areas within the Village, including the Downtown and the Ogden Avenue Corridor, as well as plans for all areas of the Village, including land use and development, transportation, community facilities, environmental features and open space, and much more. Since the last Plan's adoption in 1965, the Village has experienced significant population growth, as well as socioeconomic and physical changes.

The Plan was created to better address the changing needs of the Village's commercial and industrial areas while protecting and enhancing its attractive and well established residential neighborhoods. In 2012 the Downers Grove Comprehensive Plan received the Daniel Burnham Award by the Illinois Chapter of the American Planning Association for the best Comprehensive Plan in the State.



City of St. Cloud, Minnesota **Comprehensive Plan & Downtown Subarea**

With a vibrant Downtown along the Mississippi River, a thriving local economy, and home to a major university, St. Cloud is a community that has strong foundation upon which to plan for its future. The City's new comprehensive plan, directed by Houseal Lavigne Associates, focuses on revitalizing the core neighborhoods, guiding investment in the commercial corridors and employment areas, enhancing multi-modal connectivity, and establishing a strong economic development strategy. Rich in graphics and illustrations, the Plan includes a detailed Downtown Plan and Division Street Corridor Plan that enhances urban design, sense of place, and overall functionality. The Plan also identifies development opportunity catalyst sites and provides a development program and development visualization for market viable concepts.



City of Hudson, Ohio Comprehensive Plan & Downtown Phase II Plan

The City of Hudson is an affluent municipality located in Northeastern Ohio in close proximity to both Akron and Cleveland. Houseal Lavigne Associates was engaged by the city to prepare a new comprehensive plan while concurrently developing a plan for the expansion of their very successful Downtown. The planning process included working with separate Comprehensive Plan and Downtown Plan steering committees in addition to extensive community outreach. A major complexity in the Downtown Plan involved identifying uses had to remain on the 35 acre site as well as those that had to or should be relocated, including a public works and school bus facility.

The final plan includes an assessment of development potential, build out scenarios, a 3D model, and the creation of several different concept plans. Once adopted in December 2015, the plan will be used to solicit developers to the site.

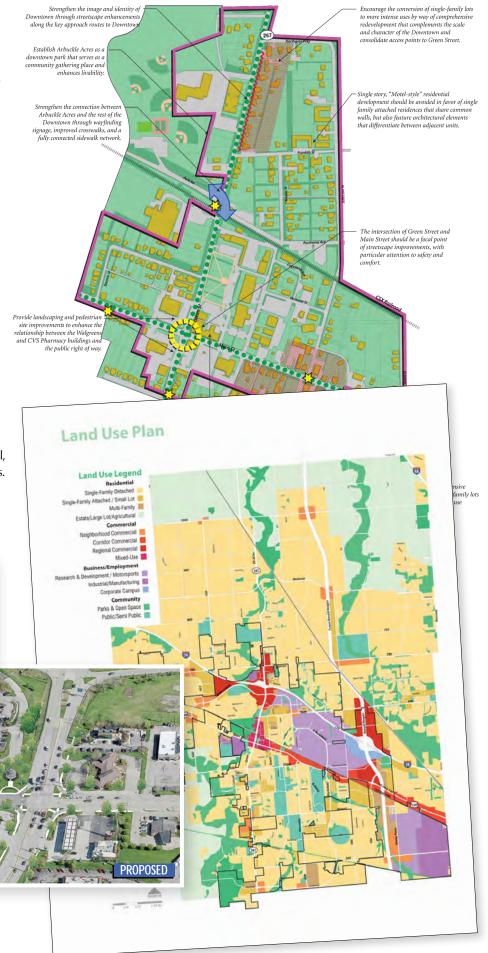
The Downtown Phase II Plan provides on overall vision and detailed concer plan depicting a desirable development program for the project study area However, flexibility should be maintained and the City should remain responsive to the market. Building sizes and footprints will likely vary between the procosed development program within its follon and



Town of Brownsburg, Indiana Comprehensive Plan

The Town of Brownsburg is a quickly growing suburb of Indianapolis. To appropriately manage growth and development and to spur reinvestment in the Town's commercial areas, the Town engaged Houseal Lavigne Associates to prepare a long-range comprehensive plan. The geographic area of the plan encompassed the Town of Brownsburg and two surrounding townships. In addition to plans for entire community, the Comprehensive Plan also includes detailed plans for 2 key corridors (Main Street and Green Street) and 3 subareas (Downtown, Ronald Reagan Parkway, Nitro Alley).

The planning process included several community workshops, including 3 separate visioning charettes with the community. Postcards were created to help popularize the study, and an exhibit booth was created for the Town's 4th of July Extravaganza. The project also featured an interactive project website, including a visual preference survey and Planning Mapper, an online mapping tool, each prepared by Houseal Lavigne Associates.



City of Coralville, Iowa Community Plan

Propelled by a burgeoning tech, research, and medical community, Coralville is a rapidly growing City in eastern lowa. **Houseal Lavigne Associates** directed the update of the City's Community Plan, which provides guidance on future growth and development, with a focus on creating diverse residential areas, improving retail areas, establishing mixed-use areas, strengthening connections to the University **COMMUNITY** of Iowa campus, and supporting R&D **FACILITIES PLAN** and technology-based industries. The Community Plan provides a growth plan that encourages the expansion of the University of Iowa Research Park, a STEM community college, and the University of Iowa Medical Center, while balancing the need for retail and residential diversity. **SUBAREA FRAMEWORK PLAN** LEGEND Catalyst Site Potential Wayfinding Streetscape Enhancements Potential Pedestrian/Trail Connection Wooded Areas Crosswalk Enhancements Proposed Street Grid

City of Bristol, Virginia Comprehensive Plan

The City of Bristol is located along the Virginia/ Tennessee state line with the Downtown being uniquely divided between Bristol, Virginia and Bristol, Tennessee. **Houseal Lavigne Associates** was retained by the City of Bristol, Virginia to prepare the City's new comprehensive plan. The Planning process incorporated extensive community outreach and included an Advisory Committee and regular interaction with City staff and officials. The Draft Plan is expected to be considered for adoption by City Council in the Fall of 2016.

The City has many assets to build off of, but faces several challenges in the future. It is currently in the process of building out a new retail center "The Falls" which has required significant city investment. The plan addresses strategies and recommendations for maximizing success of the development which will be extremely important to the City's future from both a planning and financial perspective. Other issues addressed include repositioning of a closed college campus and aging shopping mall and maintenance within the City's many different residential neighborhoods. Separate detailed subarea plans were prepared for key locations including the Downtown.















The Future of Bob Morrison Boulevard: A Visualization

The image to the left visualizes the recommendations detailed on pp. 68-72. Recommended improvements include:

- New infill development along State Street, converting underutilized parking lots into structures with a mix of retail and service uses;
- Shared parking lots behind business along State Street, allowing businesses greate parking volume;
- Enhanced buffers between proposed light industrial developments and the surrounding residential and commercials areas;
- Medians and parkway trees along Bob Morrison Boulevard and Commonwealth Avenue;
- Reconfigured intersections with pedestrian amenities such as paved crosswalks, countdown timers, and signage:
- Creation of the Corvette Trail;
- Beautification of unsightly properties with landscaping, groundcover, and lawn areas;
- Siting developments to avoid conflicts with the existing floodplain.

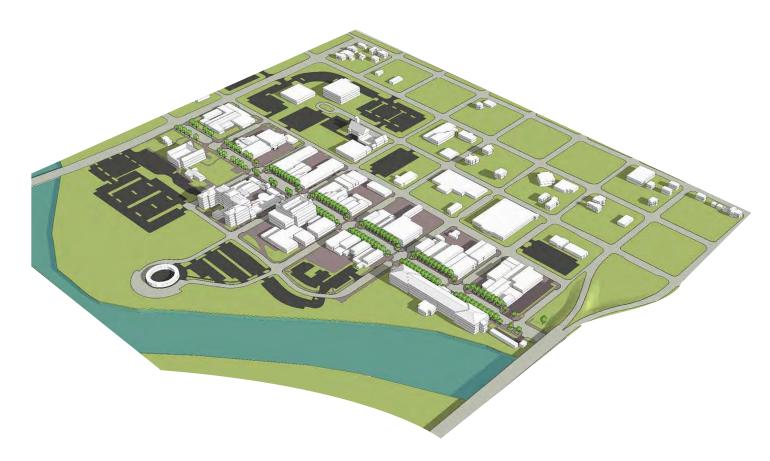
City of Midland, Michigan Downtown Midland Streetscape Redevelopment Study & Design (DLZ)

Key Elements: Traffic Analysis | Public and Stakeholder Engagement | Non-Motorized Mobility | Alternative Development and Analysis | Access Management | Geotechnical Investigation | Topographic Survey | Road Design | Drainage Design | Streetscape Design | Utility Coordination | MOT Design

DLZ was contracted (on a team with Smith Group JJR) by the City of Midland (City) to perform a streetscape study and design for Main Street from M-20/Jerome Street to State Street in the City. The study phase of the project included a detailed traffic analysis of Main Street and all cross-roads, geotechnical investigations, cost estimation, topographic survey, and development of streetscape concept design plans.

The main work tasks performed by DLZ during the design phase of the project included geotechnical engineering, utility coordination, roadway design, traffic signal removal, drainage design, maintenance of traffic design, design of non-motorized facilities, 3-D model development, and construction cost estimates. In addition, DLZ work included preparation of front-end documents and specifications, signal warrant analyses, before/after study for All-Way Stop Control implementation, and preparation of an engineering report. A key component of the project entailed non-motorized mobility and connectivity throughout downtown Midland. DLZ worked closely with other team members to assure our design would support these goals. The studies and design tasks for this project were completed by DLZ under an extremely aggressive timeline.

DLZ participated in an extensive public outreach campaign including public workshops, local business input, and stakeholder meetings. Coordination was undertaken with the City, the Midland Downtown Development Authority, the Midland Area Transportation Study, Michigan Department of Transportation (MDOT), and various stakeholders such as Momentum Midland, and the Midland Chamber of Commerce.



City of Marquette, Michigan

City-Wide Traffic Study & Truck Corridor Study (DLZ)

DLZ was contracted by the City of Marquette to perform a comprehensive traffic study for all of the main roads and intersections in the City. This comprehensive study addressed both vehicular and non-motorized travel and included the following main study phases: (1) Data collection; (2) Analysis of existing and future conditions to identify deficiencies with the transportation network; (3) Recommendation of mitigation measures; and (4) Coordination with stakeholders. In carrying out this work, DLZ staff undertook the following specific tasks:

- Data collection included turning movement counts at more than 80 intersections using Miovision, pedestrian counts, collection of crash data, and ADT counts using HI-STAR counters.
- Identified mitigation measures that included road improvements, signal timing improvements, and enhanced non-motorized facilities.
- Study and identification of potential truck routes.
- Stakeholder coordination included interaction with MDOT, City committees, the local transit provider, non-motorized advocacy groups, business groups, and the utility company that maintains the traffic signal system.
- Signal warrant analyses for intersections under City and MDOT jurisdiction.
- Capacity analysis using SYNCHRO, SIMTRAFFIC, HCS, and RODEL.
- Detailed analysis of signal corridor operations, including optimization analysis.
- City Council presentation.
- · Construction cost estimates.
- Traffic forecasting, including application of growth rates and ITE trip generation.
- Developed extensive graphics including use of GIS data.
- Preparation of a comprehensive report.



City of Dearborn, Michigan West Downtown Streetscape Traffic Study & Road Design (DLZ)

This project involved preparation of road and streetscape design plans as well as traffic studies for revitalization of Dearborn's West Downtown.

DLZ performed a traffic impact study, roadway design, and lighting design for improvements along Michigan Avenue (US-12) and several local streets. The project included proposed medians within Michigan Avenue, mid-block pedestrian crossings and a road diet on Monroe Street south of Michigan Avenue. The proposed Monroe Street road diet and proposed left turn restrictions on Michigan Avenue to accommodate the proposed median and mid-block crossings required detailed traffic analyses and coordination with MDOT. DLZ prepared a Traffic Impact Study to meet MDOT requirements to evaluate several median and left turn restriction alternatives. DLZ developed SYNCHRO/Sim-Traffic traffic models to evaluate the alternatives on this heavily travelled MDOT arterial. DLZ recommended signal timing improvements, turn bay lengths and other geometric improvements to accommodate the proposed streetscape improvements.

DLZ prepared lighting design plans for aesthetically pleasing festoon and catenary lighting that contributes to a pedestrian-oriented downtown.

DLZ also prepared a TAP Grant application for the improvements on Michigan Avenue and undertook extensive coordination with MDOT.





City of Detroit, Michigan Urban Social Space (inFORM)

DTE Energy, one of the largest employers in Detroit, is playing a ground breaking role in the formation of a new public space on the fringe of their downtown campus which is intended to spur revitalization of the surrounding neighborhood. The proposed triangular–shaped public space lies one block to the east of the DTE Energy building, along Grand River Avenue in the heart of the city. In a collaborative effort with LivingLAB, inFORM studio has provided full design services for the HUB, an on-site cafe | pavillion intended to form the catalytic heart of the park. Programmatically the HUB will provide a full service kitchen, public restrooms, AV storage, bar area, balcony seating, a historical DTE narrative and a rooftop garden with provisions made to enclose seating for 150 people.

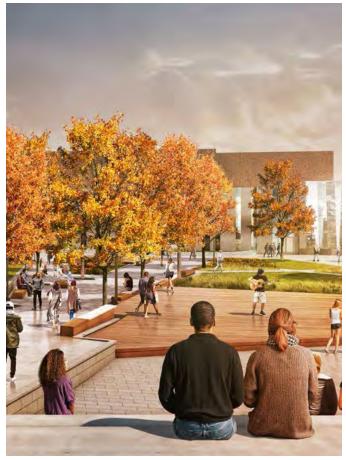
The proposed street facing public face of the HUB building aims to unify pedestrian circulation while creating an iconic wayfiding point within the park interior. The blackened steel and wood cladding pull from adjacent material palettes while a integrated Interac-tive Display System is optimized for augmented reality applications in which optical markers or real-life objects trigger information and accommodate an unlimited number of concurrent users with a high-tech LCD display. An EHTE (Extensible Hybrid Tracking Engine) is configured to capture reflections, passive ambient light and shadows between alternating frame rates. The tracking system can be used to see virtually anything placed on the display and visible with IR, tracking and passing information to applications through finger points, hands, objects (shapes) or optical markers. The high technology display system is intended to support and entertain patrons of the Grand River Circle Park Site.

The HUB interior, the heart of the GRPS, supports so many of the activities with food, drink, rest rooms, dining & gathering areas, in addition to green roof access. Elements of the interior include; 1) An operable glass partitions which extends the seating area into the park, blurring the delineation between interior and exterior space. 2) A backlit acrylic bar top contrasts the darkened steel and illuminates the event space core. 3) CNC routed concrete formwork creates a unique texture of concave and convex domes on the ex-posed concrete ceiling. This texture will provide visual intrigue and help to diffuse sound. Lights will be stippled into the field of domes in the ceiling to provide a constellation of ambient light. 4) Ipe wood siding and concrete pavers used at the exterior are extended to the interior space, further reinforcing the connection between the two environments.



Lansing Community College, Lansing, Michigan **Student Quadrangle (inFORM)**

The redevelopment of the Lansing Community College Quadrangle project creates a significant connection and a spatial mediator between a congress of energetic and diversified disciplines within the downtown campus. Working within the framework of a unified campus vision, this exciting project presents an opportunity to increase pedestrian accessibility and circulation functionality while define a signature gateway & wayfinding component at the heart of the school. The revitalized quadrangle will provide enhanced connectivity between the Gannon Building, Health & Human Services, Dart Auditorium and the Arts & Sciences Building.





City of Ann Arbor, Michigan New District Library

In 2005, The Ann Arbor District Library (AADL) purchased approximately 4 acres of property for a new branch library to serve the Northeast quadrant of the city of Ann Arbor. The site, heavily wooded and densely vegetated, is located on the Southwest corner of Huron Parkway and Traverwood Drive. A thorough site analysis identified edges of the property along the Southwest corner which were scarred and sparsely vegetated, an ideal and well suited location for placement of the building footprint. Locating the building at the property corner accomplished three primary objectives:

- The creation of a protective barrier between the existing eco-systems within the woods and the inhabitants of the city.
- Established urban street presence along the street and sidewalk edge.
- Minimal site impact, maintaining biodiversity and reducing sprawl.

During the early stages of the site planning process, we collectively began to discuss and investigate considerations for harvesting wood from the site for re-use in the building. Although densely populated, many of the trees were Ash, suffering the effects of the Emerald Ash Borer (EAB), a destructive beetle, which aggressively attacks North American Ash trees through feeding on the water and nutrient conducting tissues under the bark, killing the tree over a period of three to five years. As of 2009 it is estimated that the EAB has killed over 70 million Ash throughout the Midwest and southern portions of Canada and threatens 7.5 billion ash trees nationwide. Preliminary research showed that this particular tree species is especially well-suited to milling, as the insect does not damage the interior portion of the wood. With so much value found in a close, abundant, natural resource, unique uses of the wood in the floors, walls, ceiling and structure of the new branch library were proposed and considered.

The utilization of the Ash would become a major component to the design of the library interior. Integrated as an interior wrapper, the Ash flows from the main entry floor and walls into a ceiling condition stretching along the entire eastern interior edge of the building and culminating in an Ash wrapped reading rooms whose primary views are focused westward into the forest. Additionally, large sections of the logs were used as structural columns, accommodating vertical and lateral loading along the large southwest expanse of glass. The bark has been stripped from these log columns exposing the randomized grooves and carvings left by the EAB larvae - creating, what is in essences, a visual and tactile testament to the life and destruction of the Ash tree in Michigan and surrounding area, allowing generations to be exposed to an autopsy report of an extinct species in the region.



City of Detroit, Michigan 411 Piquette Place (inFORM)

Piquette Place is located within an urban fabric defined by rich layers of history and latent potential. On the eastern periphery of New Center, the history of its neighborhood was defined by industrial expansion in the 1890s and became known as Milwaukee Junction. At the intersection of major railways and a hotbed of innovation, the district emerged as a significant player in automotive manufacturing. The chronicling of this storied tradition resulted in the formalization of two historic districts known as the Jam-Handy District along East Grand Boulevard and the Piquette Avenue Industrial District located south of the railway from Woodward Avenue to Hastings Street. While these historic districts highlight a rich historical fabric that imbues a certain quality of the region, they lack the characterization that the greater tapestry of context illustrates.

With an array of pure industrial spaces made of brick and concrete proliferating the region, the programmatic adaptive re-use of proximate spaces is evolving into a fertile nexus of design, education and entertainment. Additionally, new developments, anchored by the Platform, are breathing a strategic vision into a significant clustering within this neighborhood, bolstering the momentum of a unique branded location within the UNESCO City of Design. Music, art and culinary destinations are diversifying the reputation of the 'Maker District' into a hub of design and production excellence. The ½ mile square zone will be anchored by Chroma to the northeast and Piquette Place along with the Ford Piquette Museum on the southeast corner. The synergy of design innovation and storied authenticity is creating one of the most unique neighborhoods in the rust belt of the United States. Piquette Place is distinctively located at the center of its heartbeat.



City of Providence, Rhode Island New Pedestrian Bridge (inFORM)

The Providence River Pedestrian Bridge is a unique urban proposal in that the basis of its proposition is an exchange of transit medium. The relocation of a substantial, vehicular only conduit in favor of a pedestrian oriented connector will completely transform the spatial character of the Jewelry District/Old Harbor. Given this significant urban transformation, the project should envision a potential much larger than a pure connector. The proposed Providence River Pedestrian Bridge can become a spatial mediator between urban and ecological spaces and function as an integrated series of programs into the waterfront public spaces, allowing east and west to become a singular meandering public space. With this perspective, the proposal is better understood less as a bridge and more as an urban intervention. Additionally, the re-invigorated entrepreneurial spirit of Providence is poised to weather the global economic downturn with a future vision for the emerging Knowledge District and potential new biomedical corridor. The face of this future is one of innovation, intellectual fervor and progressive thinking. A project of this magnitude needs to reach out to this "creative class" and "knowledge economy."



Lawrence Technological Institute, Southfield, Michigan Integrated Student Housing (inFORM)

Lawrence Technological University's Southfield campus is experiencing an in-flux of students with a desire to live on campus, impacted strongly by the LTU's recent addition of a Student Athletic program which includes a new Varsity Football team. This fervor in student resident growth has created a dramatic and immediate need for on-campus student housing facilities.

inFORM studio was selected from a small group of national candidates and commissioned with providing a 300+ student bed dormitory with a focus on student attraction and retention for the University's many design programs and relationships through cross-pollination of student social groups. Working with a very conservative budget of \$180/sf, inFORM was tasked with creating an iconic residential flagship for the University.



City of Pontiac, Michigan M1 Concourse Racing Village (inFORM)

One of the largest facilities of its kind in the world, the M1 Concourse provides exotic car and racing enthusiasts a full-service venue for an immersive experience including a 1.5-mile state of the art road course, an event center, restoration shops, aftermarket retail, restaurants, and private garages, known as car condos.

The Track One concept will be the debut phase of implementation for the new public village at the M1 Concourse in Pontiac, MI in late 2018. As the 87 acre auto-enthusiast development forays into the public realm, Track One will introduce a new paradigm of hospitality with a restaurant, cigar bar, rooftop lounge and ballroom | convention space. The concept drives a high-energy atmosphere with a tight proximity to exotic cars performing around the 1.5 mile race track, and connects to the urban village through a pedestrian oriented plaza. The project is a nexus between the best of automobile performance and the quality of a walkable environment.

REFERENCES

At **Houseal Lavigne Associates**, we are proud of our work and the long-term relationships we maintain with all of our clients. We believe each of these references demonstrates our ability to satisfy clients through an approach that meets their technical and financial needs.

The following references include clients who have worked with Houseal Lavigne Associates to complete similar work within the past five years.

Client	Contact Name	Phone	Email
City of Flint, Michigan	Kevin Schronce, Lead Planner	(810) 766-7426	kschronce@cityofflint.com
City of Traverse City, Michigan	Russ Soyring, City Planning Director	(231) 922-4465	rsoyring@ci.traverse-city.mi.us
City of Benton Harbor, Michigan	Regina Sistrunk, Deputy Director of Community & Economic Development	(269) 927-8420	rsistrunk@bhcity.org
City of Battle Creek, Michigan	Christine Zuzga, Planning Manager	(269) 966-3320	cmzuzga@battlecreekmi.gov
City of Hudson, Ohio	Mark Richardson, Director of Community Development	(330) 342-1888	mrichardson@hudson.oh.us
City of St. Cloud, Minnesota	Matt Glaesman, Community Development Director	(320) 255-7218	matt.glaesman@ci.stcloud.mn.us
City of Bristol, Virginia	Sally Morgan, City Planner	(276) 645-3784	sally.morgan@bristolva.org
City of Coralville, Iowa	Ellen Habel, Assistant City Administrator	(319) 248-1700	ehabel@ci.coralville.ia.us

WORK SAMPLES

For the City of Birmingham's consideration, multiple copies of Houseal Lavigne Associates' work samples on past comprehensive and master planning assignments have been included as separate bound documents. These samples include brief portions from the Flint Master Plan's Land Use chapter and the Market Analysis and Community Profile chapter from the City of Bentonville's Community Plan.

SECTION 4 SCOPE OF WORK

SECTION 4 SCOPE OF WORK

PROJECT UNDERSTANDING

Our Project team is excited about the opportunity to work with the City of Birmingham as it looks towards updating its City-wide Master Plan (the "Plan"). We understand the objective of the Plan is to focus on updating the existing master plan, which was adopted in 1980, and several subarea plans developed since. While most of the subarea plans focused on commercial areas, the purpose of this Plan update would be to provide a clear focus on the City's residential areas. Our initial observations all require further analysis and investigation and all are subject to community outreach efforts that are integral to our proposed planning process. We believe our award-winning community outreach, planning, and design expertise will allow us to move quickly into the assignment and provide insight into how best to tackle issues and make the most of Birmingham's opportunities.

Creating a downtown destination

Birmingham has implemented several recommendations from its Downtown 2016 Plan and created the downtown as a desirable destination. Large sites, which were once empty, are now occupied with multiple uses. The City's main street, Woodward Avenue, was narrowed to two lanes by adding a center median and diagonal parking to calm the traffic. The City is one of the few communities in the region to adopt a form-based zoning code, which has resulted in over three million square feet of mixed-use projects in the last two decades. Single-story zoning regulations have been changed to those allowing multi-story buildings to create a high-density development environment and an enhanced "street-wall" character. Some of the commercial development, such as the Kroger grocery store and the iconic downtown movie theater, is built closer to the street and the movie theater is built right up to the pedestrian sidewalk. The parking is moved either to the side or the back of structures. Shared parking garages also supplement the parking requirement to support the businesses.

The Plan should embrace and build upon the success of Birmingham's effort in managing commercial development in its downtown and other districts. The new plan should focus and put priority on residential areas of the City.

Building on positive momentum

The City has developed plans for several targeted district and strategically implemented and channeled investment to these districts with a great deal of success. The City's downtown boom has continued through the Great Recession, when the it continued to see mixed-use development. Downtown Birmingham attracts shoppers from all over the Detroit area, featuring myriad stores such as coffee houses, ice cream parlors, upscale apparel and home furnishing shops, restaurants, and theaters. Through careful and intelligent planning, most new buildings in Birmingham's downtown look very traditional and fit well with their surroundings.

The Rail District provides a luxury living in an exciting neighborhood in Birmingham. The district is surrounded by art galleries, antique shops and restaurants and is home to over 30 businesses. This district is culturally vibrant and Birmingham's "hottest" new area. Popular restaurants such as Big Rock Chophouse and The Whistle Stop are located very close to the District's residential area. The Triangle District Plan sets a new vision for the Triangle District as a vibrant, mixed-use neighborhood of homes, shops, restaurants, offices, and public plazas and identifies guidelines and recommendations to achieve this vision.

The Plan should utilize the collective impact of development in these targeted areas and focus on providing recommendations to other parts of the City.

Incorporating new urbanist principles

Andres Duany, an urban planner, gave a presentation at the City Hall in 2014. Duany talked about how the City should continue to maintain its high quality of architecture for new development in Birmingham. He indicated the City's approach to managing certain uses as remarkable. Instead of declining a particular use, the City's code provides a "range of criteria" to accommodate the use which results in the City to be viewed as a positive and attractive among development community. Duany also suggested the City act quickly in promoting new development so it can be aligned with the general development cycle of the industry. While Duany identified some key strengths and successes of Birmingham, he also identified several missed opportunities that City officials and resident prevented to implement.

The Plan should consider and address, to the extent possible, the "missed opportunities" identified by Andre Duany in 2014.

Enhancing the Walkable Community

In 2013, the City adopted its multi-modal transportation plan to provide more transportation choices to its residents. Since its adoption, the City has implemented the recommendations in accordance with the vision set forth in the transportation plan. This is evidenced by the City's downtown "Walk Score" of 95. The plan focused on providing infrastructure for pedestrian, transit, and bicycle travel modes. The plan provided recommendations for building a well-connected community and giving residents various transportation choices.

The Plan should continue to build upon the vision and goals from the multi-modal transportation plan and provide recommendations to provide a myriad of transportation choices to Birmingham's residents and make the City attractive to those looking for a walkable environment.

SCOPE OF WORK

We propose a multi-step process for preparing the City of Birmingham's Master Plan Update. This program entails analyzing existing conditions to provide a concise and accurate assessment of the City's strengths and weaknesses; developing and evaluating alternative plans and policies; preparing subarea plans; and formulating final Master Plan recommendations and implementation strategies that are both measurable and specific.

In addition, and equally important, our approach to master planning places a significant emphasis on community participation. We recognize the importance of using the planning process to establish community consensus and foster a sense of stewardship for the Master Plan. Our approach requires that residents, business leaders, City officials, and other stakeholders get involved at every step of the process and be active participants that can help to define issues, establish a vision, formulate innovative ideas, and shape lasting solutions. This approach casts a wide net of engagement by providing an assortment of both traditional and innovative web-based methods.

We believe our proposed scope of work will produce a meaningful and responsive Master Plan for the City of Birmingham. Should the City favor our approach, we will work closely with staff and other officials to further refine this process, ensuring that all local needs and requirements are met. Each step and project task of our proposed scope of services is presented in detail on the pages that follow.

Step 1: Project initiation

To "kick-off" the planning process, we will conduct meetings with key municipal staff and the City of Birmingham's Planning Board. These meetings will help establish a project framework before community outreach activities commence.

1a. Staff coordination meeting

Before beginning work on the project, Houseal Lavigne Associates will meet with City staff to (1) review the project scope, schedule, and deliverables; (2) begin to identify data needs and critical issues; and (3) clarify any outstanding matters. We anticipate having a high level of direct interaction and communication with City staff and are committed to participating in regular coordination meetings and conference calls throughout the planning process.

1b. Planning Board meeting

Before our planning work begins, we will facilitate a first meeting with the Planning Board to set the foundation for the planning program and discuss the overall direction and policy issues facing the community. The primary purpose of this meeting is to gather vital insights and ideas from commission members, ensuring that the Master Plan accurately captures the shared sentiments of the community.

Step 2: Community outreach and engagement

We understand that a one-size-fits-all approach to community engagement is ineffective and that the City of Birmingham places great value on an extensive and authentic outreach process. Step 2 of our proposed scope of work will serve as the foundation of our civic engagement strategy. Houseal Lavigne Associates provides a multi-pronged approach to outreach and a variety of expertise that will be essential in engaging the community, addressing local issues, and most importantly, and ensuring the inclusion of a diverse swath of Birmingham's residents and business owners.

2a. Press releases, notices, and newsletter articles

We will work with City staff to develop press releases, newsletter articles, and other means of public notice at different points in the planning process. These items will be disseminated on various platforms, including the City's official website, local newspapers, and local media outlets. We advise that these platforms be updated regularly throughout the process of preparing the City's Master Plan Update.

2b. Interactive project website

We will design and host an interactive project website that is linked to the City's official website. We are committed to utilizing the internet to maximize the participation and communication between stakeholders for the duration of the planning process and beyond. This website can be used to post project schedules and meeting dates, display documents, address frequently asked questions, and host a community discussion forum. The website will be the "one-stop shop" for information related to the master planning process. In addition, the website will include two sets of survey questionnaires: one targeted at residents and another at Birmingham's business community.

2c. Community charrette

A multi-day charrette will be scheduled to allow residents and community leaders to provide input before any plans or recommendations are formulated. The function of this charrette is to (1) define the purpose of the Master Plan Update, (2) review the planning process and project schedule, and (3) secure local views on concerns, issues, and potentials within Birmingham.

2d. Business workshop

This workshop will be targeted specifically to Birmingham's business owners and corporate citizens, an important stakeholder group. The primary purpose of the workshop is to establish a dialogue and obtain feedback from those members of the business community that have a unique insight and perspective and whose assistance and involvement is crucial to the Master Plan's ultimate success.

2e. Stakeholder interviews and focus group discussions

Stakeholder interviews and focus group discussions allow us to obtain first-hand insight into the community from a diverse array of perspectives. Houseal Lavigne Associates will conduct confidential interviews and focus group discussions to obtain vital information regarding local issues and opportunities. We will work with City staff to identify those individuals and groups to be interviewed, but we do recommend a broad sampling of interviewees who possess unique perspectives and special insights into Birmingham.

2f. Do-it-yourself (DIY) workshop kits

We will make DIY workshop kits available to City staff, as well as community groups throughout Birmingham (e.g., chamber organizations, homeowner associations, churches, and neighborhood groups). DIY kits will allow City staff and residents to self-facilitate workshops and gather input from specific segments of the population that may not otherwise participate in more formal planning activities.

2g. Immersive outreach

Our immersive outreach methods utilize an approach centered on bringing "planning to the people." To this end, and to ensure we cast as wide a net of engagement as possible, we can attend certain agreed-upon events throughout the planning process to facilitate targeted discussions at community events. In addition, working with City staff, we will develop promotional collateral, including flyers, posters, and email blasts, to help get the message about the Master Plan Update throughout the community in an impactful and engaging manner. We will also develop postcard-sized surveys that can be distributed at any event, gathering, or location within the community. These materials will give staff the tools needed to continue community engagement outside of scoped outreach activities.

2h. Social media

If desired, we can integrate the project into the City's existing social media accounts. For those residents that use social media platforms to stay informed, this is an essential tool to keep this population connected with local master planning activities. Social networking tools can also help increase awareness of the Master Plan Update and assist in increasing participation at outreach events, including traditional face-to-face meetings.

2i. map.social

As an innovative feature of our proposed scope of work, we will feature map.social, a web-based community issues mapping tool as part of Birmingham's master planning process. Developed and used exclusively by Houseal Lavigne Associates, this award-winning tool allows website visitors to identify, map, and comment on geographic areas of concern and valued community amenities. Map.social simplifies the mapping process and familiarizes residents with all areas of the community in a manner that is exciting, interactive, and effective. Input from residents allows us to create a composite map of community issues to assist with the establishment of community goals.

2j. Community outreach summary memo

After the completion of the community outreach and engagement activities, Houseal Lavigne Associates will prepare a memo summarizing the input we received and identifying key issues.

Step 3: Data collection and existing conditions analysis

This step of the project will include the analysis of existing conditions and future possibilities within the community. It will be based on information provided by the City as well as feedback from community service providers. In addition, we will utilize information collected during field reconnaissance, obtained from surveys and inventories, and derived from planning analyses. We will emphasize the identification of the current conditions within Birmingham that will ultimately guide the formulation of the City's vision, goals, and policies included in the final Master Plan.

3a. Review of past plans, studies, and reports

We will conduct a thorough review of Birmingham's existing Master Plan along with other previously prepared plans, studies, and reports relevant to the planning process. This review process will help to (1) identify recently adopted City policies that need to be reflected in the new master plan, (2) assess changes within the community that have occurred since the adoption of previous plans, (3) find conflicts between, or deficiencies within, existing plans, and (4) determine the validity of previously collected data.

3b. Demographic analysis and market overview

We will prepare a demographic analysis of Birmingham that will include an analysis of recent trends in population, households, income, age and gender characteristics, racial and ethnic composition, and labor force and employment. We will concurrently formulate a market overview to assess high-level supply and demand trends, particularly as they relate to attracting and retaining residents and businesses.

In addition, this analysis will assess the development potential for a range of uses including residential, retail, office, and industrial. Our housing analysis will document the City's existing housing inventory and identify the need and potential by product and price points for both owner-occupied and rental product,

3c. Existing land use and development

We will prepare an existing land use map comprised of all parcels within the City's planning jurisdiction and then analyze this map to identify functional land use areas, compatible and incompatible land use arrangements, and other issues related to existing land use and development conditions. This inventory and assessment will include a detailed examination of the City's residential, commercial, industrial, parks, and open space.

3d. Zoning and development controls

We will conduct a technical analysis and sustainability audit of Birmingham's current zoning and development controls. This process will allow us to (1) assess how well current regulations effect established City policy and integrate with other ordinances and initiatives, (2) summarize consistencies or inconsistencies in the current code, and (3) evaluate general strengths and weaknesses of existing regulations—especially structure, organization, clarity, usability, district standards, regulations of general applicability, definitions, and procedures.

3e. Community facilities

We anticipate that much of the information related to community facilities will be provided by City staff. To supplement this, however, we will prepare a facilities survey for community service providers and will use the results—together with fieldwork and other research—to prepare a community facilities inventory, including detailed map exhibits.

3f. Issues and opportunities memo

The project team will outline the results of the community outreach activities and existing conditions analysis in a technical memo detailing issues, opportunities, and trends that will be addressed in the master plan. This working document will serve as a foundation for future steps in the planning process as we craft an understanding of Birmingham's major priorities.

3g. Staff coordination meeting

In this meeting with City staff, we will review the information contained in the issues and opportunities memo ahead of its distribution to the Planning Board. We will also work to ensure that substantive comments provided by City staff are integrated into our ensuing plan development.

3h. Planning Board meeting

The primary purpose of the second meeting of the Planning Board will be to present the findings of the issues and opportunities memo and gather any feedback.

Step 4: Infrastructure and transportation

DLZ will assess existing transportation infrasrucute in the City utilizing existing transportation information from City staff and other agencies, including the Michigan Department of Transportation (MDOT) and SEMCOG, as well as data garnered from field observations.

The plan will include strategies to enhance pedestrian movement, implement complete street ideas, and manage the transportation system to meet future needs based on growth in demand, redevelopment scenarios, and changes in land uses. As part of the transportation analysis, the following transportation elements will be evaluated and graphically presented:

- Street characteristics including lanes, operations (one-way/two-way), width, and street distribution
- Transportation use such as bus route, truck route, bicycle lanes and non-motorized facilities
- Current road designations, functional classifications
- Intersection configurations
- · Potential traffic control changes
- · Typical cross sections related to current and future needs

Step 5: Parking analysis

The parking analysis outlined in the City's request for proposals is, essentially, a separate study independent of the Master Plan Update. To ensure that the analysis receives the attention and resources required, we suggest that the City contract separately with a professional services firm specializing in parking. While this expertise could be included on our project team, it is our opinion that it would be far more effective to have a standalone parking study. To that end, we would work closely with the City's selected consultant to ensure that plans and recommendations are consistent with the findings of the parking study.

Step 6: Community vision, goals, and objectives

The purpose of this step will be to establish an overall vision for the future of the City of Birmingham that can provide focus and direction for subsequent planning activities and serve as the cornerstone of the consensus-building process. Based on this vision, we will develop the preliminary goals and objectives that will serve as a framework for the detailed recommendations included in the final Master Plan.

6a. Community visioning workshop

The community visioning workshop will include members of the project team, City staff, the Planning Board, elected and appointed officials, and all interested members of the community. The session will include both large- and small-group working sessions to review and discuss conditions and potentials within the community. The large group will work together to identify issues and opportunities, and the smaller breakout groups will work together to develop visions for the future of Birmingham. The workshop will conclude with general agreement and understanding regarding the long-term role and character of the City, as well as the types of projects and improvements desired for the future.

6b. Vision statement

Following the visioning workshop, we will summarize the results of the group discussions and prepare a preliminary vision statement for the City of Birmingham. The preliminary vision statement will be based on the community visioning workshop, feedback from community outreach activities, and observations garnered from the existing conditions analysis.

6c. Goals and objectives memo

Based on previous steps in the planning process, we will develop the visionary goals, coupled with measureable objectives, to provide more specific focus and direction for planning recommendations. As a starting point, we will establish updated goals and objectives from Birmingham's existing Master Plan. As desired by the City, we can develop additional categories for goals and objectives that were not addressed in this plan.

Step 7: Subarea plans

We will review the existing subarea plans including those prepared for Eton Road, Downtown, and The Triangle District, as well as materials related to the Andres Duany visit. Other documents, including the Alleys and Passageways Plan, multimodal transportation plan, and parks and recreation plan, will be reviewed as well. The relevance and continued long-term applicability of these plans will be analyzed and discussed with City staff, and the need to update components of each plan will be documented where necessary. Additional locations for subarea plans, such as the South Woodward Gateway, will be reviewed and discussed.

Step 8: Community-wide plans and policies

This step of the project will entail the preparation of plans that are consistent with Birmingham's reputation as an exceptionally livable and walkable community. At a minimum, plans will address core planning themes, including land use and development, multi-modal transportation, public services and facilities, and environmental systems and natural resources, In addition, these plans will include a comprehensive implementation program, detailing actionable strategies to ensure essential elements of the final Master Plan are fully realized.

8a. Land use and development plan

The land use and development plan will include recommendations and policies for all land use areas in the City, including residential, commercial, industrial, and recreational areas. We will identify existing land uses and provide future land use designations for all areas within the City's planning jurisdiction. The land use and development plan will utilize text and illustrative maps and graphics to communicate planning concepts and principles. It will clearly articulate recommendations related to the character and intensity of future development in Birmingham over the next 10 to 20 years. In addition, we will assess how well current zoning districts match the adopted future land use plan and existing development patterns to determine where current regulations meet or fail to meet public expectations as articulated during the planning process.

8b. Multi-modal transportation plan

DLZ will develop a multi-modal transportation plan consisting of improvements that address concerns stated in the public engagement process and deficiencies identified in the existing conditions assessment. The multi-modal transportation plan will also include a series of strategies that support our future land use recommendations. In addition, the project team will prepare a map that depicts the recommended transportation and infrastructure improvements and opportunities.

8c. Public facilities and services plan

The public facilities and services plan will identify and inventory all community facilities in the City and include recommendations and policies for municipal facilities and services, as well as intergovernmental coordination and cooperation. This plan will, at a minimum, include water, wastewater stormwater, police, and fire protection services.

8d. Implementation program

As a final component of the community-wide plans and policies, Houseal Lavigne Associates will prepare an implementation program that will describe the actions required to carry out the policies contained in the Master Plan Update, including immediate, short-term and long-range strategies and recommendations related to zoning and other land use regulations, priority improvement projects and redevelopment sites, Capital Improvement Program projects, funding sources and implementation methods, timing and prioritization, metrics and performance indicators, and general administration and management of the Master Plan. We will work to ensure that these implementation recommendations are both practical and actionable.

Step 9: Master Plan documents and adoption

The culmination of the planning process will be the preparation of the final Master Plan document that will be reviewed and adopted by the Planning Board and approved by the City Commission.

9a. Draft Master Plan document

Utilizing work completed in the preceding steps of the project, the project team will prepare a draft Master Plan document for review by City staff, the Planning Board, as well as the public-at-large.

9b. Staff coordination meeting

In the final staff coordination meeting, Houseal Lavigne Associates will compile any feedback and comment from City staff related to the draft Master Plan deliverable. In addition, we will review the next steps in the Master Plan adoption process and coordinate accordingly.

9c. Community open house

The project team, along with City staff, will be present for community open house will to allow Birmingham's residents and community stakeholders to examine, discuss, and comment on the draft Master Plan. We will be available throughout the community open house to present material, answer questions, and get feedback prior to initiating the approval process.

9d. Final Master Plan adoption

Houseal Lavigne Associates, in conjunction with City staff, will present the final Master Plan to the Planning Board at a public hearing for adoption. This hearing will provide an opportunity for residents and the community at-large to comment on the Master Plan—and the recommendations therein—before its adoption.

9e. Final Master Plan City Commission presentation and approval

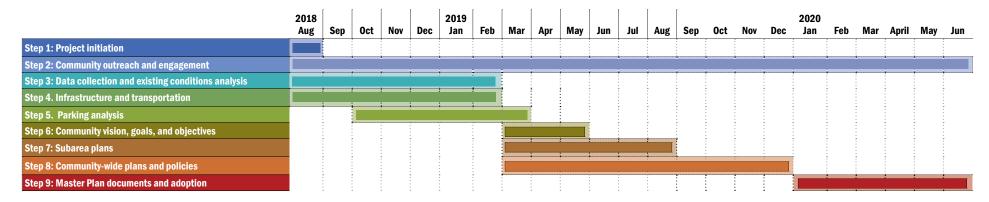
Once the Master Plan has been adopted by the Planning Board, the City Commission may complete an approval of the revised Master Plan. In addition, Houseal Lavigne Associates will provide City staff with the final plan in both hard copy and digital formats in this last step of the project. We will work with staff to ensure that the Master Plan formats will enable low-cost reproduction, revision, and direct web and social media posting.

SECTION 5 TIMEFRAME

TIMEFRAME

Availability

The chart below outlines **Houseal Lavigne Associates**' proposed timeframe to complete the services described in our Scope of Work. The team we have assembled for the City of Birmingham's Master Plan Update is available to undertake this important assignment immediately upon selection and will be available for the duration of the schedule outlined below.



SECTION 6 ADDITIONAL SERVICES

SECTION 6

ADDITIONAL SERVICES

Subarea plans

As noted in the subarea section of our scope of work, new subareas may be identified. Cost would be dependent upon the size and number of locations.

Staff Name	Discipline	Hourly Rate
John Houseal	Urban Planning	\$205.00
Devin Lavigne	Urban Planning	\$205.00
Daniel Gardner	Economic Development & Market Analysis	\$185.00
Nik Davis	Urban Planning	\$175.00
Todd Meyer	Urban Planning	\$180.00
Michio Murakishi	Economic Development & Market Analysis	\$140.00
Wes Butch	Transportation & Civil Engineering	\$209.10
Jason Whitten	Transportation & Civil Engineering	\$124.05
Cory Lavigne	Urban Design & Architecture	\$200.00
Michael Guthrie	Urban Design & Architecture	\$200.00

Zoning code and regulations update

At the completion of the Planning process, an update of the City's zoning code and regulations could be prepared. This engagement would be scoped and budgeted separately at that time.

Staff Name	Discipline	Hourly Rate
John Houseal	Zoning	\$205.00
Jackie Wells	Zoning	\$110.00
Nik Davis	Graphics, Visualizations & Plan Composition	\$175.00

SECTION 7 BIDDER'S AGREEMENT

ATTACHMENT B - BIDDER'S AGREEMENT FOR MASTER PLAN UPDATE

In submitting this proposal, as herein described, the Contractor agrees that:

- 1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- 2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

John Houseal, FAICP	06/01/2018	
PREPARED BY	DATE	
(Print Name)		
Principal Co-founder	06/01/2018	
TITLE	DATE	
	jhouseal@hlplanning.com	
AUTHORIZED SIGNATURE	E-MAIL ADDRESS	
Houseal Lavigne Associates		
COMPANY		
188 W. Randolph Street, Suite 200	(312) 372-1008 x101	
ADDRESS	PHONE	
N/A	N/A	
NAME OF PARENT COMPANY	PHONE	
N/A		
ADDRESS		

SECTION 8 COST PROPOSAL

ATTACHMENT C - COST PROPOSAL FOR MASTER PLAN UPDATE

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be itemized as follows:

 Project Elements 1. Comprehensive Community Engagement Plan 2. Updated Data Collection and Analysis 3. Infrastructure Analysis 4. Parking Analysis 5. Attendance at Meetings 6. Plan Preparation 7. Finalization and Adoption 	\$ 20,000 \$ 34,000 \$ 17,000 \$ To be budgeted separately \$ 15,000 \$ 34,000 \$ 14,000	
TOTAL AMOUNT	\$ 134,000	
Additional Meeting Charge	\$ 2,500 per meeting	
Additional Services Recommended (if any): Subarea Plans Zoning	\$ / hour \$ 110 to 205 / hour \$ 110 to 205 / hour \$ / hour	

Firm Name_ Houseal Lavigne Associates		
Authorized signature	Date 06/01/2018	_

SECTION 9 IRAN SANCTIONS ACT VENDOR AGREEMENT

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM

FOR MASTER PLAN UPDATE

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

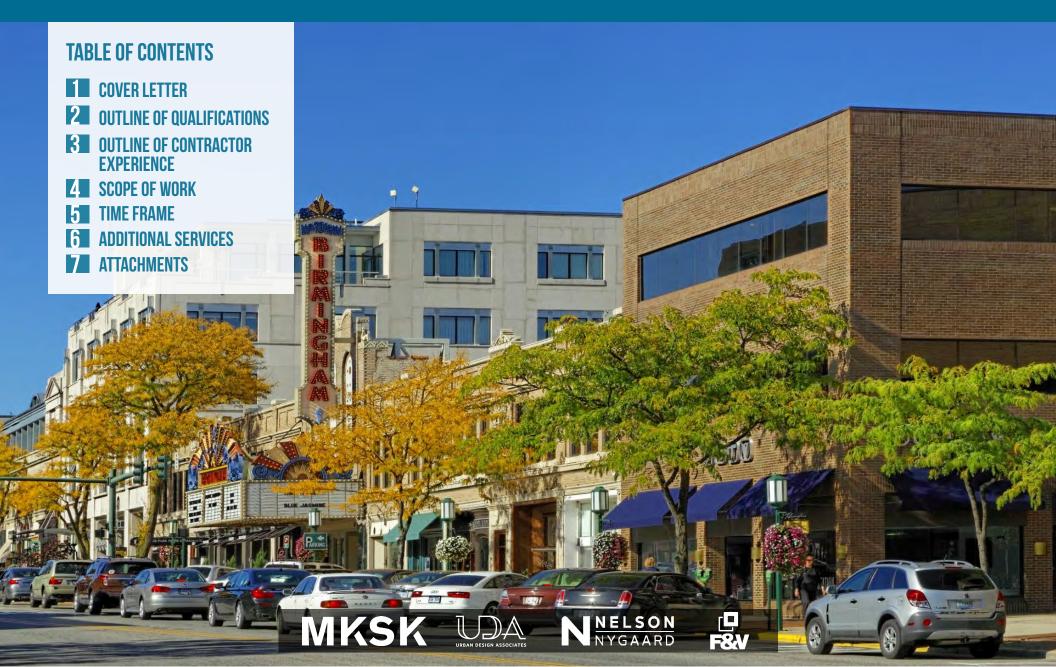
By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

John Houseal, FAICP	06/01/2018	
PREPARED BY	DATE	
(Print Name)		
Principal Co-founder	06/01/2018	
TITLE	DATE	
	jhouseal@hlplanning.com	
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N/A		
ADDRESS		
13-4287640		
TAXPAYER I.D.#		

MASTER PLAN UPDATE

JUNE 1, 2018









MAY 31, 2018

JANA L. ECKER, PLANNING DIRECTOR CITY OF BIRMINGHAM 151 MARTIN STREET BIRMINGHAM, MI 48009 JECKER@BHAMGOV.ORG | 249.530.1841 CHRIS HERMANN, AICP PRINCIPAL-IN-CHARGE 4219 WOODWARD AVE, SUITE 305 DETROIT, MI 48201

Re: City of Birmingham - MASTER PLAN UPDATE

Dear Ms. Ecker and Members of the Selection Committee,

On behalf of our team, MKSK is pleased to present our proposal to update the City's Master Plan. We have carefully organized a team of planners, designers and community engagement specialists to lead the city through this Master Plan process. Our interdisciplinary team includes both national and local experts in charrette facilitation, land use, urban design-based plans, landscape architecture, Complete Streets, parking, infrastructure engineering and graphic communications. Our firms and individuals are committed to outcomes that promote sustainability, placemaking, multi-modal transportation and great urban environments. Our teams has demonstrated success working across a broad range of project scales and complexities. Most of us have experience working with Birmingham on a variety of other assignments.

MKSK will be the Prime firm. We are a leader in graphic-forward, broad-based comprehensive planning and imaginative solutions. Our resources include dozens of registered Landscape Architects, LEED AP certified professionals, AICP Certified Planners, Professional Transportation Planners and community involvement specialists. We have led planning efforts in many cities across the Midwest and Mid-Atlantic regions including: East Grand Rapids, Grand Rapids, Ann Arbor, Kalamazoo, and Midland MI, Columbus and Cincinnati OH, Greenville SC, Charleston WV, Lexington and Louisville KY, West Lafayette, IN, suburban Minneapolis and Tulsa Oklahoma. Our Principal-in-Charge will be Chris Hermann. Chris leads our planning team and has more than 25 years of experience. Chris provides a broad range of project planning experience to the firm, managing projects involving regional planning policy, comprehensive plans, downtown plans, focus area planning, community revitalization/reinvestment, economic development, urban design and form-based codes, transportation planning, consensus-building, and public engagement and facilitation. Chris is adept at helping communities create a unique, compelling vision and translating that vision into strategic steps that transform cities and spaces. Local Coordination will be led by Brad Strader of our Detroit office. Brad's wealth of experience includes eight projects in Birmingham including the Downtown 2016 Plan, Triangle District, zoning studies and advising the Multi-Modal Board.

Our team includes:

UDA is our design charrette expert. They will lead the design charettes and development of neighborhood typologies. UDA has a well-developed Design Charrette process used as a tool to build consensus and identify implementation strategies. UDA has facilitated charrettes for mid-sized cities, downtowns, and mixed-use centers around the country and internationally. Recent similar projects include charrettes for the Chattanooga Arts District, Hershey West End Village in Derry Township, PA, Summers Corner village center in Dorchester County, SC, Cypress Village in West Vancouver, BC, downtown Huntsville, AL, Boca Raton, FL, and Alameda, CA.

Nelson\Nygaard is our parking expert. Parking systems have always been complicated and demands and competing needs are only intensifying. We've partnered with Nelson\Nygaard for this project (and many others) because of their renowned innovative solutions for today's parking needs that also take into account future changes in mobility. Nelson\Nygaard is currently leading the Birmingham's Downtown Parking Study, which touches on some of the topics outlined in the Master Plan RFP.

Fleiss & Vandenbrink is our traffic and engineering expert. They will provide support in traffic engineering and construction staging. Julie Kroll and others from the firm have reviewed development impact studies and have served as the city's Multi-Modal Board advisor for many years.

The combined talents of this team will provide Birmingham with:

- · Leaders in innovative, action-oriented mid-sized city comprehensive and district plans,
- · Leaders in the planning and placemaking field who are known for creating vibrant and livable communities,
- Confident professionals to facilitate and listen to diverse stakeholders and the public,
- Facilitators who have led design charrettes for decades,
- · National leaders in Parking Management strategies,
- National leaders in Multi-modal and Complete Streets, linking land use with multi-modal transportation,
- Professionals who serve as instructors on best practice training on how to craft a Master Plan to be successful and meet the requirements of the Michigan Planning Act; and available support to help the city through implementation after the plan is developed,
- Experience in crafting easy to understand, visionary action plans followed by successful implementation,
- A group you have entrusted with many previous projects in Birmingham (three of our four firms).

Given our valued relationship with you and the positive experience working with the City on past undertakings, we would be delighted to continue our partnership with Birmingham with this project. We have crafted our work plan based on a combination of our past experience in developing city-wide and district comprehensive plans, as well as our specific understanding of Birmingham. We are prepared to refine the scope to best suit your expectations and budget to ensure the process and products deliver what you seek. We look forward to the opportunity to discuss our proposal with you for this exciting effort. Should you have any questions about our enclosed qualifications and proposal, please do not hesitate to write or call.

Sincerely,

MKSK

Chris Hermann, AICP, Principal-in-Charge

Chris Hermonn

chermann@mkskstudios.com | DIRECT: 614.686.0128 FAX: 614.621.3604

OUTLINE OF QUALIFICATIONS







PROJECT MANAGEMENT, PLACEMAKING, COMMUNITY ENGAGEMENT, LAND USE, COMPLETE STREETS, TRANSIT, DOCUMENT DEVELOPMENT & ADOPTION PROCESS

CONTACT:

CHRIS HERMANN AICP, PRINCIPAL-IN-CHARGE CHERMANN@MKSKSTUDIOS.COM 614.686.0128

BRAD STRADER
PE, PTP, PRINCIPAL
BSTRADER@MKSKSTUDIOS.COM
313.652.1105

OFFICE WHERE WORK WILL BE PERFORMED:

4219 WOODWARD AVE, SUITE 305 DETROIT, MI 48201 MKSKSTUDIOS.COM

FAX: 614.621.3604

MKSK brings Planners, Urban Designers, and Landscape Architects together to offer creative planning, design, economic, and sustainable solutions. MKSK offers multidisciplinary professional services through our studios in Michigan, Ohio, Kentucky, Indiana, and South Carolina. As planners and landscape architects, we blend the art and science of land planning, placemaking, urban design and transportation; we are principled by a comprehensive view of sustainability that emphasizes not only environment, but also economy, energy, and society. We support our work with sound market data, engineering metrics, and community engagement. This information forms the backbone of our decision-making and allows us to give clients informed recommendations. We are leaders in helping communities plan and implement projects, because we help to seek out innovative funding and partnering strategies. We revisit work and measure outcomes. We strive to learn from our projects and we bring this knowledge to our clients.

Our approach focuses on helping communities fully realize their potential, by providing plans, collaborative services, design guidelines and policy tools that address each community's specific needs and goals. Our team of highly qualified planners brings both private practice expertise, as well as a wide range of public planning experience to projects both large and small. By continually evolving planning processes and crafting individualized solutions for each community, our planners are able to create plans that clearly communicate effective strategies and facilitate success.



2 OUTLINE OF QUALIFICATIONS



URBAN DESIGN, NEIGHBORHOOD TYPOLOGIES, CHARRETTE LEAD

URBAN DESIGN ASSOCIATES (UDA)

Urban Design Associates (UDA), founded in 1964, is a multi-disciplined urban design and architecture practice headquartered in Pittsburgh, Pennsylvania. UDA's design process features dynamic, three-dimensional graphics that allow everyone involved to visualize the scale and character of what is being proposed. This process creates consensus among stakeholders, development teams, political leaders, and the general public.

UDA establishes the character of new places through their research into the distinct patterns that have evolved in a region over time. Each place has its own DNA. These enduring qualities spring from the environment, culture, and heritage. By documenting these qualities and establishing design vocabularies that grow out of great places, new development can continue the sense of place into the future. This method makes it possible to design a rich and diverse environment that is sustainable and flexible for many different market sectors and uses over time.

CONTACT: MEGAN O'HARA, PRINCIPAL, MEGAN.OHARA@URBANDESIGNASSOCIATES.COM, 412.263.5200

PARKING

NELSON \ NYGAARD

Nelson\Nygaard Consulting Associates, Inc. is an internationally recognized firm committed to developing transportation systems that promote vibrant, sustainable, and accessible communities. Founded by two women in 1987, Nelson\Nygaard has grown from its roots in transit planning to a full-service transportation firm with over 130 people in offices across the United States. In keeping with the values set by the founders, Nelson\Nygaard puts people first. They recognize that transportation is not an end by itself but a platform for achieving broader community goals of mobility, equity, economic development, and healthy living. Their hands-on, national experience informs but doesn't dictate local solutions. Built on consensus and a multimodal approach, their plans are renowned as practical and implementable.

CONTACT: CHRIS BONGORNO, SENIOR ASSOCIATE, CBONGORNO@NELSONNYGAARD.COM, 212.405.2534





INFRASTRUCTURE ANALYSIS & MULTI-MODAL TRANSPORTATION ENGINEERING

FLEIS & VANDENBRINK ENGINEERING

Fleis & VandenBrink (F&V) has the most dedicated and experienced group of traffic professionals in SE Michigan. They have approximately 75% of all the traffic analyses performed in the state. Their clients include Kroger, Amazon, IKEA, Love's Travel Stops, Pulte Homes, REDICO, Pinnacle Homes, and Beztak, just to name a few. They are also the traffic consultants for the City of Birmingham, Bloomfield Township and Commerce Township. They have worked on projects in every community in SE Michigan, including Detroit, where they have recently worked with FCA (Chrysler) to assist them with shift change operations and parking analysis at their Jefferson North facility.

CONTACT: JULIE KROLL, PE, PTOE, PRINCIPAL, JKROLL@FVENG.COM248.536.0080





COMPREHENSIVE COMMUNITY MASTER PLANNING

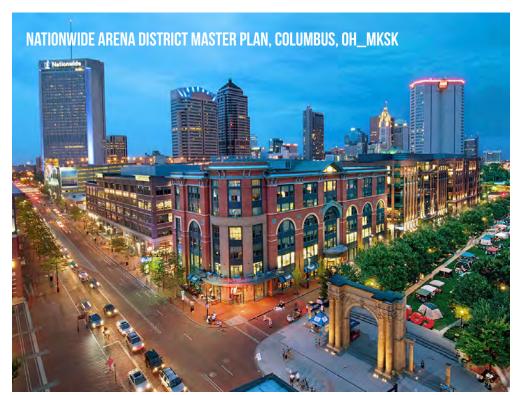
MKSK understands the numerous factors that must be considered to create a robust and successful plan including assessments of existing conditions, environment, infrastructure, transportation systems, parking, demographics, market trends, development economics, fiscal implications, community character, cultural and historic structures, the built environment, and the public realm. We understand the relationships between the various types of land uses and their impacts on infrastructure and municipal services and funding.

Because of our work with the development community, we have a robust understanding of the types, yields, needs, and site layout of the myriad land developments of private developers. This ranges from subdivisions to multi-family developments, retail stores to town centers, corporate offices to industrial development, and true mixed-use urban centers. We also understand their infrastructure, parking, support, amenity, and open space needs. We specialize in planning for the public realm, including riverfronts, parks, signature spaces, plazas, civic building spaces, streetscapes, gateways, etc. Our goal in all of our community planning efforts is to identify catalytic projects that will attract investment, support the community, and greatly improve quality of life and economic opportunity.

Our planning practice is guided by the following principles:

- 1. We **invest** long-term commitments with the communities where we work, which is critical to plan implementation.
- 2. MKSK brings a critical **understanding** of placemaking trends and community development strategies.
- 3. We **recognize** key success factors for implementation such as funding, stakeholder, community buy-in, resource commitments, political will and leadership.
- 4. We bring a **comprehension** of both public and private sector goals, partnerships that can bring results, and understand the appropriate public investments that can spur substantial private development.
- We champion urban placemaking, walkable districts, multi-modal transportation enhancements, and sustainable healthy community design practices which have resulted in significant reinvestment.
- 6. We bring broad **experience** in funding and regulatory tools.
- 7. We **create** exciting and achievable visions that motivate leaders, stakeholders, funders, and the public, that lead to successful built projects embraced by the community.
- 8. We understand the importance of careful and thoughtful **quality** planning and design in creating catalytic and lasting projects.
- 9. We understand the importance of place and character that is **unique** to each community and strive to incorporate and reflect that in individual designs.













URBAN DESIGN & PLANNING

MKSK's approach focuses on helping communities fully realize their potential, by providing plans, collaborative services, design guidelines and policy tools that address each development's specific needs and goals. Our team of highly-qualified urban designers brings both private and public practice expertise on large and small projects.

By continually evolving design processes and crafting individualized solutions for each community, our team is able to create visions that clearly communicate effective strategies and allow for an organic and extraordinary place to emerge. There are three elements that are consistent in our firm's approach:

- A focus on quality design and placemaking;
- An inclusive, communication-based approach for coordination of stakeholder interests into a common goal;
- A strategic approach to implementation that is grounded in reality but innovative in its solutions.

These elements have directly led to renewed investment and improved quality-oflife in the places in which we have worked.

At **MKSK**, our designers have the unique ability to work in conjunction with the firm's landscape architecture, planning, and transportation studios to bring multidisciplinary expertise, high-quality design, and achievable, real-world solutions to all of its urban design efforts. This, combined with the firm's focus on high-quality graphic presentations, enhances the ability of the planning studio to effectively communicate and gain consensus on plan concepts, ideas and strategies. The end results are thoughtful, meaningful and implementable plans that spur action and provide a framework for transformational change.

ZONING & FORM-BASED CODES

Part of MKSK's commitment to implementation extends into repair of existing zoning regulations and street design standards that may be barriers. We are currently helping Lansing, Dearborn and East Lansing develop new form-based codes. MKSK is frequently tapped as instructors by organizations such as the MI APA, National Form-Based Code Institute, MML, MEDC and the Michigan Bar. Once the concepts and plan are identified, we can audit your regulatory program and provide advice on changes to standards and procedures. We promote a variety of techniques such as waterfront overlay districts, form-based codes and special pedestrian or transit oriented street design standards. We can also help craft user guides and other tools to help spark redevelopment interest from the private sector.

PLACEMAKING

MKSK approaches placemaking with a clear understanding that each site has a unique story to tell influenced by distinctive natural, environmental, historical, and cultural influences which should be expressed through thoughtful, contextual sensitive design. Our design team's interests and abilities are rich in all aspects of project design and implementation within the fields of landscape architecture and urban design, lending expertise in creative placemaking. The team's approach is focused on helping the City of Birmingham identify their unique spirit and translate this identity into themes that can be represented physically, through various cocreated placemaking strategies. This approach has been applied in many places including, but not limited to nationally prominent communities Detroit, Michigan, Lexington, Kentucky, and Athens, Ohio.

LANDSCAPE ARCHITECTURE

MKSK has the largest dedicated landscape architecture studio in the Midwest, with 40 Registered Landscape Architects. Attention to detail and construction implementation of the design vision are core values of our practice. Understanding of construction process, costs, and maintenance operations inform our design decisions throughout the entire design process. Through our internal research, regional practice and on-going commitment to sustainable design, we strive for highly creative and innovative design in coordination with a practical, sustainable, and fiscally-responsible solution.













MULTIMODAL TRANSPORTATION & COMPLETE STREETS

MKSK is a leader in shaping place. We strive to create places that not only perform, but also transform and inspire. We are committed to a complete streets design approach that is holistic in nature, that seeks to balance the economic, environmental and societal impacts and opportunities and apply creativity and innovation to solve current issues while striving for responsible, long-term, practical solutions. This integrated approach considers all of the layers of activity along the street, from retail nodes to office and residential districts, the interrelationships between the public realm and other adjoining uses (whether public, semi-public, or private spaces) in order to accommodate multi-functionality. Our experience and expertise includes the design and implementation of hundreds of streetscapes throughout the Midwest.

The street is the most common form of public space in Midwestern cities and neighborhoods. MKSK is a leader in capturing the full value of streets for all users and uses, not just the automobile. Multi-modal design that treats streets as true places to spend time is central to our street design philosophy. We know that complete streets are the most equitable for the end user and the most successful in driving economic development and private investment along a street. When travel speeds slow down, streets not only become dramatically safer, the adjacent development realizes higher rental rates, better sales per square foot, and experiences less vacancy. When streets are safer, designed and inviting for pedestrians and bicyclists, more people walk and bike, improving community health and accessibility for everyone.

We also recognize that desired design for all types of users cannot always fit into the available space so we use a "Complete Network" perspective to identify priority networks for pedestrians, bicyclists, transit, trucks and automobiles. We also promote transportation design that complements the desired character of the built and natural environment.

In our approach to transportation planning and complete streets planning and design, MKSK provides the following services:

- Multi-modal street and streetscape design
- Tactical street calming and activation strategies
- Bike and pedestrian master planning
- Street safety improvement design
- Transit station/stop planning
- Access management strategies
- · Bike infrastructure and trail master planning
- Parking management studies
- Street and right-of-way design manuals
- Form-Based Codes
- Transportation Demand Management Strategies
- · Smart Cities considerations

PARKING MANAGEMENT

Nelson\Nygaard believes effective parking management is the key to unlocking multiple community goals, from economic development to congestion management and historic preservation. With more than 50 projects completed for cities, public agencies, developers, universities and nonprofits, they can analyze and share best practices from all sides of the table. The senior staff at Nelson\Nygaard includes former parking managers who can lead clients through the implementation process for parking cash-out, shared parking, residential permit parking and other programs. They advise on how to take advantage of new payment and enforcement technologies, and implement customer-friendly information systems.

DEMAND ANALYSIS

Nelson\Nygaard helps developers and cities to go beyond the Parking Generation manual and accurately quantify parking demand for a new development, neighborhood plan or zoning ordinance. The firm's integrated financial and transportation models incorporate the impacts of density, transit access, pricing and demand management, and the potential for shared parking. They can analyze when more parking is needed, and when it is more effective to invest in alternatives to driving.













SUSTAINABILITY

History provides many examples of sustainable development patterns. The best towns and cities evolved over time as compact, mixed-use environments, designed for walking, transit, a wide range of choices and prices, and a supportive network of civic amenities. The rich interplay of streets, public spaces, and architecture provided beautiful settings for an entire range of daily activities. With the introduction of new building technologies, LEED® standards, new techniques for the disposal of waste, energy generation, and stormwater management, the environmental costs of urban development are further mitigated. **UDA** integrates these techniques and expertise into their multidisciplinary approach to urban design. They work collaboratively in teams of urban designers, ecologists, engineers, architects, and economists to design state-of-the-art environments in both urban and rural contexts.

MKSK is committed to the principles of sustainability and we endeavor to incorporate those principles into all of our projects based on our professional oath to serve as stewards of the environment. We seek a balance between economic, environmental, and societal impacts and opportunities, the underlying principles of sustainability and apply creativity and innovation to solve current issues while striving for responsible, long-term, practical solutions. Our design and planning projects begin with overall sustainability goals and consideration of LEED® certification. For each project site, we strive to achieve low-impact site development through means of preserving open space, accommodating multi-modal transportation and bicycle facilities, reducing impervious surfaces and heat island effects, incorporating passive solar design, retaining or creating natural habitat, integrating sustainable stormwater management through the use of permeable pavement, bio-swales, rain gardens and green roofs, and using recycled and regionally-available materials.

CITIES. NEIGHBORHOODS & ARCHITECTURE

Over the past 40 years, cities have found renewed life as both the civic and cultural core of regions and as 24-hour centers with residential, cultural, entertainment, retail, business, civic, and educational uses. **UDA** has been working with existing cities for over 40 years to create new investment opportunities and attractive urban infill developments to capture emerging markets. Their work has featured successful developments aided by UDA Pattern Books® and form-based codes, revolutionary implementation tools that ensure high quality standards throughout the life of the project. Their approach also assimilates green infrastructure design, mixed-use centers, walkable neighborhoods, and a variety of parks and open space systems.

The UDA architecture studio is committed to building designs that evolve from regional traditions with new technology and market requirements. UDA designs a variety of key buildings for many of our urban design and master plans to create the essential character and image. Their team includes LEED® accredited professionals for each project to complete the cycle of sustainable design from the city scale to the human scale.







ដ៊ៃ Home

Project Team Events Participate Gallery



Public Meeting 3





Marina District Fra Plan















PUBLIC & STAKEHOLDER ENGAGEMENT

Community involvement and engagement is a fundamental part of our urban planning and design approach. The success of the public engagement process is a critical step in building understanding, support, and ownership of focus areas that will ultimately lead to effective implementation across time.

Our team views the early stages of a planning project as a time for learning and collaboration. It is here that we invite the public and stakeholders to share with us the issues and considerations important within a community. This knowledge, and the relationships built through this process, guides our planning efforts as we develop ideas and strategies to address project issues. The testing of those ideas, through further public engagement, ultimately provides us with a consensus-based direction. Our goal is to form a shared and "living" vision. To reach this goal, we cast a wide net, which often includes residents, business interests, development community members, key stakeholders, elected officials, and public agencies. Opportunities to engage the public can be in the form of traditional open houses, forums, or focus group sessions, or online through webbased meetings, surveys, and via social media platforms.

Our public participation toolbox blends traditional methods with fresh approaches adapted to hands-on engagement together with 24-hour community information and dialogue on web-based platforms. Every project and community is unique, so for each we refine an engagement tool kit in close consultation with the Working Group. The more traditional public participation and engagement opportunities incorporated in this process include stakeholder interviews, walking tours, and public meeting visioning workshops. Additional opportunities include:

- Interactive meetings & exhibits
- Pop-up displays
- Dedicated website & social media platforms
- Community mapping geo locate ideas
- Online and telephone surveys
- Mail-in postcard concepts
- Tactical urbanism
- · Youth activities

- DIY Meetings in a Box
- Study area storefront displays and office hours
- · Street stalls and kiosks at existing events
- Study area walking/bike tours
- Distribute disposable cameras to record the study area likes/dislikes
- Stakeholder and focus group meetings
- Public workshops and presentations
- Charrettes and visioning



NATIONAL CHARRETTE INSTITUTE TRAINING

MKSK's Haley Wolfe is NCI certified and will assist the planning team in the stakeholder engagement process to harness the talents and energies of all interested stakeholders to create and support a feasible plan. Haley's holistic approach to planning begins with her passion to work with local residents and business owners by listening to their perceptions and positions within the city and results in designing a shared solution that resolves conflict and achieves a shared vision.

In addition, Brad Strader has helped facilitate over 15 charrettes including the Downtown 2016 Plan and Triangle District Plans in Birmingham. UDA has led dozens of charrettes from coast to coast.







CITY OF BIRMINGHAM
CITY STAFF

PLANNING BOARD

CITY COMMISSION

STAKEHOLDERS
ADVOCACY GROUPS
NEIGHBORHOOD GROUPS
GENERAL CITIZENRY

MKSK PROJECT LEADERSHIP



Chris Hermann, AICP
Principal Planner/Project Manager
Primary Client Contact

PROJECT TEAM KEY PERSONNEL

— Urban Design Associates (UDA) —



Megan O'Hara LEED AP, Principal Urban Design Public Participation



David Csont ASAI, Principal Chief Illustrator



Jeffrey Pongonis PLA, ASLA, Principal Urban Planner Development Planner



Justin Goodwin AICP, Associate Project Planner Administrator



MKSK

Brad Strader AICP, PTP, Principal Transportation Planner

F&V ENGINEERING -



Haley Wolfe Designer National Charrette Institute Certified



Nikki Polizzotto Planner Public Engagement

Nelson\Nygaard



Tom Brown Principal Parking



Chris Bongorno Senior Associate Parking



Alyson Fletcher Associate Parking



Julie Kroll PE, PTOE Infrastructure Analysis & Multimodal Transportation Engineering



Todd Richter PE, Associate Infrastructure Analysis & Construction Practices





PRINCIPAL PLANNER / PROJECT MANAGER



CHRIS HERMANN, AICP

PRINCIPAL PLANNER PROJECT MANAGER PRIMARY CLIENT CONTACT

EDUCATION

Master of City and Regional Planning, The University of North Carolina Bachelor of Arts in Political Science, Miami University

EXPERIENCE

Chris is a certified city planner with more than 25 years of experience. Chris provides a broad range of project planning experience to the firm, managing projects involving regional planning policy, comprehensive plans, downtown plans, focus area planning, community revitalization/ reinvestment, economic development, urban design and form-based codes, transportation planning, consensus-building, and public engagement and facilitation. Chris is adept at helping communities create a unique, compelling vision and translating that vision into strategic steps that transform cities and spaces. Highly acclaimed for creating plans that are implemented, Chris is skilled at building partnerships and translating plans into strategic steps that guide and attract investment for community betterment. His aptitude for transformational planning is complemented by his strong public presentation ability. Chris has been an adjunct professor at The Ohio State University, teaching masters students in planning. He is currently on the Columbus Board of Transit and a member of the ULI transportation and corridors committee that is helping to guide the MORPC Regional Corridors Study.

NEW ALBANY STRATEGIC PLAN

NEW ALBANY, OHIO

The Strategic Plan guides development of this rapidly growing community, focusing on creating great neighborhoods, providing first rate amenities, and developing a robust employment base. Of more particular focus is the mixed-use Village Center, interconnecting the community with multi-use trails and guiding densities and aesthetics.

POWELL COMPREHENSIVE PLAN

POWELL. OHIO

The plan aims to guide the community in mitigating growth and development pressures. Aspects included determining appropriate housing types, land use and development patterns, resolving traffic congestion, and diversifying revenue sources to support needed infrastructure investments and high-quality public services.

2016 DOWNTOWN TOLEDO MASTER PLAN

TOLEDO, OHIO

MKSK is leading an interdisciplinary team to develop a Master Plan for Toledo focusing market-based catalytic solutions to build on the current momentum downtown is experiencing and to identify future opportunities. The plan was informed by a robust and unique public input process including a project website and storefront.

WESTERVILLE UPTOWN COMPREHENSIVE PLAN

WESTERVILLE, OHIO

The 2013 Uptown Westerville Comprehensive Plan evaluates the district's existing conditions, exemplifying its strengths, and proposing catalytic projects and potential planning tools to address its challenges. By planning for the future, Uptown can ensure its continued success as the community core of the City of Westerville.













TRANSPORTATION PLANNER



BRAD STRADER, AICP, PTP **PRINCIPAL**

TRANSPORTATION PLANNER

EDUCATION

Bachelor of Science with Honors, in Urban Planning, Michigan State University

EXPERIENCE

Brad advocates linking land use with multi-modal transportation and design to create vibrant places. Brad has more than 33 years experience in parking and traffic studies, comprehensive and downtown plans, multi-modal transportation, and development regulations. His transportation projects include over 60 corridor and access management thoroughfare plans and other studies including transit for metropolitan planning organizations, municipalities, and road agencies. Brad is a frequent lecturer on planning and transportation topics at state, regional and national conferences and training

OLD WOODWARD AVENUE/MAPLE STREET CORRIDOR PLAN

BIRMINGHAM, MICHIGAN

Brad led the development of a Transit-Oriented model code for the Woodward Avenue Action Association and rapid transit recommendations for the SE Michigan Regional Transit Authority in Detroit to Pontiac, including land use analysis, non-motorized concepts, station location workshops.

TRIANGLE DISTRICT FORM-BASED CODE BIRMINGHAM, MICHIGAN

Brad led development of a new form-based code for the Triangle District to help transform that area into a more vibrant urban place. He also assisted the city in its plans and codes for the downtown, South Gateway along Woodward Ave, downtown transition zones, and parking strategies over the last 15+ years.

MIDLAND COMPREHENSIVE/DOWNTOWN PLANS. SPECIAL STUDIES & FORM-BASED CODE

MIDLAND, MICHIGAN

The Midland DDA commissioned a Redevelopment & Design Plan to explore new development opportunities and potential projects to enhance the downtown, create a commercial node, and improve the pedestrian environment connecting downtown and surrounding neighborhoods.

AUBURN AVENUE

CINCINNATI. OHIO

MKSK conducted a study to assess how Auburn Avenue, a major corridor servicing Christ Hospital—a key stakeholder, can better serve the local neighborhood and safely transport emergency vehicles into and out of the hospital. The study investigated development patterns and future development sites and how they both can better interact with the right-of-way.













PROJECT PLANNER / ADMINISTRATOR



JUSTIN GOODWIN, AICP **ASSOCIATE**

PROJECT PLANNER **ADMINISTRATOR**

EDUCATION

Bachelor of Science in Geography, Ohio University Master of Arts in Geography, Ohio University Master of City and Regional Planning, The Ohio State University

EXPERIENCE

Justin has over a decade of experience in both public and private sector planning. He has completed transformational long-range plans, innovative form-based zoning regulations, and implementation strategies for catalytic development projects. He has a strong background in GIS and spatial analysis, which he combines with a broad skill set including research, writing, and public speaking to communicate complex issues in an accessible manner. Justin has managed a variety of projects and multidisciplinary teams to create collaborative and holistic plans. His passion for walkable streets and livable cities drives Justin's commitment to making urban places better for people.

POWELL COMPREHENSIVE PLAN

POWELL. OHIO

The Plan aims to guide the community in mitigating growth and development pressures. Aspects included determining appropriate housing types, land use and development patterns, resolving traffic congestion, and diversifying revenue sources to support needed infrastructure investments and high-quality public services.

ENVISION SHAKOPEE 2040 COMPREHENSIVE PLAN

SHAKOPEE. MINNESOTA

Shakopee engaged MKSK to lead a new type of planning process that will go beyond the Met Council's technical standards. The planning process began in July 2017, kicking off with a community engagement effort including an interactive website, focus group meetings and mobile displays at community events.

EUCLID AVENUE AND SOUTH LIMESTONE STREET COMMERCIAL **CORRIDOR STUDY**

LEXINGTON, KENTUCKY

In Lexington, two vastly different corridors are united by their economic potential to catalyze a revitalization of the neighborhoods that lie between the City's economic engines: the downtown and University of Kentucky.

BRIDGE STREET DISTRICT **DEVELOPMENT CODE***

DUBLIN, OHIO

The Code develops the urban design principles for an authentic, urban, mixed-use district, including new zoning districts, block standards, street and open space typologies, parking, and development review procedures. MKSK assisted in the implementation of the Code and the development of preliminary designs for several circulation and open space projects within the district.















URBAN PLANNER / DEVELOPMENT PLANNER



JEFFREY PONGONIS PLA, ASLA, PRINCIPAL

PRINCIPAL URBAN DESIGN LANDSCAPE ARCHITECT

EDUCATION

Bachelor of Science Landscape Architecture, The Ohio State University

EXPERIENCE

Jeff is committed to the implementation of a meaningful, green, and well-connected environment. His practice, steeped in Midwestern urbanism and a devotion to the creation of market-based aspirational strategies is exemplified in Columbus' Arena District. As urban design lead and cross-discipline collaborator. Jeff's contribution in the Arena District is evident as the dynamic public realm infrastructure network is now the key link connecting the C.B.D., the Short North, the Convention Center District, and the Columbus Scioto Mile Greenways. His process is focused and mindful of both the aesthetic details of robust social spaces as well as the greater urban strategy of complex urban centers and their clients, partnerships, and cities. His practice is based around a framework of performative, contemporary, and beautiful infrastructure systems of organized urban spaces, connected pedestrian ways, and performative green corridors all equally responsible in the creation of a successful, human-scaled urban pattern.

NATIONWIDE ARENA DISTRICT MASTER PLAN

COLUMBUS, OHIO

The Arena District has served as the guiding development strategy for a vibrant, new downtown entertainment district. It has resulted in private investment and is a model success story in the country's growing urban revitalization trend. Jeff served as Design Principal and Principal in Charge.

DOWNTOWN AKRON VISION & REDEVELOPMENT PLAN | AKRON. OHIO

The plan will help foster a rich diversity of downtown places and spaces that will attract and support people who live, work and play in Downtown Akron. The vision will articulate how to improve the character, identity, and connectivity of the downtown area and its surrounding neighborhoods and increase its vitality and prosperity.

LIBERTY CENTER

LIBERTY TOWNSHIP, OHIO

Liberty Center is a 64-acre mixed-use new town center for Liberty Township, including The Park & The Square. The Park is a open space with a custom designed pergola, an interactive fountain, splash pad, display garden, and event lawn space. The Square provides paved plaza space and larger event lawn for concerts and performances.

GRANDVIEW YARD

GRANDVIEW HEIGHTS. OHIO

A new mixed-use development that will include 1.5 - 2 million SF of commercial development and 600-800 residential units. Located on a former Brownfield site, the development will create a new vibrant neighborhood. Jeff served as Design Principal and Principal in Charge. The first LEED-ND (Silver) certified neighborhood in Ohio.













PROJECT LANDSCAPE DESIGNER



HALEY WOLFE

DESIGNER NATIONAL CHARRETTE **INSTITUTE CERTIFIED** (ANTICIPATED JUNE 2018)

EDUCATION Bachelor of Landscape Architecture, The Ohio State University

EXPERIENCE

Haley believes that because everything is a part of the landscape, a landsacpe architect must know something about everything. She believes that designing on multiple layers will generate sites that are both beautiful and sustainable.

Haley's foundation in hospitality and mixed-use development drives her to create environments that are as memorable as they are functional. Her additional experience in hand-drawing fosters an intimate relationship with her designs and allows her to communicate in real-time. This background informs Haley's process from initial concept design to final construction of both private and public projects.

PROMOTING TRANSIT-ORIENTED DEVELOPMENT IN THE CATA BUS RAPID TRANSIT CORRIDOR

LANSING, MICHIGAN

With a Federal Transit Administration TOD Pilot Grant, a form-based code was crafted to unify the character of future private development and public street design along the Avenue to create a vibrant, pedestrian-friendly and transit-oriented corridor.

OLENTANGY PARKWAY DEVELOPMENT COLUMBUS, OHIO

This major Columbus river has the opportunity to be a fully realized, fully functioning green infrastructure corridor dedicated to stitching the city together east to west, north to south, for work and play, for open-space respite and ecological sustainability.

EAST GRAND RAPIDS MASTER PLAN EAST GRAND RAPIDS. MICHIGAN

The plan is revised with a fresh look at quality of life and economy, including e-commerce, housing preferences & multi-modal transport. Retaining, strengthening, and building upon these assets is essential to the long-term sustainability of the community.

DETROIT MOBILITY PLAN

DETROIT. MICHIGAN

Recent and upcoming investment in downtown provides an unprecedented opportunity to redesign the transportation system. Various new developments are transforming the downtown into a more vibrant, 24-hour, livable place.













PROJECT PLANNER / PUBLIC ENGAGEMENT SUPPORT



NIKKI POLIZZOTTO

PROJECT PLANNER PUBLIC ENGAGEMENT SUPPORT

EDUCATION

Master of Urban Planning, University of Southern California Bachelor of Cultural Anthropology & Sociology, University of Puget Sound

EXPERIENCE

Nikki has significant experience working with nonprofits, community organizations, and public agencies to build scalable and replicable solutions to promote equitable community development. Her passion and expertise as an urban planner stems from her desire to use research and meaningful engagement methods to improve the design and livability of cities and neighborhoods. Her background encompasses the research and analysis of commuting patterns and alternative modes of transportation, programming, marketing, and managing various forms of public engagement, and grant writing. Specifically, Nikki has led community engagement strategies on a variety of projects including several "First-last" mile transit projects and corridor redevelopment plans.

ST. CLAIR SHORES PARKS AND RECREATION MASTER PLAN

ST. CLAIR SHORES, MICHIGAN

In 2018, MKSK led community engagement and visualized several park redesigns for the City of St. Clair Shores. Through a successful series of stakeholder and public workshops, the Parks and Recreation Master Plan identified specific parks and tangible improvements valued most by the community.

BROWNFIELD REDEVELOPMENT AREA WIDE PLAN

RIVER ROUGE, MICHIGAN

The future decommissioning of the DTE River Rouge Power Plant and construction of the Gordie Howe International Bridge are expected to bring several opportunities for industrial and economic growth to the City of River Rouge and Southwest Detroit. This ongoing project uses technical analysis and community engagement to develop a comprehensive area wide plan with actionable next steps that supports community and economic development.

EQUITABLE ACCESS TO PARKS AND OPEN SPACE

LOS ANGELES. CALIFORNIA

This research endeavor studied the relationship between equity, public health, and access to parks in L.A. County. Through the review of empirical data and the history of park resource investment in L.A. County, a policy for improving equitable access to parks through a new framework for resource management and investment as well as an integrated mobility plan was recommended.

CRITICAL CARTOGRAPHY + SPATIAL ETHNOGRAPHY: VIRGINIA AVENUE PARK

SANTA MONICA, CALIFORNIA

Virginia Avenue Park is a space that embodies the changing, gentrifying, yet diverse Pico neighborhood. This research endeavor explored how Virginia Avenue Park has been a cultural asset to the Pico Neighborhood over time through creative mapping exercises, film, and interviews.









2 OUTLINE OF QUALIFICATIONS



URBAN DESIGN/CHARRETTE LEAD



MEGAN G. O'HARA. AICP. LEED AP, PRINCIPAL

URBAN DESIGN. PUBLIC ENGAGEMENT

EDUCATION

Masters in Sustainable Urban Development, University of Oxford Bachelor of Architecture, University of Notre Dame

EXPERIENCE

Megan has over 10 years of expertise revitalizing urban neighborhoods and promoting social, economic, and environmental sustainability. At Urban Design Associates, she has led projects domestically and internationally, including infill, mixed-use and mixed-income neighborhood revitalization, form-based codes, and design guidelines. She has a passion for helping communities create consensus visions that benefit people equitably. At every stage of the design process, authentic community involvement and engagement is key to making these plans feel like home for the current and future residents. To support Megan's focus on neighborhood stabilization in disadvantaged neighborhoods, she developed an expertise in policy, land use and zoning, and an understanding of the relationship between opportunity sites and the appropriate incentives and financing strategies. Megan has spoken at the American Planning Association, Congress for the New Urbanism, University of Notre Dame, U.S. Green Building Council, and the Remaking Cities Congress.

CHATTANOOGA ARTS DISTRICT

CHATTANOOGA, TENNESSEE

Urban Design Associates prepared an arts district plan for downtown Chattanooga's riverfront area. The plan proposes a pedestrian art promenade that connects the Hunter Art Museum with the Aguarium and Chattanooga Green and new residential and institutional development on key parcels in the downtown.

HERSHEY GATEWAY

HERSHEY. PENNSYLVANIA

UDA was selected by the Hershey School Trust to prepare a master plan for their "Gateway Site," a large parcel of land adjacent to the Penn State Hershey Medical Center. This new mixeduse neighborhood will include residential, retail, entertainment and office space.

SUMMERS CORNER

SUMMERVILLE, SOUTH CAROLINA

UDA prepared a pattern book for Summers Corner, a new village being developed by WestRock, in North Charleston. The stated goals include responsible management of natural environments, reconnecting individuals and families to a garden ethic, and fostering daily social connectivity that enhances the quality of life.

CYPRESS VILLAGE, VANCOUVER,

BRITISH COLUMBIA. CANADA

Cypress Village will be a high-density urban precinct with a mix of uses developed by British Pacific Properties within a 350-acre site adjacent to Cypress Falls Park at the base of Cypress Mountain. UDA led a diverse team in a 9-month long design process engaging with the West Vancouver community and the many stakeholders who work, live and play in this extraordinary region.











URBAN DESIGN/CHARRETTE LEAD, ILLUSTRATION



DAVID CSONT. ASAI **PRINCIPAL**

URBAN DESIGN/CHARRETTE LEAD CHIEF ILLUSTRATOR

EDUCATION

Bachelor of Art History, State University College at Buffalo Bachelor of Science, State University College at Buffalo Master of Fine Arts, University of Wisconsin-Madison

EXPERIENCE

David is a nationally recognized illustrator and educator with over twenty-five years of experience in the visualization of architecture. A key member of the UDA design team, David's unique talents include the ability to translate urban design and architectural concepts into three-dimensional perspective drawings in a variety of traditional and digital media. These images become an integral part of the marketing program for each project because they can easily communicate complex ideas to a varied audience. As a member of the American Society of Architectural Illustrators (ASAI), David's work has been recognized in the juried exhibition, Architecture in Perspective, in 1989, 1996, 1998, and 2005 through 2012. He served as President of ASAI in 2007. He has conducted many seminars and lectures and is committed to the exploration of illustration as a means to effectively communicate design ideas.

DOWNTOWN HUNTSVILLE MASTER PLAN HUNTSVILLE. ALABAMA

The Master Plan guides the creation of a vibrant mixed-use historic downtown. UDA led the master plan which enhances mobility with bicycle lanes and walkable streets, connects and adds parking resources, embraces historical Big Spring Park, reconfigures City Hall, bridges the gap to the convention center, provides hundreds of mixed-income residential units, and helps activate its retail and dining district.

MID-CITY

HUNTSVILLE. ALABAMA

Mid-City is a public-private redevelopment initiative of a regional shopping mall located just west of downtown Huntsville. The plan integrates a 13-acre city park as the focus of outdoor recreation and performance venues including a 3,000 seat amphitheater. The site will have retail, office space, a specialty hotel, and residential units designed with multiple modes of access for pedestrians, bicycles, and vehicles.

DOWNTOWN BOCA RATON

BOCA RATON, FLORIDA

UDA developed strategies for growth and revitalization of the district. Key among these strategies are enhancements that strengthen the connection between downtown and the waterfront, new architectural design guidelines and significant improvements to the quality of the public space.

DOWNTOWN ALAMEDA MASTER PLAN

ALAMEDA. CALIFORNIA

The City of Alameda, in collaboration with UDA as their urban design consultants created vision plans for their Civic Center, Webster Street, and Encinal Terminals. The public planning process for each project engaged a broad range of citizens and stakeholders. UDA prepared digital models and perspective drawings that enabled everyone involved to visualize the scale and character of the recommendations.













PARKING



TOM BROWN **PRINCIPAL**

PARKING

EDUCATION Bachelor of History, The Ohio State University Master of Urban Planning, Hunter Collage

EXPERIENCE

Urban parking management has been a special focus during Tom's 12+ years at Nelson\Nygaard. In his experience, nothing undermines the best of planning and design efforts as quickly or significantly as failing to get the parking right. Getting it right, however, invariably involves negotiating challenging and consequential tradeoffs. Years of engaging diverse, passionate, and thoughtful stakeholders on all aspects of parking, in a wide variety of contexts and opportunity environments, has afforded Tom the capacity to offer his clients a clear assessment of best available options, the essential pros and cons of each, and a viable path forward in serving transportation, growth, and broader community goals and objectives.

TRAVEL DEMAND MANAGEMENT STUDY

TRAVERSE CITY, MICHIGAN

Managed a study of mobility-improvement and demand-management opportunities to reduce parking needs for Traverse City's thriving downtown district. The TDM plan takes advantage of an inverse cycle of parking demand that will allow it to reduce its downtown parking needs, without requiring 12-month mode-shift commitments from its commuters.

COMPREHENSIVE PARKING STUDY

ASHEVILLE. NORTH CAROLINA

Asheville hired Nelson\Nygaard to perform a comprehensive parking study and develop a strategic plan for parking in the downtown area. It included a comprehensive survey of best practices, covering management policies/practices and technology/operations, as well as a financial model to project the impact of various rate-setting options on parking demand and revenues.

VITAL STREETS

GRAND RAPIDS. MICHIGAN

Led the parking and transportation demand management (TDM) component of this complete-streets study, which culminated in a Street Design guide for the City. Deliverables included a Neighborhood Commercial Center parking-management toolbox and a Citywide TDM Policy.

PARKING & TDM STUDY

ANN ARBOR, MICHIGAN

The DDA contracted Nelson\Nygaard to complete a Downtown Parking & TDM study designed to update a similar study, completed in 2007. The primary goal of the 2016 study was to ensure downtown's continued growth, economic expansion, and rising quality of life, with little parking supply.

OFF-STREET PARKING & MOBILITY UPDATE STUDY

ASPEN, COLORADO

Managed a study to update the City's off-Street parking requirements, with a particular focus on reducing single-occupancy travel in downtown while supporting desired levels and forms of economic and population growth in this thriving district. Built-out under a code that emphasized minimum parking requirements, most of downtown's current parking supply is private and restricted, leaving drivers wishing to park in one place and walk around the downtown to hunt for on-street parking. The recommended code update, adopted in early 2017, integrates parking standards, mobility investments, and TDM commitments, as well as an In Lieu Fee alternative, into a Mobility Requirement that allows developers to right-right their options for their projects.

ZONING PARKING REQUIREMENTS REVIEW

MONTGOMERY COUNTY, MARYLAND

Led a comprehensive review of parking requirements for the County, as well as a peer review of the County's parking lot district program for developing shared, public parking facilities in mixed-use urban centers.





PARKING



CHRIS BONGORNO, SENIOR **ASSOCIATE**

PARKING

EDUCATION

Bachelor of Urban Studies, University of Cincinnati Master in Urban Planning, Design & Development, Cleveland State University

EXPERIENCE

Chris has more than 10 years of professional planning experience, applying a detail-oriented and client-focused skill set to extensive work in the fields of transportation and community planning, mixed-use and institutional development, and place management. His curiosity about how cities work drew him to the field and that curiosity has only grown with each new community he engages with. Chris's recent work has tied together his passions for innovations in mobility, community accessibility, sustainability, civic engagement, and economic development. Chris is dedicated to the communities in which he works and lives, serving multiple non-profit and civic roles in both Cleveland and Yellow Springs, Ohio.

DOWNTOWN DETROIT TRANSPORTATION STUDY (SEMCOG)

DETROIT, MICHIGAN

Deputy Project Manager for a collaborative effort of the Southeast Michigan Council of Governments (SEMCOG), the City of Detroit and the Michigan DOT. The study will consider all aspects of mobility in Downtown Detroit, including traffic, parking, transit, biking, and walking, beginning with evaluation of existing conditions and developing a holistic strategy to manage the future transportation demands of Downtown. As part of a strong consulting team, Nelson\Nygaard is leading strategies for Parking Management, TDM, and Curbside Management.

DUBLIN MOBILITY PLAN

DUBLIN, OHIO

Deputy Project Manager for Phase 2 of an effort to improve public health, expand residents' multimodal travel options, and promote equitable access to mobility in Dublin, Ohio. Following development of a Mobility Vision and Toolkit, Nelson\Nygaard is working with the City to identify and evaluate action items for implementation. High-priority projects include the development of a citywide Complete Streets ordinance, a feasibility study of on-demand transit options, bike share pilot launch, bike route wayfinding, and municipal partnerships with shared mobility providers.

IUPUI TRANSPORTATION & PARKING PLAN

INDIANAPOLIS, INDIANA

Planner on an urban campus effort to improve opportunities for biking, walking, and transit use for IUPUI employees, students and visitors. Nelson\Nygaard is examining parking utilization and other travel pattern data to understand how the campus transportation system can be managed more effectively with a variety of demand management tools. Strategies for non-driving mobility options, including bike share, car share, and shuttle services, are being developed to meet the University's goals.

MOVING GREATER UNIVERSITY CIRCLE TRANSPORTATION & MOBILITY PLAN

CLEVELAND, OHIO

Led scope and RFP development, fundraising and project management on behalf of the University Circle Inc. over a two-year period. The 3-part plan was completed by Nelson\Nygaard and included a Parking Management Plan, Transportation & Mobility Plan, and Implementation Plan. Recommendations have led to tangible projects and additional funding for implementation.

CIRCKELINK CIRCULAR EVALUATION

CLEVELAND, OHIO

Served as project manager on behalf of the University Circle Inc. and worked with planning consultant Nelson\Nygaard to evaluate current service and enhancements to the neighborhood's free circulator bus. Recommendations led to the addition of a second route, rebranding, and execution of a marketing plan. The improved service has expanded geography, grown ridership, increased visibility, and garnered more than \$100,000, annually, in additional financial support.





PARKING



ALYSON FLETCHER **ASSOCIATE**

PARKING

EDUCATION

Master of Art History, Literary & Cultural Studies, College of William & Mary

Master of Landscape Architecture, Cornell University Master of City and Regional Planning, Cornell University

EXPERIENCE

Alyson Fletcher focuses on street design and multimodal transportation studies, which encompass best practices for integrating modes. Alyson has an inter-disciplinary background in architecture, planning and landscape architecture. Before joining Nelson\Nygaard, Alyson not only worked for an architecture firm in Boston but also worked on civic landscape designs for stormwater infrastructure projects in Philadelphia and on the Neighborhood Bikeways Network for the Active Transportation Alliance in Chicago. Alyson's Chicago work became part of a thesis presented at the Transportation Research Board's 2012 Urban Street Symposium and the 2012 Velo-City in Vancouver, B.C.

NEWTON CENTRE PARKING STRATEGY

NEWTON, MASSACHUSETTS

Alyson assisted in the creation of a parking management plan for Newton Centre with principles to be replicated in other villages within the City of Newton.

DOWNTOWN CHELSEA PARKING & CIRCULATION STUDY

CHELSEA. MASSACHUSETTS

Alyson is studying parking demand patterns in the Broadway neighborhood of Chelsea to support a main street redesign and visioning process.

BRAINTREE PARKING INVENTORY

BRIANTREE, MASSACHUSETTS

Alyson created a GIS repository of all on- and off-street parking facilities within the two main village squares in Braintree

ARLINGTON PARKING MANAGEMENT PLAN

ARLINGTON. MASSACHUSETTS

Alyson assisted in the development of a parking management plan with specific strategies to alleviate real and perceived parking problems in the core of the central business district.

LEXINGTON PARKING MANAGEMENT IMPLEMENTATION PLAN

LEXINGTON, MASSACHUSETTS

Alyson provided planning assistance on this project, which included public participation, surveys, reviewing existing conditions, developing implementation options and outreach strategies, and studying their impacts.

CHARLOTTE SOUTH END PARKING STUDY

CHARLOTTE. NORTH CAROLINA

Alyson diagrammed recommendations to improve parking, pedestrian, and bicycling facilities. She also drew sections to illustrate possibilities within various street widths throughout the area for this project that evaluated existing transportation conditions and developed a multimodal transportation plan that addressed design best practices and recommendations for parking management strategies for mixed use developments.





INFRASTRUCTURE ANALYSIS & MULTIMODAL TRANSPORTATION ENGINEERING



JULIE KROLL, PE, PTOE. **PRINCIPAL**

INFRASTRUCTURE ANALYSIS & MULTIMODAL TRANSPORTATION **ENGINEERING**

EDUCATION

Bachelor of Civil/Transportation Engineering, Michigan Technological University

EXPERIENCE

Julie has been involved in a wide variety traffic and transportation engineering projects for over 18 years, including all aspects of transportation planning, operations and design. She has provided the traffic and mobility analyses on hundreds of different Federal, State and local projects. As a Project Manager she is responsible for all aspects of the project scoping, analysis, design and delivery. Julie has a broad range of experience that is essential in evaluating each project and she is able to effectively and concisely communicate this information.

MAPLE ROAD LANE CONVERSION BEFORE/AFTER STUDY

BIRMINGHAM, MICHIGAN

Project Manager responsible for before and after study to evaluate the four lane road operations and the three lane roadway operations during the trial periods. This trail was done to determine if the implementation of a three-lane cross section would enhance operations for all transportation users including drivers, pedestrians, and bicyclists. Study analyses included modeling of the study network, crash analysis, and calculation of intersection delays, Levels of Service (LOS), and vehicle queues. The results of the study showed a decrease in speeds, improved conditions for pedestrians, reduction in crashes and negligible increases in travel time. The study results were presented to the Multi-Modal Board and the City commission who recommended to maintain the three-lane section. The project was successful and constructed as recommended in summer 2016.

RAIL DISTRICT PARKING STUDY

BIRMINGHAM, MICHIGAN

Project Manager responsible for the evaluation of the existing peak period parking demand within the Rail District and an evaluation of pedestrian improvements at intersections identified by the Ad Hoc Rail District Commission for review. The Ad Hoc Rail District Commission members were tasked with developing a plan to address the current and future parking demands within the district that align with both the planning goals and multi-modal opportunities for the Rail District. This study was performed to assist in the development of this plan and achieving their goals. Recommendations included areas to provide shared parking and pedestrian crossing enhancements at several intersections along the corridor.

SOUTH ELTON BIKE LANES

BIRMINGHAM, MICHIGAN

Project Manager responsible for the evaluation of the bike lane alternatives on the S. Eton Street corridor between Maple Road and 14 Mile Road. The study included several options for the Multi-Board consideration. The options were all developed in accordance with on guidance from the NACTO Urban Bikeway Design Guide, the NACTO Urban Street Design Guide and the recommendations from the City of Birmingham Multi-Modal Transportation Plan, with additional support from the Ad Hoc Rail Committee study.

DESIGN REVIEWS/ENGINEERING STUDIES/PLAN & STUDY REVIEW

BIRMINGHAM, MICHIGAN

- Neighborhood Connector Route Plan/Signing
- Lincoln and Pierce Bumpout Evaluation
- Lincoln and Ann Signing and Striping Evaluation
- Maple Road Mid Block Crossing Evaluation
- Southfield and Maple HSIP Application
- Saxon Roundabout Operational Analysis and Design
- Lincoln and Southfield Signal Evaluation

- Chesterfield and Quarton Traffic Analysis
- North Old Woodward Corridor
- Oak Street Traffic Engineering Analysis
- South Eton Street Engineering Review
- Brookside Terrance Engineering Review
- 277 Pierce Engineering Review
- 2010 Cole Engineering Review
- Boutique Hotel Engineering Review





INFRASTRUCTURE ANALYSIS & CONSTRUCTION PRACTICES



TODD RICHTER, PE **ASSOCIATE**

INFRASTRUCTURE ANALYSIS & CONSTRUCTION PRACTICES

EDUCATION

Bachelor of Civil Engineering, Michigan State University Master of Civil Engineering, Michigan State University

EXPERIENCE

Todd has experience in the design and construction of transportation projects. The majority of these consist of MDOT local agency projects.

His experience includes construction engineering and administration of state, municipal and private engineering projects. He has performed inspection and testing for quality control of concrete, asphalt and other construction materials and is familiar with the procedures and paperwork associated with local municipal and MDOT funded projects.

Todd is recognized as a Consultant Assistant for MDOT Local Agency Programs providing project delivery assistance for rural, and TAP (Enhancement and safe routes to schools) projects.

BALDWIN STREET BRIDGE OVER THE MUSKEGON RIVER

BIG RAPIDS, MICHIGAN

Project manager for the design and construction engineering services to replace the existing five-span structure with a new three-span spread concrete box beam bridge. The bridge was also realigned to improve visibility of approaches. Other improvements included sidewalks, bike lanes, street lighting, and steel railings. The project was awarded the 2017 Project of the Year Award from APWA.

MDOT TRAFFIC SIGNALS

OSCEOLA & WEXFORD COUNTIES, MICHIGAN

Project manager for the as needed construction inspection and testing services on traffic signal moderation and sidewalk ADA ramp upgrades across Osceola and Wexford Counties. Inspection included: removal and replacement of 23 existing traffic signals; installation of concrete sidewalk and ADA-compliant ramps and 10 pedestrian crossing signals; installation of 3 wireless vehicle detection systems with 36 wireless sensor nodes; installation of 1 solar powered flashing beacon on an advance warning sign; and direction placement of placement markings.

EAST WEST STREET RECONSTRUCTION

STURGIS. MICHIGAN

Project manager for the reconstruction of 0.50 miles of E. West Street. Provided design, survey, permitting, and construction for the road. Work included watermain replacement, storm sewer improvements, and sidewalk improvements, including the addition of ADA-accessible ramps.

CONGRESS STREET RECONSTRUCTION

STURGIS. MICHIGAN

Project manager for 1,400 feet of Congress Street Reconstruction. Project included watermain and storm sewer replacement.

INDIAN RIVER PATHWAY

TUSCARORA TOWNSHIP

Project engineer for an \$833,000 in grant funded trail along M-68 in Indian River, Michigan including financing from the MNRTF, MDOT-TE, and the SR2S programs. The project provided over a mile of universally accessible paved pathway and pedestrian bridge across the Sturgeon River from the North Country Trail on the north end to M-68 west on the south end. The pathway provides walkable access to the North Country Trail, the Village of Indian Rivers, Burt Lake State Park and the Inland Lakes Schools K-12 campus.

GRAND HAVEN ROAD

NORTON SHORES, MICHIGAN

Project engineer for 1.01 mi of residential and commercial road reconstruction and storm sewer replacements and extension. Work included drainage improvements, survey, construction testing, televising, legal descriptions / easements, Federal STIP funding, and permitting for MDOT /CRC ROW Permits.







MKSK - PLANNING & DEVELOPMENT PROJECT EXPERIENCE

5 POINTS REDEVELOPMENT PLAN WEST LAFAYETTE, INDIANA

15TH & HIGH URBAN FRAMEWORK AND **URBAN DESIGN** COLUMBUS, OHIO

ALLIED INSURANCE CORPORATE **HEADQUARTERS** DES MOINES, IOWA

ALLIANT ENERGY CENTER FEASIBILITY **STUDY** MADISON, WISCONSIN

ARENA CROSSING, ARENA DISTRICT COLUMBUS, OHIO

BATTELLE MEMORIAL INSTITUTE MASTER PLAN COLUMBUS, OHIO

BIOHIO RESEARCH PARK MASTER PLAN WOOSTER, OHIO

BOB EVANS CORPORATE HEADQUARTERS NEW ALBANY, OHIO

BRIDGE STREET DISTRICT SCIOTO RIVER CORRIDOR FRAMEWORK DUBLIN, OHIO

BRIDGE STREET DISTRICT STREETSCAPE CHARACTER **GUIDELINES** DUBLIN, OHIO

BRIDGE PARK OPEN SPACES AND **STREETSCAPES** DUBLIN, OHIO

BREWERY DISTRICT REDEVELOPMENT PLAN

COLUMBUS, OHIO

CAMBRIDGE REVITALIZATION/TURNER **AVENUE VISION PLAN** CAMBRIDGE, OHIO

CENTER CITY ACTION PLAN COVINGTON, KENTUCKY

CENTRIC PRIVATE DEVELOPMENT CLEVELAND, OHIO

CERTIFIED TECHNOLOGY PARK MASTER PLAN

BLOOMINGTON, OHIO

'IMAGINE CHARLESTON' COMPREHENSIVE PLAN AND DOWNTOWN PLAN CHARLESTON, WEST VIRGINIA

COLERAIN AVENUE CORRIDOR STUDY COLERAIN TOWNSHIP, OHIO

COLUMBUS COMMONS DEVELOPMENT PLAN COLUMBUS, OHIO

CROCKER PARK WESTLAKE, OHIO

DAVENTRY AT SUMMIT PARK BLUE ASH, OHIO

DETROIT MOBILITY & ACCESSIBILITY PLAN DETROIT, MICHIGAN

DOWNTOWN AKRON VISION & REDEVELOPMENT PLAN AKRON, OHIO

DOWNTOWN BUSINESS DISTRICT REVITALIZATION PLAN AUBURN, INDIANA

DOWNTOWN COLUMBUS STRATEGIC PLAN COLUMBUS, OHIO

DOWNTOWN AND EAST DOWNTOWN **CONNECTIVITY STUDIES** LOUISVILLE, KENTUCKY

DOWNTOWN DISTRICT STRATEGIC **DEVELOPMENT ACTION PLAN** EVANSVILLE, INDIANA

DOWNTOWN STRATEGIC REDEVELOPMENT PLAN RICHMOND, INDIANA

DOWNTOWN TOLEDO MASTER PLAN TOLEDO, OHIO

DUVENECK SQUARE COVINGTON, KENTUCKY

EASTON FENLON SQUARE

COLUMBUS, OHIO

LEXINGTON, KENTUCKY

EAST GRAND RAPIDS MASTER PLAN EAST GRAND RAPIDS, MICHIGAN

COLUMBUS, OHIO **EASTON TOWNE CENTER GATEWAY**

EUCLID & SOUTH LIMESTONE COMMERCIAL CORRIDOR STUDY

FINDLAY CATALYTIC OPPORTUNITIES SITES STUDY FINDLAY, OHIO

FIRESTONE ALLEY AND **BUGGYWORKS II, ARENA DISTRICT** COLUMBUS, OHIO

FLATS ON VINE AND FLATS II, ARENA DISTRICT COLUMBUS, OHIO

GM STAMPING PLANT REDEVELOPMENT PLAN INDIANAPOLIS, INDIANA

GREATER COLUMBUS CONVENTION CENTER EXPANSION COLUMBUS, OHIO

HIGHLAND PARK DOWNTOWN STRATEGIC PLAN HIGHLAND PARK, MICHIGAN

HUNTINGTON BALLPARK, ARENA DISTRICT COLUMBUS, OHIO

INDIANAPOLIS RIVERFRONT VISION INDIANAPOLIS, INDIANA

JACKSON SQUARE COVINGTON, KENTUCKY

JEFFREY PARK COLUMBUS, OHIO

JORDAN CROSSING REDEVELOPMENT **PLAN** CINCINNATI, OHIO

LANSING DOWNTOWN FORM BASED CODE

LANSING, MICHIGAN

LEBANON COMPREHENSIVE PLAN LEBANON, OHIO

LEXINGTON DISTILLERY DISTRICT LEXINGTON, KENTUCKY

LEXINGTON CENTREPOINT LEXINGTON, KENTUCKY

LIBERTY CENTER LIBERTY TOWNSHIP, OHIO

LOUISVILLE DOWNTOWN MASTER PLAN LOUISVILLE, KENTUCKY

MARATHON CORPORATION **HEADQUARTERS MASTER PLAN & IMPLEMENTATION** FINDLAY, OHIO

MIDLAND DOWNTOWN STREETSCAPE **PLAN** MIDLAND, MICHIGAN

MONROE DOWNTOWN MASTER PLAN & PARKING STUDY MONROE, MICHIGAN

MONTGOMERY TRIANGLE GATEWAY MONTGOMERY, OHIO

NASHVILLE DOWNTOWN PLAN NASHVILLE, INDIANA

NATIONWIDE ARENA DISTRICT MASTER **PLAN** COLUMBUS, OHIO

NORTH BANK CONDOMINIUMS, ARENA DISTRICT COLUMBUS, OHIO

NORTHERN KENTUCKY **CONVENTION CENTER** COVINGTON, KENTUCKY

OLD WOODWARD AVENUE / MAPLE DRIVE CORRIDOR PLAN BIRMINGHAM, MICHIGAN

OSU COMPREHENSIVE PARKING AND TRANSPORTATION PLAN COLUMBUS, OHIO

PIQUA COMPREHENSIVE PARKS MASTER PLAN PIQUA, OHIO

PITTSBURGH NORTH SHORE **MASTER PLAN** PITTSBURGH, PENNSYLVANIA

PORTAGE CROSSING CUYAHOGA FALLS, OHIO

POWELL COMPREHENSIVE PLAN POWELL, OHIO

PURDUE INNOVATION DISTRICT WEST LAFAYETTE, INDIANA

REEDY RIVER REDEVELOPMENT AREA AND CITY PARK GREENVILLE, SOUTH CAROLINA

RIVERWEST GREAT PLACE **INVESTMENT STRATEGY** INDIANAPOLIS, INDIANA

SCIOTO PENINSULA MASTER PLAN COLUMBUS, OHIO

SHAKOPEE COMPREHENSIVE PLAN SHAKOPEE, MINNESOTA

SHAPING THE AVENUE LANSING, MICHIGAN

TRIANGLE DISTRICT URBAN DESIGN **PLAN**

BIRMINGHAM, MICHIGAN

UPTOWN WESTERVILLE COMPREHENSIVE PLAN WESTERVILLE, OHIO



OLD WOODWARD AVENUE / MAPLE DRIVE CORRIDOR PLAN

BIRMINGHAM, MICHIGAN

CONTACT:

City of Birmingham Jana Ecker, Planning Director 248.538.1841

TEAM MEMBERS:



Old Woodward Avenue and Maple Road are the intersection of "Main and Main Streets" in this vibrant downtown north of Detroit. Set for its first reconstruction in 30 years, city leaders hired MKSK to identify a design concept that would best balance a variety of transportation and economic goals advocated by various groups and the public. Business leaders emphasized the need to retain the amount of convenient on-street parking and a thoughtfully designed streetscape. Planners sought wider sidewalks with more frequent pedestrian crossings and additional space for outdoor cafés. Others advocated better routing for bikes and use of long lasting green infrastructure elements. City engineers stressed the need for smooth traffic operations, radii for larger commercial vehicles and cost considerations. Some wanted to retain the traditional streetscape features while others felt it was time for a fresh design.

Due to the timing of funding, a final design concept was required within just a few months in early winter 2016. Through exploration of a range of alternatives, MKSK crafted a design that strikes a balance between those somewhat competing goals. Not only were the sidewalks widened, but a more linear landscape design increased the walkable sidewalk width by up to 25%. A new palette of trees, curbs, streetlights, and distinct pavement materials will provide a lasting design.







TRIANGLE DISTRICT URBAN DESIGN PLAN

BIRMINGHAM. MICHIGAN

CONTACT:

City of Birmingham Jana Ecker, Planning Director 248.538.1841

TEAM MEMBERS:



A master plan was needed to redevelop Birmingham's Triangle District. Its goal would be to create a cohesive vision for the area that would direct future development and connect the downtown with the surrounding residential neighborhoods.

A two-day public charrette was held to guide and inform the design and build community support. It brought together prominent stakeholders, neighborhood residents, area developers, and business owners to share their hopes and visions for the area. Concepts of the final plan include mixed use buildings, new housing, parking structures, urban green spaces, public plazas, and the preservation of the existing neighborhood.

Architectural and design guidelines along with form-based code will help to control the future development of the area, ensure the long-term vision, and maintain the overall quality of design.





ENVISION SHAKOPEE 2040 COMPREHENSIVE PLAN

SHAKOPEE, MINNESOTA

CONTACT:

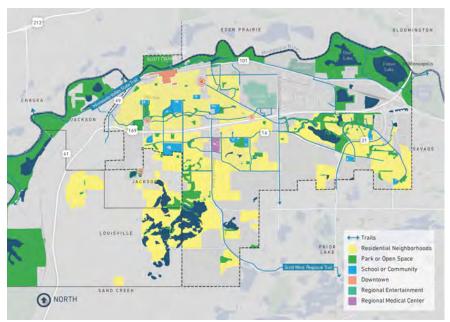
City of Shakopee Eric Weiss Senior Long Range Planner 952.233.9347 An outer suburb of Minneapolis, the City of Shakopee boasts an historic downtown along a major highway and adjacent to the Minnesota River. The city's population has seen tremendous employment and household growth, nearly doubling in population since 2000 and is expected to grow for decades to come. This growth has brought economic prosperity, but also challenges as the community grapples with rapid change, uncertainty and diverging perspectives on how the city should manage its resources.

TEAM MEMBERS:





All cities in the Twin Cities metro area are required to update their comprehensive plans every ten years to meet regional Metropolitan Council planning requirements. However, Shakopee has engaged MKSK to lead a new type of planning process that will go beyond the Met Council's technical standards. The planning process began in July 2017, kicking off with a robust community engagement effort including an interactive website, focus group meetings, mobile displays at community events, and with more outreach to come. MKSK is engaging the community to establish a shared vision of what people want Shakopee to be in the future. The Envision Shakopee 2040 Plan will paint a compelling picture of what Shakopee can be – how it would like to grow and change, what it would like to improve, and what it would like to preserve and strengthen for future generations. The plan will establish a strong and aspirational vision for the future and will serve as a guidebook and plan of action for the community to achieve that vision.





CITY OF POWELL COMPREHENSIVE PLAN

CONTACT:

City of Powell David Betz, AICP Director of Development 614.885.5380

TEAM MEMBERS:





The City of Powell is a growing upscale 'bedroom community' in the Columbus Metropolitan Area. Located north of Columbus, State Route 750 serves as a major transportation corridor between the Columbus Zoo & Aguarium and Interstate 71, funneling traffic through historic downtown Powell. Resolving traffic congestion at the downtown's 'Four Corners' intersection was a key goal of the planning process. MKSK also explored land use considerations in Powell's downtown. The Plan aims to guide the community in determining what types of housing may be appropriate in the downtown area. This is of particular importance for a community with an aging population and few alternative housing options. The planning process also explored opportunities for Powell to expand and diversify its revenue sources to support needed infrastructure investments and maintain the high quality public services that residents desire. The planned extension of Sawmill Parkway through undeveloped farmland north of the City will increase pressure for growth and development. The Plan update guides the City in determining what types of land use and development patterns are appropriate in this expansion area, and will be fiscally sustainable in the long run. Key Components of the Plan include:

- 1. Traffic and infrastructure capacity
- Annexation policy and relationship to surrounding communities
- Downtown vitality
- Taxation and finance policy
- Economic development strategies
- Preservation of community character
- Response to changing development and market trends









UPTOWN WESTERVILLE COMPREHENSIVE PLAN

WESTERVILLE, OHIO

CONTACT:

City of Westerville Bassem Bitar, AICP Senior Planner bassem.bitar@westerville.org 614.901.6658

TEAM MEMBERS:



Uptown Westerville represents one of the best preserved and prosperous historic town centers in Central Ohio. Decades of involved community members and active public figures have helped create a unique downtown that other communities in Central Ohio can only attempt to emulate. While, to date, Uptown has been very successful in preserving and fostering Westerville's historic downtown, it lacks a comprehensive document to help guide future growth and development. The 2013 Uptown Westerville Comprehensive Plan provides this by evaluating the district's existing conditions, exemplifying its strengths, and proposing catalytic projects and potential planning tools to address its challenges. By planning for the future, Uptown can ensure its continued success as the community core of the City of Westerville. The planning process was guided by a Steering Committee of residents, property owners, and business owners. Analysis of the study area resulted in recommendations for new civic spaces, infill development, and streetscape and transportation improvements including a new alley system, dedicated pedestrian vias; and bike improvements including important connections and improved amenities. In addition to the guidance of the Steering Committee, public input via stakeholder interviews, public meetings, and an interactive public input website helped to ensure that the final plan addresses the immediate concerns and needs of Uptown, while also advancing the interest of those in Uptown and the Westerville community. This plan will serve as a guiding document for city officials, employees, and any future developer of the Uptown area.





WESTERVILLE ZONING CODE UPDATE

CONTACT:

City of Westerville Kimberly Sharp, Deputy Director of Planning & Development kimberly.sharp@westerville.org 614.901.6895

TEAM MEMBERS:

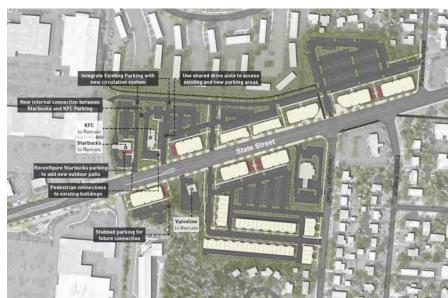




MKSK is working with the City of Westerville as part of a multidisciplinary team to conduct an extensive update and modernization of the City's zoning code. This is a key implementation action recommended by the City of Westerville's 2016 Comprehensive Plan and will position the City to accommodate new growth and economic development by eliminating outmoded standards and processes.

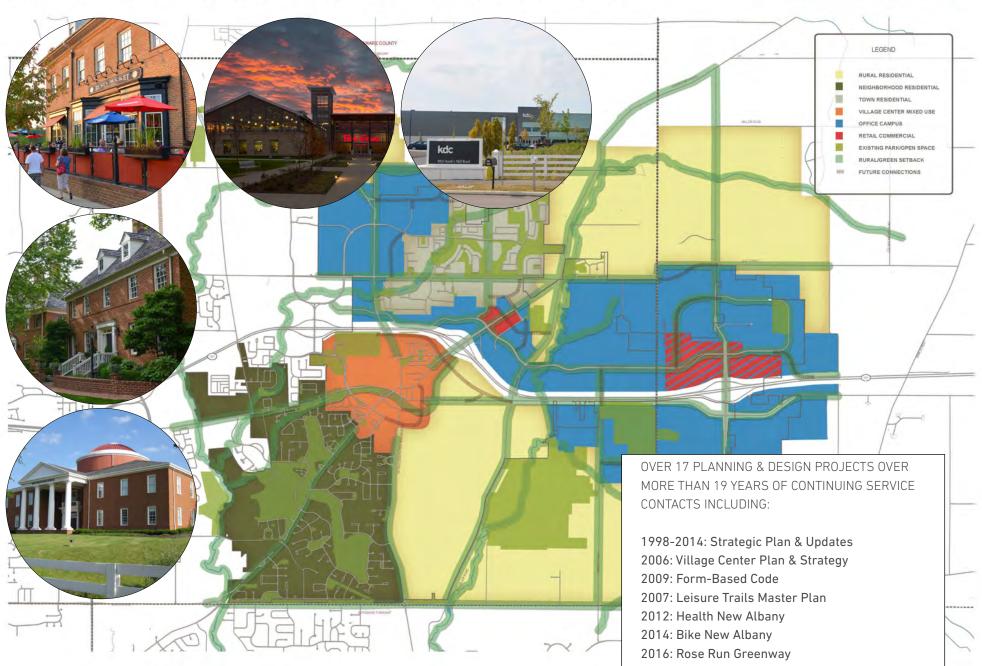
MKSK conducted a comparative analysis of the City's existing zoning map and districts against the Comprehensive Plan's recommended land use character areas to determine areas of conflict and opportunities for simplification. MKSK is also leading the development of form-based districts in strategic planning areas to ensure that new walkable, mixed-use urban development is permitted and appropriately designed within the context of this suburban community.





NEW ALBANY STRATEGIC PLAN, NEW ALBANY, OH_MKSK









NEW ALBANY PLANNING & DESIGN SERVICES 2000-2016

CONTACT:

City of New Albany Joseph Stefanov City Manager admin@newalbanyohio.org 614.855.3913

OUTCOMES:

2000 OCASLA Merit Award (Strategic Plan)

2015 OCASLA Honor Award (Bike New Albany Master Plan)

TEAM MEMBERS:





MKSK has been involved in planning and design services in New Albany for over 30 years, in which time New Albany has transformed from a small village to a vibrant city. Today, ranked as the Top Suburb in America by Business Insider, New Albany's continued emphasis on planning and design have resulted in a thoughtfully planned community that has preserved and exemplified its small-town charm and character.

MKSK works closely with the Community Development Staff to regularly update the City's Strategic Plan, provide site and landscape design review for new projects, continue to develop a city-wide multi-use trail system and on-street bicycle infrastructure, strategically plan for continued residential growth, ensuring a high standard of design in the City's Business Park, and develop focus area planning studies to ensure the continued growth and development of New Albany supports the community's vision. Through these efforts, the Village Center has continued to be prioritized as the downtown area for the city and the heart of the community. Additional studies such as the Village Center Study, the Village Center Form Based Code, and the Village Center Strategies Plan, the Village Center has become a pedestrian-oriented, civic and social hub, as well as a regional destination for festivals and special events in Central Ohio.

STRATEGIC PLAN

The New Albany Strategic Plan has been guiding development in the community since its adoption in 1998. New Albany has relied on this critical tool for this growing community to preserve character, reduce impacts of development, and encourage investment that contributes to the community. The plan focuses on promoting balanced growth, creating great neighborhoods, providing first rate amenities, and developing a robust business employment base. Of particular focus has been the development of a mixed use Village Center, interconnecting the community with leisure trails, and guiding densities and aesthetics.

The original plan has been regularly updated to reflect the evolving nature of New Albany and its rapid growth. With each update, the planning effort has been a highly collaborative process involving elected leaders, administration, and community members.

ACCORDS

The City of New Albany has relied on MKSK to develop several multi-jurisdictional planning accords including the Rocky Fork Blacklick Accord and the West Licking County Accord.



NEW ALBANY VILLAGE CENTER PLAN NEW ALBANY, OHIO

CONTACT:

City of New Albany Joseph Stefanov City Manager admin@newalbanyohio.org 614.855.3913

OUTCOMES:

2006 OCASLA Merit Award

TEAM MEMBERS:



The Village Center Plan establishes the long-term vision for the village core as an integrated, mixed-use town center with attention to the location of civic uses, the inclusion of high-density residential areas, and the quality of the built environment – buildings, streetscapes and public spaces.

Since the adoption of the Village Center Study a number of the planning recommendations have been accomplished including a revision of the Village Center Design Guidelines and development of a Form-Based Code. Quality development within the Village Venter includes City Hall, a public library, a community performing arts center, mixed use office and retail, higher density residential, and a community health and recreation center. Planning efforts in and around the Village Center have continued to emphasize this area as the heart of the New Albany community, which has created a vibrant and prosperous city core.





ROSE RUN CORRIDOR VISION PLAN & IMPLEMENTATION

CONTACT

City of New Albany Joseph Stefanov, City Manager 614.855.3913

TEAM MEMBERS



The Rose Run Corridor Vision Plan is intended to guide park development and urban redevelopment at the core of the Village Center and energize the downtown with new park space and an improved greenway. The plan envisions to intertwine the riparian edge of the Rose Run stream corridor with more urbanized pedestrian connections and green spaces linking the Learning Campus with the Village Center and Public Library and breaking the once divided land uses. Planned improvements begin with the realignment of Village Hall Road to reclaim park space between the Library and the Rose Run corridor. Acquirement of this land facilitates the new Library Gardens to the south which connects to the new pedestrian bridge crossing the stream. The pedestrian bridge leads to a new plaza overlook along Dublin Granville Road at the southern end of the existing Learning Campus entry greenspace. Both the pedestrian bridge and the plaza overlook will serve as a ceremonial gateway to the City of New Albany. Additionally, this new space will be a focal point of the project and programmed to accommodate City festivals, farmers markets, and other public gatherings. MKSK provided study plan services for the initial design and in conjunction with the Engineer team, and is continuing design services for the next phase of implementation.











DOWNTOWN HUNTSVILLE MASTER PLAN HUNTSVILLE, ALABAMA

CONTACT:

City of Huntsville Dennis Madsen Long Range Planning 256.427.5100 dennis.madsen@huntsvilleal.gov

TEAM MEMBERS:



The Huntsville Downtown Master Plan guides the creation of a vibrant mixed-use historic downtown. Home to NASA and aerospace technology, the City seeks to attract and retain talented workers and companies looking for urban vitality not present in the conventional office parks, and low-density neighborhoods far from downtown. UDA led the master plan which enhances mobility with bicycle lanes and walkable streets, connects and adds parking resources, embraces historical Big Spring Park, reconfigures City Hall, bridges the gap to the convention center, provides hundreds of mixedincome residential units, and helps activate its retail and dining district.











SUMMERS CORNER SUMMERSVILLE, SOUTH CAROLINA

CONTACT

West Rock Joseph Barnes, Director 843.637.7735 joseph.barnes62@gmail.com UDA prepared a pattern book for Summers Corner, a new village being developed by WestRock, in North Charleston. Summers Corner is emerging as a model for how new communities can become part of a continuum of regional settlement patterns that are deeply connected to both natural and cultural environments. This new community connects distinctive regional building traditions to today's context of rapidly changing digital economies and working methods. The stated goals include responsible management of natural environments, reconnecting individuals and families to a garden ethic, and fostering daily social connectivity that enhances the quality of life.

TEAM MEMBERS



















CYPRESS VILLAGE WEST VANCOUVER, BRITISH COLUMBIA, CANADA

CONTACT:

British Pacific Properties Limited Bryce Tupper 604.418.8525 btupper@britishproperties.com Cypress Village will be a high-density urban precinct with a mix of uses developed by British Pacific Properties within a 350-acre site adjacent to Cypress Falls Park at the base of Cypress Mountain in West Vancouver. UDA led a diverse team in a 9-month long design process engaging with the West Vancouver community and the many stakeholders who work, live and play in this extraordinary region. Three concept plans were developed over the course of the process to test sustainable and resilient programs, mixes of use, physical character, densities, conservation methods, community servicing, recreation networks, approach to urbanism in the mountain environment.

TEAM MEMBERS:









CHATTANOOGA ART PROMENADE

CONTACT

Lyndhurst Foundation / River City Company Macon Toledano 423.765.0767 mtoledano@lyndhurstfoundation.org

TEAM MEMBERS





River City Company and the Lyndhurst Foundation commissioned a team including Urban Design Associates and W.M. Whitaker and Associates to prepare an arts district plan for downtown Chattanooga's riverfront area. The plan proposes a pedestrian art promenade that connects the Hunter Art Museum with the Aquarium and Chattanooga Green and new residential and institutional development on key parcels in the downtown. The plan defines three character zones along the walk and provides a creative framework for integrating art into the landscape. Development guidelines are provided for new performing arts theaters flanking a cultural square at the foot of Broad Street and residential and hospitality development on the riverfront.











DOWNTOWN MASTER PLAN & PARKING STUDY

MONROE, MICHIGAN

CONTACT:

City of Monroe
Annette M. Knowles
Economic/Downtown
Development Coordinator
734.384.9146
annette.knowles@mionroemi.gov

MKSK led a team to craft a redevelopment plan and parking management strategies for downtown Monroe, Michigan. Specialists in the marketplace (Bob Gibbs) and urban design (MKSK) outlined strategies to invigorate the downtown. Specific redevelopment concepts and actions were created for key sites.

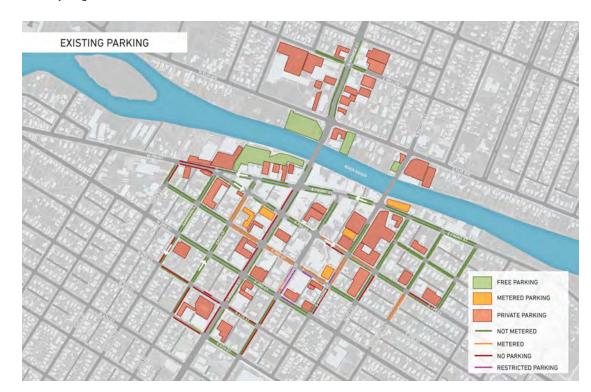
A key part of the plan was an evaluation of the transportation and parking system. The team's complete street specialists (MKSK) outlined a package of changes to streets including road diets and conversion of several one-way streets to two-way. Parking specialists from MKSK and Nelson\Nygaard outlined a series of changes to parking pricing and relocation of some parking lots to open development opportunities.

TEAM MEMBERS:





Concepts were widely embraced through meetings with business and city representatives, along with a very successful public open house at a unique downtown location. The Plan is going through the adoption process but implementation has already begun.





GRAND RAPIDS VITAL STREETS PLAN GRAND RAPIDS. MICHIGAN

CONTACT

City of Grand Rapids Suzanne Schulz, AICP Managing Director of Design, Development & Community 616.456.4100 sschulz@grcity.us

TEAM MEMBERS









The Vital Streets Plan revolutionized the approach of City of Grand Rapids, MI, to designing, maintaining, and using its streets. Adopted by the City Commission in December 2016, the Vital Streets Plan defines a community vision, principles, and design goals to build a network of accessible, inviting, and safe streets that serve all people. Going beyond a traditional complete streets policy, Vital Streets fully integrate green infrastructure into street design in order to protect the quality of region's waterways while contributing to the vitality of Michigan's second largest city. The Vital Streets Plan was developed collaboratively with public and private sector stakeholders, recognizing that roads aren't just for moving vehicular traffic. Rather, streets are complex environments that must balance the needs of different types of users. The plan establishes a street typology that unites street design with local land use context; defines an integrated, multimodal network; provides guidance in street design; presents a methodology for facility selection amid competing demands; and provides a way to measure performance and evaluate outcomes.

To implement the vision included in the Plan, Nelson\Nygaard developed Vital Streets street design guidelines. With detailed graphics, context, and use requirements, the guidelines are a tool for city staff, developers, and community stakeholders to understand the tradeoffs and design considerations in building balanced streets. An implementation and performance monitoring section of the Vital Streets Design Guidelines includes a detailed equity analysis for use in project identification and selection. The equity analysis includes estimation of the areas of the city with the greatest mobility needs in consideration with places with the greatest opportunities. Further, the Vital Streets Design Guide includes a detailed community engagement framework to ensure Vital Streets projects meet community goals.



MOVING GREATER UNIVERSITY CIRCLE TRANSPORTATION & MOBILITY PLAN

CLEVELAND, OHIO

CONTACT:

University Circle, Inc,
Debbie Berry
Vice President of Planning & Development
216.791.3900
dberry@universitycircle.org

TEAM MEMBERS:



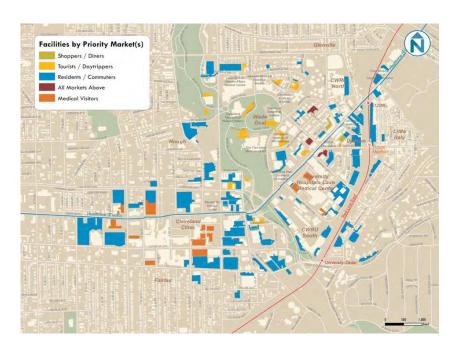




University Circle may be the most spectacular square mile in the state of Ohio. Anchored by major hospitals and universities, University Circle is the second largest employment center in the state and is continuing to grow.

The Moving Greater University Circle Transportation & Mobility Plan was a three-part study and implementation plan assessing areas of need and opportunity in University Circle's transportation system. The study identified short- and long-term strategies for effective transportation management. Moving Greater University Circle has four primary components:

- 1. The District Parking Study focused on understanding and evaluating existing and projected supply and demand in the study area and was completed in December 2014. Immediate action recommendations included increasing non-driving mobility among commuters and residents with a comprehensive TDM program coupled with improvements to walking, biking, and transit options; optimizing a park-once strategy for tourists and day trippers by addressing short-term/peak period demand; and offering shoppers and diners consistent availability through information and technology improvements.
- 2. The Transportation & Mobility Study focused on understanding and evaluating the comprehensive transportation systems, patterns, choices, and challenges that confront people as they travel to, through the District.
- The Transportation Management Implementation Plan synthesized recommendations from the first two components and established a series of short- and long-term goals, metrics, action steps, and organizational responsibilities, based on stakeholder feedback.
- 4. The CircleLink component developed a new transit circulator system to connect the major locations throughout the area, including a schedule of service based on daily trip patterns.





PORTSMOUTH 2025 MASTER PLAN

CONTACT

City of Portsmouth Jessa Berna 207.774.9891 jberna@gpcog.org

Over the last ten years, Portsmouth has taken significant steps toward updating its transportation network, from incorporating complete streets principles into its road projects, to revising its zoning policy to promote a park-once environment, to improving public transit options for evening and weekend activities. While these changes led to measured improvement, Portsmouth remained predominately car-dependent, leading to outsized parking demand both within and beyond the urban core.

TEAM MEMBERS



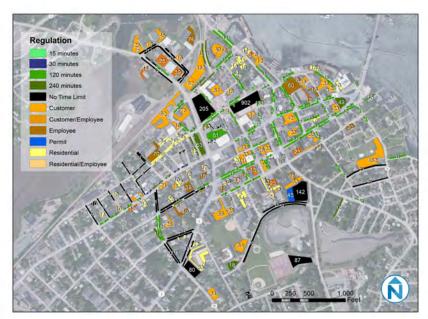




The Portsmouth 2025 Master Plan prioritized connectivity for all modes of transportation, envisioning a future for Portsmouth of safe and accessible streets for all users. Toward this vision, as subs to NBBJ, Nelson\Nygaard staffed three dynamic public input workshops and developed multimodal transportation recommendations for updating the City's street standards to reflect current design best practices, including planning for full accommodations for bicyclists and pedestrians. To address high parking demand, the firm provided recommendations and implementation action items for cost-effective ways to maximize the utilization of—and access to—existing parking infrastructure and adjust parking requirements to better account for demand, including tailored recommendations for how to address demand generated by accessory unit infill development.

Recommendations for fixed-route bus service to meet emerging demands were also developed.

Portsmouth 2025's comprehensive strategies provide clear steps toward a more balanced transportation network, with less stress on the City's parking supply, more travel options, and enhancements that support the vitality of the urban core.





TRAFFIC ENGINEERING SERVICES

BIRMINGHAM, MICHIGAN

CONTACT:

City of Birmingham Jana Ecker City Planner 248.530.1841 F&V staff have provided the City with as-needed traffic and transportation engineering consulting services since 1986. Birmingham is a community of approximately 20,000 residents and nearly 300 retailers. Birmingham has focused on providing a walkable community and F&V has provided consulting services for various projects throughout the City to help them realize their vision. Services have included as-needed traffic engineering for operations analysis and safety studies, as well as site specific traffic impact study reviews.

TEAM MEMBERS:





Since 2015, F&V has also served as the City of Birmingham Multi-Modal Transportation Board's traffic engineering consultant. Tasks performed have included road diet studies, bike route designs, and design of multi-modal facilities like sharrows, bike lanes and cycle tracks. F&V also confirms that any new development in the City follows the Multi-Modal Transportation Plan.

F&V participated in public meetings and provided recommendations to the City based on the results of these analyses, in order to maintain acceptable traffic operations for City residents, businesses, and visitors.

Sample projects include:

- Maple Road 4 to 3 Lane Conversion (Road Diet) Study
- Neighborhood Connector Route Plan/Signing
- Lincoln and Pierce Bumpout Evaluation
- Lincoln and Ann Signing and Striping Evaluation
- S. Eton Bike Lanes Study
- Maple Road Mid Block Crossing Evaluation
- Southfield and Maple HSIP Application
- Rail District Parking Study
- Saxon Roundabout Operational Analysis and Design
- Lincoln and Southfield Signal Evaluation
- Chesterfield and Quarton Traffic Analysis



MAPLE ROAD TRAFFIC IMPACT STUDY

CONTACT

City of Birmingham Jana Ecker City Planner 248.530.1841 F&V evaluated the existing four-lane cross section and lane usage on Maple Road between Cranbrook Road and Southfield Road in Birmingham, Michigan to determine if a "Road Diet" from a four lane cross section to a three lane cross section would enhance operations for all transportation users including drivers, pedestrians, and bicyclists. The study included analysis of traffic operations for this road segment and the intersections along Maple Road to determine the feasibility of the proposed modifications.

TEAM MEMBERS





Study analyses included modeling of the study network, crash analysis, and calculation of intersection delays, Levels of Service (LOS), and vehicle queues. Study analyses indicated that with capacity and geometric improvements at the intersection of Maple Road and Southfield Road the four lane to three lane conversion was feasible. The recommendations of the study were reviewed by the City of Birmingham and the city implemented a trial for the three lane conversion conducted from October 2015-March 2016 before accepting the recommendations.





FENTON ROAD REHABILITATION FLINT, MICHIGAN

CONTACT:

Michigan Department of Transportation Tracie Leix, Section Supervisor 514.335.2233

TEAM MEMBERS:





This MDOT LAP project included 4 to 3 lane Road Diet. F&V performed a crash analysis and safety review for Fenton Road from I-69 bridge to Hemphill Road. This section of Fenton Road was under consideration for a four-to-three lane conversion as part of the 3R project and as part of the review process a crash analysis was performed.

The results of the study showed that a road diet is recommended and it will help to reduce the number of crashes and crash severity.













DOWNTOWN TOLEDO MASTER PLAN

Toledo 22nd Century Committee randy.oostra@promedica.org 419.469.3824



DOWNTOWN AKRON VISION & REDEVELOPMENT PLAN

Downtown Akron Partnership Susan Graham 103 S High Street, 4th Floor Akron, Ohio 44308 sgraham@downtownakron.com 330.374.7610



MONROE DOWNTOWN MASTER PLAN & PARKING STUDY

City of Monroe Annette Knowles, Downtown Economic Development Coordinator 120 E 1st Street Monroe, Michigan 48161 annette.knowles@monroemi.gov 734.384.9146



WESTERVILLE UPTOWN PLAN

City of Westerville Bassem Bitar, Senior Planner 21 S State Street Westerville, OH 43081 bassem.bitar@westerville.org 614.901.6658



CITY OF WYOMING MASTER PLAN

City of Wyoming Terry Vanderman, Community Development Director 800 Oak Avenue Wyoming, Ohio 45215 tvanderman@wyomingohio.gov 513.821.7600





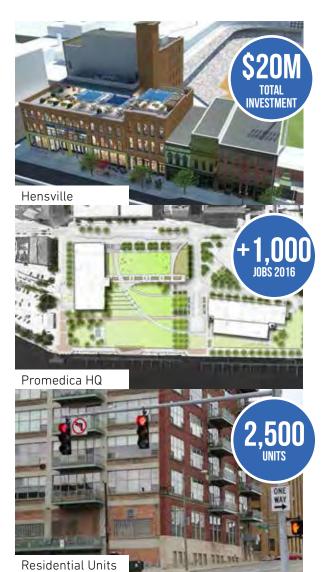
INTRODUCTION

Assets & Momentum

Downtown Toledo is at the cusp of a renaissance. Current and planned developments, along with world-class institutions, have re-energized the core and have the potential to have a transformative effect on downtown and the Toledo region. Downtown Toledo benefits from high-quality assets, such as the Toledo Main Library, Fifth Third Field, the Huntington Center, Farmer's Market and the Valentine Theater. Within a short distance from downtown, the Toledo Museum of Art and the Toledo Zoo are nationally-recognized institutions that attract millions of visitors to the region. Also nearby is the University of Toledo, which has an enrollment of over 20,000 students.

Several downtown neighborhoods are currently experiencing an influx of young entrepreneurs, residents, and visitors. The Warehouse District and Uptown have emerging retail corridors in St. Clair Street and Adams Street, respectively. The Hensville development rehabilitated three historic buildings and added restaurant, retail and office space to St. Clair Street. Uptown is undergoing its own local arts-centered revitalization with the opening of Uptown Green and ProMedica's Market on the Green.

In addition to Hensville, planned, under construction and recently opened investments downtown include the continued development of the Warehouse District, a new ProMedica headquarters that will bring 1,000 jobs downtown, Middlegrounds Metropark, the Anthony Wayne Trail Gateway, and the Renaissance Hotel along the waterfront. These are all potentially transformative projects that should be leveraged to the fullest extent possible.





INTRODUCTION

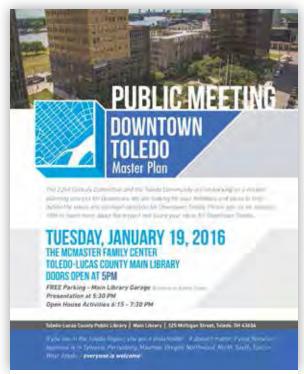
Public Meeting 1

More than 350 Toledo area residents attended the First Public Meeting at the McMaster Family Center, located in the Toledo Main Library. Hosted by the 22nd Century Committee, the meeting took place on January 19, 2016 between 5 p.m. and 7:30 p.m. The planning team started the meeting with a presentation highlighting the process along with initial existing conditions and analysis.

After the presentation, participants were invited to interact with exhibits and the planning team for one-on-one conversations at eight themed stations, including:

- > Riverfront
- > Residential & Retail Opportunities
- > Streets/Connectivity
- > Transportation & Parking
- > Greenspace/Recreation/Bike Network
- > Business, Talent and Innovation
- > General Comments/Ideas
- > Downtown Visioning (Interactive Display)

It was an enthusiastic and highly engaged crowd. Participants expressed their vision and ideas for the future of Downtown Toledo through both conversations at the stations, and by participating in the hands-on activities. The interactive post-it and map display was transported from the Project Storefront to the Public Meeting, so meeting attendants were able to engage with the storefront activities.



A Public Meeting announcement flyer was emailed to the Toledo community and posted in various downtown locations

Meeting attendants provided over 600 comments in the form of answers to questions on comment cards, notes added to the interactive displays/map exercises, and comments left on station materials. Comments focused on revitalizing the riverfront, attracting talent and young people to the city, and building a vibrant downtown retail and residential district. Public comments have been sorted and are summarized on page 28.



INTRODUCTION

Project Storefront

Located in the lobby of the Toledo Edison Building directly adjacent to the Downtown Toledo Improvement District Office, the Project Storefront included interactive and hands-on displays meant to engage downtown residents, workers, and visitors. The storefront was staffed by Toledo Design Center representatives between 12 PM and 1 PM on Mondays, Wednesdays, and Fridays. The lobby was fully accessible to all foot traffic during regular business hours.

Open to the public between January and May of 2016, the storefront materials included a post-it display with the following three questions:





MY VISION FOR Downtown Toledo Is:

The hands-on display also included two interactive maps where participants provided information on where they live and their perception of downtown. The display was temporarily transported to the First Public Meeting for the duration of the event.









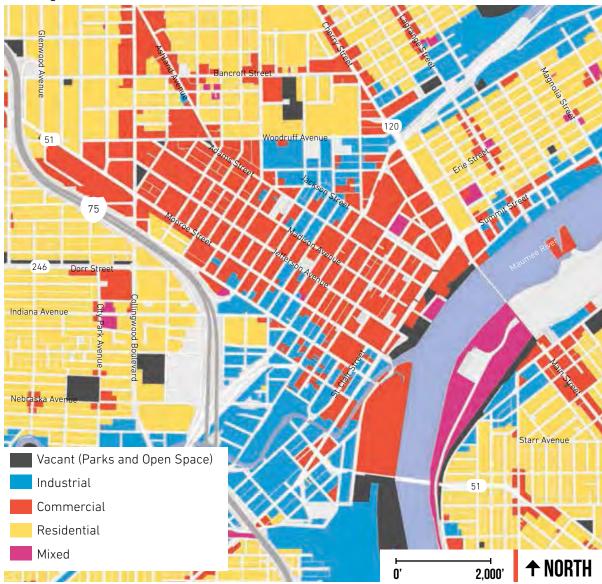
PHYSICAL CONDITIONS

Existing Land Use and Zoning

Current land use and zoning patterns show a heavily commercial core surrounded by primarily single-family residential neighborhoods. Corridors in these residential neighborhoods, such as Lagrange, Cherry, and Main Streets, radiate toward downtown and the river and are characterized by commercial uses of varying intensities. Commercial and office zoning designations are prevalent in the downtown area between Woodruff Avenue and the riverfront. Uptown is generally zoned office commercial, as is the Civic Center area. The Warehouse District. reminiscent of its rich industrial past, is mostly zoned limited industrial despite having a relatively high concentration of residential and commercial structures. Except for a downtown section consisting of parks and open spacezoned parcels, the riverfront is generally zoned commercial or general industrial, especially to the north of downtown.

More importantly, the City of Toledo Zoning Code establishes several Overlay Districts affecting downtown and its surrounding neighborhoods. These districts set review processes for development as well as design guidelines of various extents, some of which include guidelines for building setbacks, parking, and streetscape. The Overlay Districts relevant to the study area include: Downtown District (shown on map), Warehouse District, Uptown District, Maumee Riverfront, Monroe Street Corridor, Summit Street Corridor, and the Marina District. Each district is accompanied by a respective planning document that sets out a rationale and vision for future development.





DOWNTOWN VISION + REDEVELOPMENT PLAN

MARCH 12, 2018 AKRON, OHIO

















EXISTING CONDITIONS

CONNECTIVITY & STREETS

Connectivity

Downtown's connectivity to surrounding neighborhoods is challenged by a variety of factors, the first being geography. Due to its location along the Ohio and Erie Canal, downtown's edges are defined by steep slopes that have been accentuated by decades of transportation decisions. Along the north and east, railroad tracks separate downtown from Cascade Valley and the University of Akron. Along the west, Route 59 has added a separatedhighway in the valley between downtown and the West Hill Neighborhood. This barrier is now being undone by the Innerbelt Project, and its completion will improve connectivity to western neighborhoods. Along the south edge, Interstate 76 separates the downtown area from South Akron neighborhoods. The result is a downtown isolated from its surrounding neighborhoods, operating as a virtual island.

Streets

In response to topography, railroad lines, and the canal, downtown streets are better connected when traveling north-south versus east-west. As seen in the map on the following page, major streets are configured as paired one-way streets designed to move commuters in and out of downtown at fast speeds. Nonetheless, portions of one-way streets, such as Exchange and Cedar Streets, are being converted to two-way travel. This will result in calmer traffic and easier wayfinding for pedestrians and vehicles alike.



FOCUS AREAS

3 | BOWERY DISTRICT

Catalytic Change

Even with the improvements and development planned in the Bowery District, there is more work to be done to connect Main Street to Bowery Street and begin to extend the energy of downtown toward the redevelopment opportunities present along S.R. 59. There are two major mixed-use redevelopment opportunities along Bowery Street. On the west side of Bowery Street, the underutilized buildings and surface parking lot represent an opportunity for medical, mixed-use redevelopment that could serve the Akron Children's Hospital campus. With the removal of S.R. 59, this site should feature double-sided architecture that fronts both Bowerv Street and Rand Street. On the other side of Bowery Street, the city—owned parking lot also represents a mixed-use residential redevelopment opportunity.

To maximize the development potential along Bowery Street, Lock 3 needs to be properly integrated and connected east to west and both sides of the canal must be activated with public spaces and pathways. This should include new bridges across the canal with walkways between new buildings to link Bowery Street to Lock 3 and a new pathway should be created on the west side of the canal to connect State Street north toward Lock 4. Along Main Street, there are two sites adjacent to Lock 3 that have long been planned to be developed. While these should be mixed-use in nature, the one adjacent to the Civic Theatre could potentially have an arts and performance use that allows cultural activity to spill out onto both Main Street and Lock 3.

MARKET ANALYSIS CONCLUSIONS

HOUSING **HOSPITALITY BUSINESS DEVELOPMENT Product** Townhomes, condominiums. NA NA New and Rehabbed Apartments Types STRATEGIC INFILL DEVELOPMENT FUTURE MEDICAL MIXED-USE REDEVELOPMENT: FOUR-SIDED ARCHITECTURE DEVELOPMENT: FOUR-SIDED ARCHITECTURE **NEW PARK CONNECTION DEVELOPMENT: FOUR-SIDED** Park Expansion Arts and performance uses













Existing Conditions

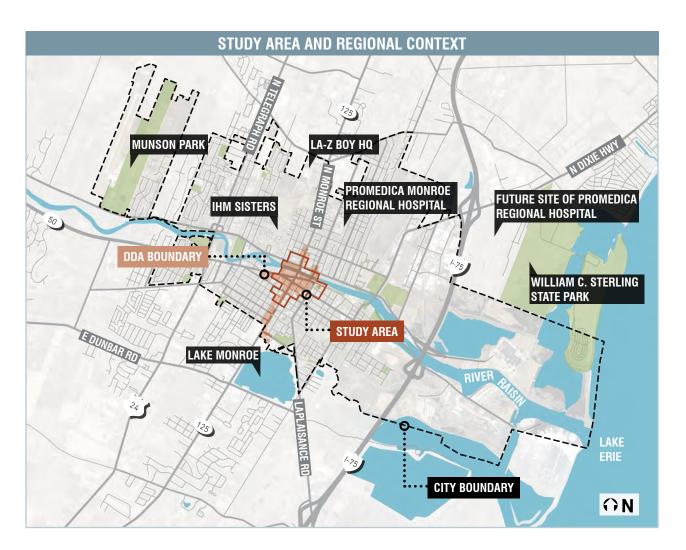
STUDY AREA & REGIONAL CONTEXT

There are many regionally significant sites in proximity to downtown Monroe, including the River Raisin Battlefield Park, the La-Z Boy Headquarters, and the Promedica Monroe Regional Hospital, among others. Multiple direct access points to I-75 (Dixie Highway, Elm Avenue, First Street, and LaPlaisance Road) provide downtown with a greater level of connectivity to these assets and others throughout the region. In addition to I-75, two major state routes (M-50 and M-125) also connect into/pass through downtown Monroe, and U.S. Route 24 provides an alternative route just outside of downtown.

All of these routes provide critical access to the City of Monroe and serve as key gateways into downtown Monroe. An important aspect of this study will be looking at how downtown Monroe can capitalize on its regional connectivity and proximity to regional assets.

The project study area echoes the boundary for the Downtown Development Authority (DDA), but focuses more specifically around the core downtown. The study area boundary generally extends north to Willow Street, east to Murray Street, south to 5th Street, and west to Smith Street.

The DDA boundary extends farther south to the City's edge, and slightly farther north across the river, but does not include every property within the project study area.





Parking Assessment

PARKING SUPPLY AND OCCUPANCY

Parking occupancy counts were conducted for two distinct periods of parking demand downtown: Friday evening and weekday lunch. Between the two periods, the overall utilization of parking within the study area remained below 40% systemwide. This percentage includes all facility types (public and private, metered and free), but does not include any restricted spaces, such as designated handicap parking or police vehicles only.

Parking Occupany on Friday Evening

Parking Type	Total Spaces	Total Cars	Percent Occupied
Off-Street		504	23%
On-Street	886	175	20%
TOTAL	3,126	679	22%

Note: these numbers do not include designated handicap parking or other restricted spaces.

PARKING OCCUPANCY LEGEND

Percent of Parking Occupied at Time of Count





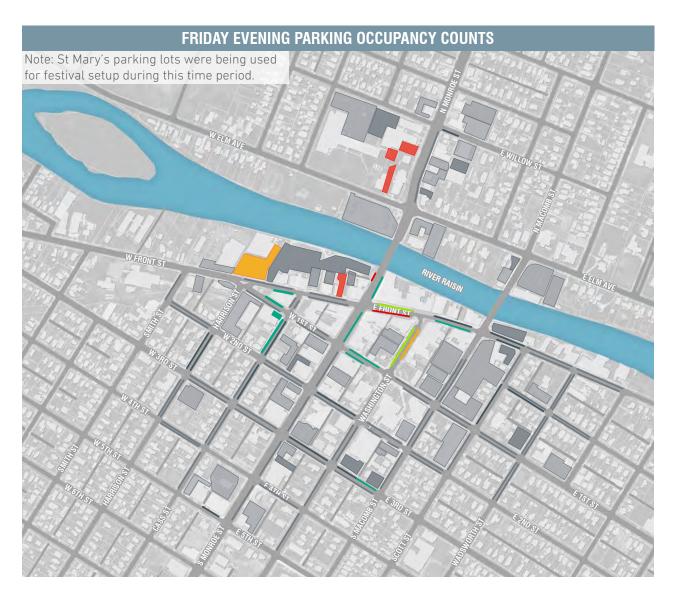












What We Heard

PARKING SURVEY

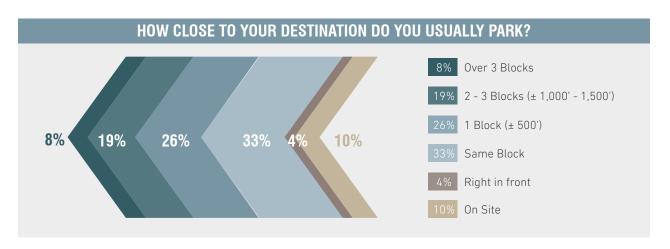
The results of the parking survey indicate that overall, the community is generally satisfied with parking downtown. Most respondents indicated that they are able to park within a block of their final destination, which equates to less than a 5-minute walk.

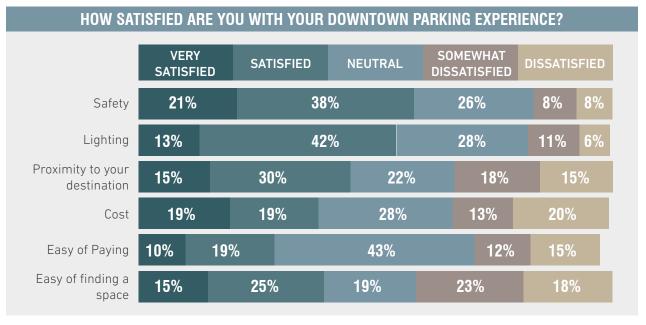
The most dissatisfaction was indicated with:

- » the ease of finding a parking space
- » the cost to park
- » the proximity of parking to destinations

Additionally, the majority (65%) of respondents indicated that they typically park in free on-street or off-street parking when they travel downtown. Another 21% indicated that they park in permit parking, which is often provided for free through employers. **Only 14% of respondents** indicated that they **typically pay for parking** downtown.







UPTOWN PLAN

WESTERVILLE, OHIO



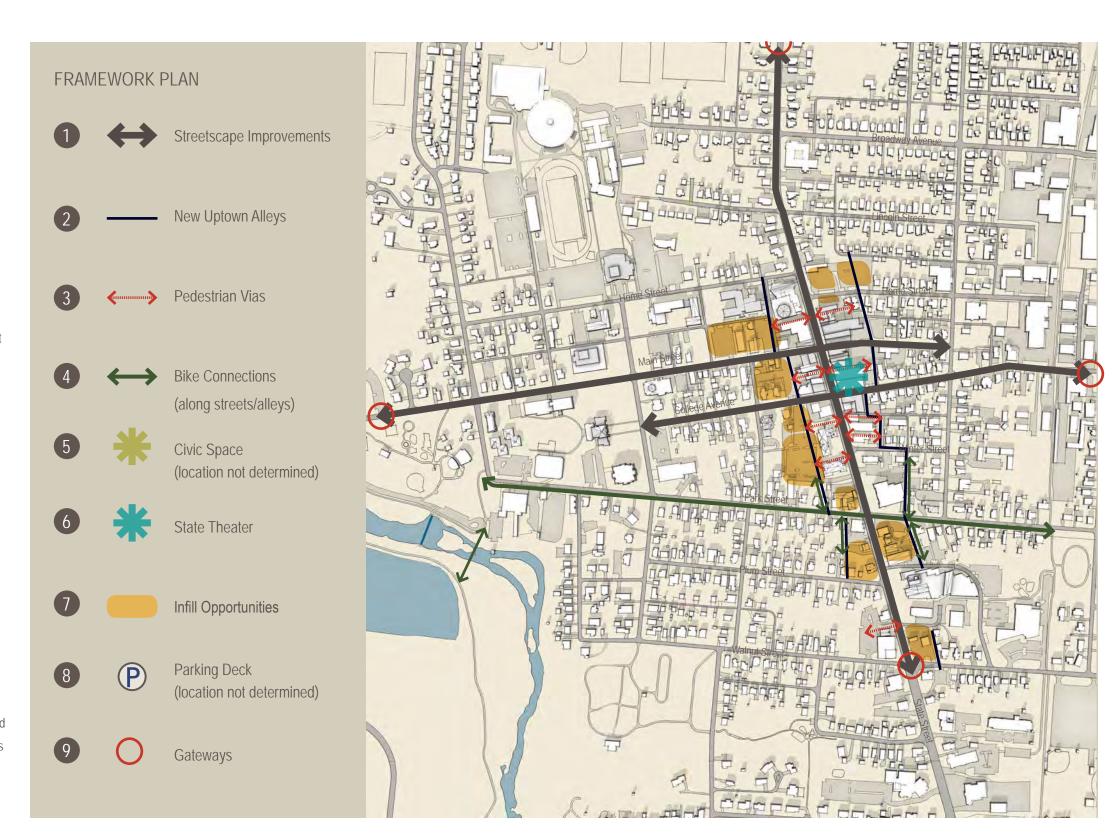
Framework Plan

The Framework Plan to the right illustrates how all of the nine catalytic ideas could work together to transform Uptown. While many of the nine catalytic ideas have a set physical location for implementation, two do not (the Civic Space and the Parking Deck) and three are shown in generally preferred locations (the New Uptown Alleys, the Bike Connections, and the Infill Opportunities). It is also worth noting that several of these, such as the Infill Opportunities and the State Theater, require the property owner to initiate, and others require participation of the property owner, such as the Pedestrian Walkways/Vias.

In this Framework Plan, streetscape improvements are planned for State Street, Main Street, and College Avenue. Both Main Street and College Avenue are important corridors because they draw people into Uptown. These streets should be enhanced to continue the aesthetic charm of Uptown and act as gateways to Olde Westerville. The streetscape improvements to State Street are planned to enhance pedestrian enjoyment and safety along this vehicle-heavy corridor. Additional streetscape improvements are recommended for Park Street to allow it to act as a bike connector to Uptown.

Creating a public alley system that runs parallel to State Street allows cyclists to exit Park Street and easily access Uptown. These Uptown Alleys also help to re-organize parking and access, making it more intuitive, efficient, and attractive. The Framework Plan shows how these alleys approximately follow the drives that exist behind the State Street buildings today. Implementing this idea coupled with the embellishment of the current mid-block pedestrian walks will create an inviting and memorable way-finding system from the parking areas to the activity on State Street.

Other catalytic ideas include the creation of a civic space along State Street for community gathering and events, the renovation of the State Theater, and the development of potential infill sites -- for mixed-use buildings along State Street and residential infill along the cross streets -- to help strengthen the fabric and vitality of Uptown. Such projects could be serviced by a public parking deck located in close proximity to State Street, which could help address the existing parking challenges and encourage further redevelopment. While the location of certain catalytic ideas, such as the civic space and parking deck, would need to be determined with further study, all nine ideas work together to build upon Uptown's strengths and enhance its ability to attract visitors, businesses, and residents.



Concept - State Street



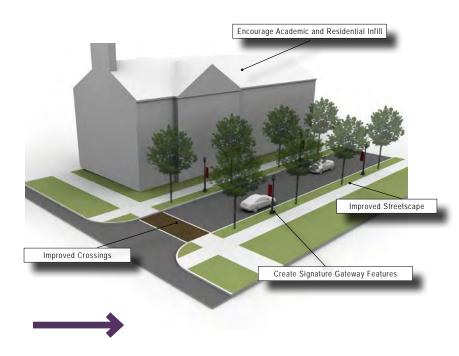
State Street Streetscape Improvement Strategies

- Add bumpouts at intersections
- Curb extensions for pinch points (ex. Old Post Office, State Theater)
- On-street parking differentiation
- Unique crosswalk pattern
- Consistent sidewalk width
- Landscape for buffering





Concept - Main Street



Main Street Streetscape Improvement Strategies

- Bury overhead utilities
- Improve streetscape
- Screen surface parking lots
- Create signature gateway elements
- Academic residential infill





Concept - College Avenue



College Avenue Streetscape Improvement Strategies

- Enhance College Avenue as ceremonial gateway to Otterbein University
- Maintain and extend brick street
- Bury overhead utilities
- Encourage residential and academic infill
- Maintain existing residential setback
- Create signature gateway elements
- Screen surface parking lots

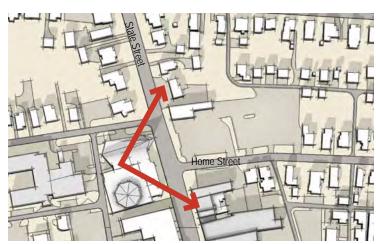




REDEVELOPMENT & INFILL

North Gateway

The existing Church of the Messiah parking lot at the northeast corner of East Home Street and State Street is one of the sites that residents and stakeholders expressed interest in seeing redeveloped. Repurposing the site with mixed-use and residential would fill in the existing gap in the State Street streetscape, and allow the site to serve a more beneficial purpose for Uptown and the City of Westerville. This location at the northern corner of Uptown creates the potential for a strong gateway feature, defining the edge of Uptown and drawing people into the district. The illustration to the right demonstrates how a new mixed-use development could be complemented by residential use along East Home Street. The mixed-use building facing State Street creates continuous edge, while the residential use along East Home Street blends into the existing scale and character of the street. This helps strengthen residential within the Uptown district, while also introducing new commercial opportunities that would be included on the first floor of the new mixed-use building.



EXISTING NORTH GATEWAY



ESTIMATES OF POTENTIAL COST

Catalytic Projects





State Street: \$1.5 - 2.0 million

- Curb extensions
- Pavers
- Crosswalks
- Gateway structure (north & south ends)

Main Street: \$1.5 - 2.0 million

- Gateway features
- Utility burial
- Street light, sidewalk, & street trees infill

College Avenue: \$1.7 - 2.2 million • Similar to Main St. above

\$4.7 - 6.2 million total for all three streets *

(can be accomplished in phases by street)



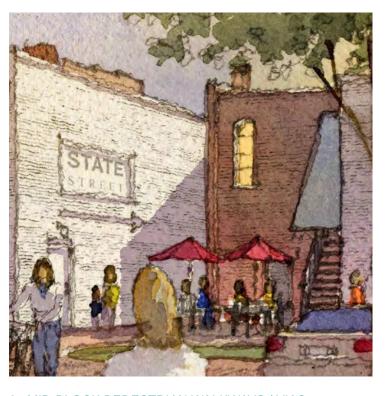
2. PUBLIC ALLEYS

Estimate Includes:

- Demolition
- Permeable pavers alley
- Drainage
- Sidewalk
- Lighting
- Trees
- Bike/pedestrian lane & bollards
- Note: Does *not* include any land aguisition

\$3.8 - 5.0 million total for all alleys * or roughly \$1,200-1,800 per lineal foot * (can be accomplished in phases by block)

* Note: Estimates provided are for budgeting purposes only. As projects are advanced to conceptual design, more accurate cost estimates can be developed.



3. MID-BLOCK PEDESTRIAN WALKWAYS / VIAS

Estimate Includes:

- Demolition
- Specialty pavement
- Portal gateway elements
- Site furnishings
- Art elements
- Drainage
- Note: Does *not* include any land aquisition

Estimate Includes:

- Bikeway connecting the Ohio to Erie Trail to the Alum Creek Trail along existing Park Street
- Sharrow (shared use) paint markings
- Wayfinding signage

4. BIKE CONNECTIONS

\$1.2 - 2.7 million for all pedestrian walkways * or roughly \$150,000-300,000 per walk

(assumes nine total walkways/vias) (can be accomplished in phases by alley) \$25,000 - \$35,000 for the connection markings *







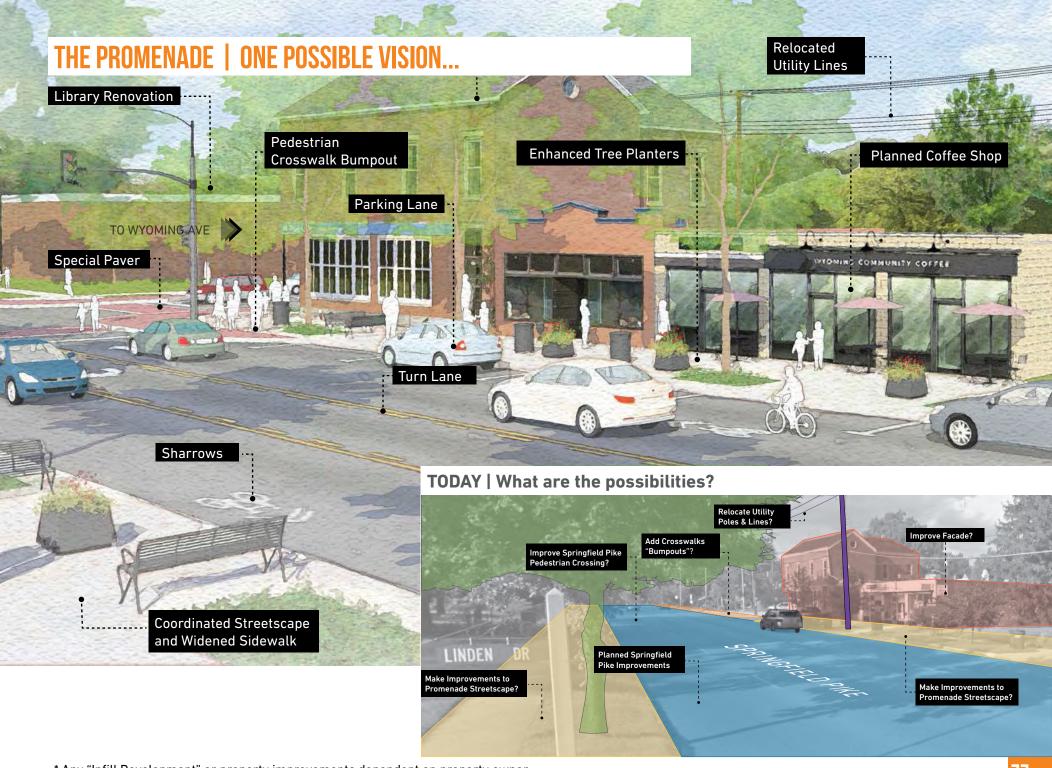








CITY OF WYOMING MASTER PLAN



^{*} Any "Infill Development" or property improvements dependent on property owner.

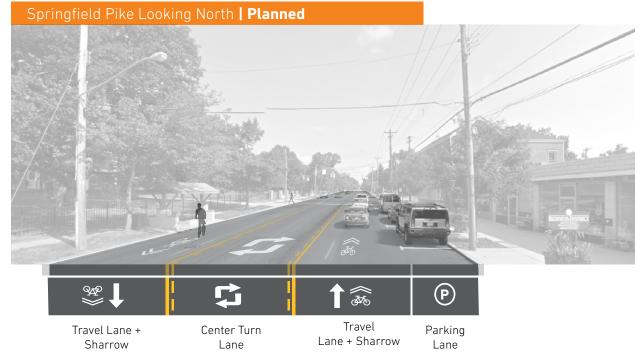
A First Step Toward Future Opportunities

The road diet should be considered the first step toward a series of incremental improvements that will over time enhance the Pike as a public way in which the City can take pride. The improvements will provide safe and efficient travel options for people of all ages, including those who can't or choose not to drive (such as children, the elderly, and cyclists).

Future additional improvements should be considered to improve pedestrian crossings along Springfield Pike. These could include additional or improved crosswalk designs and curb extensions (also referred to as "bump-outs") at intersections to shorten pedestrian crossing distance and improve the streetscape quality at prominent locations

In particular, the intersection of Wyoming, Chestnut, and Worthington Avenues, and Springfield Pike are recommended as priority locations for such a design. Where space allows, additional on-street parking could also be considered to serve businesses as redevelopment occurs. Such improvements will serve to transform Wyoming's one arterial roadway into the type of place that truly captures the essence of the community and the small town, walkable character that residents love



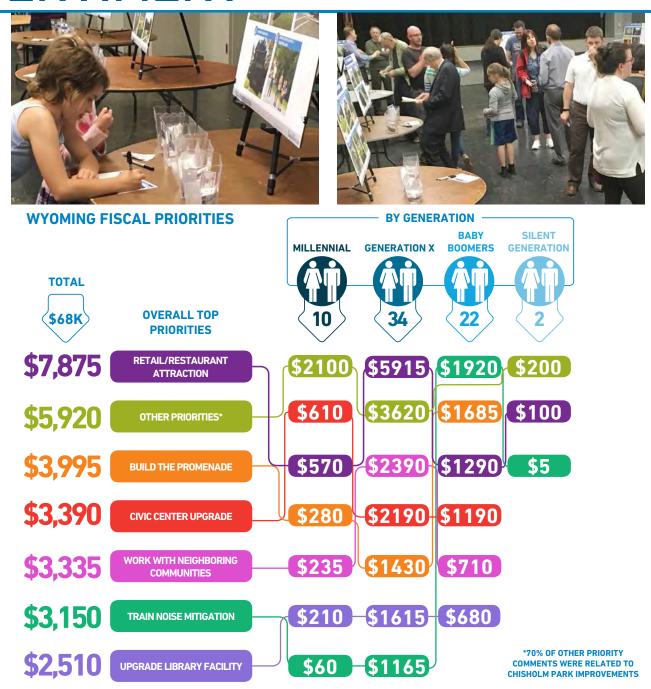


COMMUNITY SENTIMENT

Public Open House 3

At the third public open house, held on April 12, 2017, participants were asked to engage in a fiscal prioritization exercise. Each person was allocated \$1,000 (in play money!). This represents an approximate per capita annual City tax contribution. There were 10 topic-based stations, each with multiple options for municipal investments, plus, a station for the attendees to suggest their own priorities. The public was invited to consider their priorities, decide how much of their tax dollars should be allocated to each one of their priorities and make their contributions.

The diagram on this page shows the results of this exercise portraying overall and by generation top priorities. As an example, "retail and restaurant attraction" ranked first overall and was among the top three across generations.



Public Open House 4

The final public open house was held on June 28, 2017. Planning team opened the meeting with a short presentation to reinforce the Master Plan primary goals and themes, and introduce opportunities and possible vision for targeted areas.

Participants were asked to review and prioritize a series of draft objectives and strategies organized according to eight planning themes.

Participants were also invited to review conceptual graphic renderings of potential public improvements and private development ideas and to sketch their own ideas for the future.

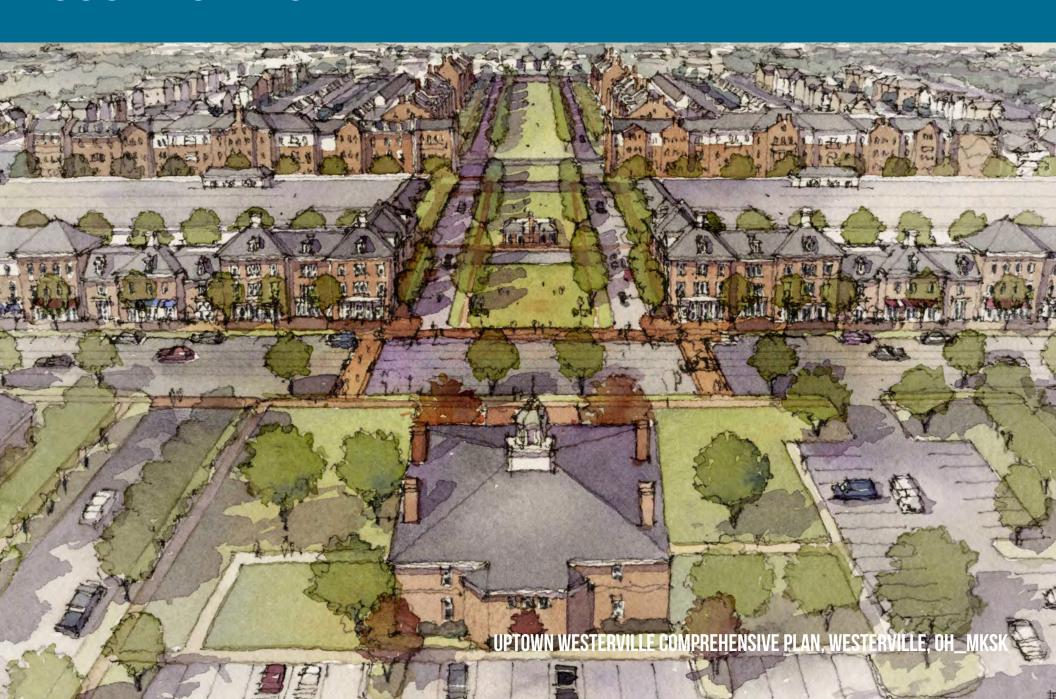








SCOPE OF WORK







PROJECT UNDERSTANDING

Strong planning direction has helped guide the City through past challenges. It has played an important role in shaping Birmingham's various mixed use districts into one of the premier cities in the Midwest. As the City continues its forward looking legacy, a new City-wide Master Plan is sought to a course for sustained prosperity. A successful process and eventual Plan needs to consider what different stakeholders and the community at-large feel is important.

For residents, it is the downtown and their immediate neighborhood including their home, schools, parks, and tree-lined streets. Different neighborhoods also include specialty shops such as LePetite Prince, Market Square, Mills Pharmacy, the Whistle Stop Diner, Big Rock Cop House, Papa Joe's and many other unique places to enjoy. For weekend and evening visitors, it is the vibrant downtown with niche retail, restaurants, library and events. For employees, it is the attractiveness of working in a walkable downtown with plenty of open spaces and places to grab a cup of coffee, lunch or a beverage after work. For Developers and investors, it is the appeal of an affluent population in an urban setting to build upon the success of recent developments. We will work with you on a process that captures those sometimes competing interests into a wellvetted plan to guide you over the next 10 years.

In the past two decades, the City has focused its Master Planning efforts on areas that need the most guidance - the Downtown, Eaton Street Rail District and Triangle District. Woodward Avenue's corridor has been examined through a South Gateway Study, and separate Complete Street and rapid transit studies. In addition, a city-wide Non-Motorized Plan was prepared. Many of the recommendations of those prior plans have been implemented. Others are still valid for consideration. Our impression is that one objective of this Master Plan Update is a light refresher for those plans and to integrate them into a Ccity-Wwide Plan. A second goal of the Master Plan is to cover the other, largely residential districts that were not covered in those plans. This will include some consistent elements as well as policies that reflect the distinct characteristics of the City's varied neighborhoods.

While Birmingham is an incredibly successful city – from its residential neighborhoods to commercial districts – the City still needs a Master Plan to help maintain its success. Specifically, a Master Plan can help with the following:

- Engage stakeholders and the public in taking a broader view of the city and the future.
- Take a fresh look at the City overall with an eye on future trends such as the implications of e-commerce, housing needs, and mobility.
- Identify enhancements that may be needed in the stable neighborhoods to help them retain their appeal.
- Evaluate how to better link land use, design and the transportation system to increase the number of people who walk, bike and use transit.
- Address some of the consequences of densification, such as stress on the parking system. Parking pressures that extend onto some residential streets.
- Discuss policies to align the City's various Boards, Committees, City Commission and Staff.
- Determine if a wider array of housing types is needed (the "Missing Middle"). If so, where should it be located and how can it fit into the character of the area?
- Provide a foundation for the zoning ordinance and identify potential amendments.
- Meet the State requirements that a Master Plan be adopted every five years. Along with including State-required Plan elements that are missing in Birmingham's various plans, in particular, a Zoning Plan.





COMMUNITY ENGAGEMENT PLAN - APPROACH & ASSUMPTIONS

Our approach is to build upon the prior district plans and fill in the gaps, both content and geographic, to create a city-wide Master Plan. This will be done through an extensive community engagement process. Our definition of the community to engage is not just residents. It also includes key stakeholders (property owners, advocacy groups, organizations), agencies, city officials and staff. Our engagement process includes a variety of tactics and sessions with city staff, city officials, stakeholders and the public. Our featured event will be a four-day charrette process. As with our past projects and charrettes in Birmingham, we look for a collaborative process working with city staff. Our budget assumes city staff will handle logistics including the notices required by the Michigan Planning Act, invitations, e-blasts, event locations, publicity, media kits and other coordination.

At the project outset, we will develop a draft Community Engagement Plan. This plan will be discussed and refined at the kickoff meetings. This guidebook will include detailed of how we will communicate with different groups and the timing of various elements. The tactics and events are described in the Work Plan below at the time they would occur. In summary the Engagement Activities include the following:

- A website to be hosted by the city, to announce the project and schedule.
 We will develop language and illustrations for the city to update the website before and after public events.
- We will prepare e-newsletters for the city to blast out to residents, business owners and key stakeholders. We will prepare these three times 1) announce the project 2) before the charrette and 3) to summarize the draft plan before the open house and public hearing.
- · Five meetings with City staff
- Five meetings with the Planning Board plus meetings during the adoption process
- Two meetings with the City Commission plus the Public Hearing
- Suggested optional meetings with city staff, the Multi-Modal Board and parking committee
- A two-day session of roundtable or focus group discussions with key stakeholders plus Visioning or Listening sessions with the public
- A meeting with agencies and representatives of adjacent communities
- A four-day design charrette led by UDA
- A public open house during the public review period before the Public Hearing
- Summary brochure





WORK PLAN

Our proposed Work Plan is organized by Plan Phases. For each Phase we have noted the meetings and deliverables. For ease of understanding, the work plan for parking related topics has been included in one location, under the Exploration Phase. But that effort will span throughout the Phases.

We have included the meetings requested in the RFP, noted at the times we would expect them to occur. But we believe addition meetings will be needed. Those are noted as "Optional" and would be billed hourly in addition to our stated fee.

The sequence would follow the project schedule below.

PHASE 1: Months 1-2	Project Launch – Kickoff meetings with city staff and officials
PHASE 2: Months 2-4	Discovery - data collection, inventory of existing conditions, and review of past plans
PHASE 3: Months 3-5	Visioning - Best Practices Summit, Charrettes to identify aspirations and alternatives
PHASE 4: Months 6-8	Exploration - Evaluation of Options, Selection of Preferred Alternatives and Scenarios
PHASE 5: Months 9-12	Draft Master Plan – pulling various elements together into a document, development of an Action Plan with priorities and implementation steps
PHASE 6: Months 12-16	Draft Plan Adoption Process - State Required 63-day Public Review Period, Public Hearings, Revisions, Adoption

PHASE 1: PROJECT LAUNCH

MONTHS 1-2

This first phase is intended to review the work plan and schedule to agree on any adjustments. We will also use this period to set the course for engagement activities, understand the previous plans and data available. We also suggest some early discussions on the eventual plan format.

The tasks in this phase will include the following:

- Kickoff meeting with City staff to review the work plan, to have staff provide an overview of active planning efforts, development projects, capital improvements, etc. Also clarifications of the integration and extent of update to the Downtown, Triangle and Rail District Plans. This should include representatives of Planning, Engineering, Administration, Communications Director, and the Police Chief.
- · A kickoff meeting with the Planning Board
- Project start-up briefings with the Multi-Modal Board and City Commission
- · Based on the above, a second meeting with city staff to agree on any refinements to the Work Plan and Schedule
- · Initiate community engagement including a page on the City's website, calendar of events, lists of key stakeholders to invite to focus group meetings

Meetings:

- 2 with City staff (1 is Optional)
- 1 with the Planning Board
- 1 briefing for the Multi-Modal Board at our regular meeting (not charged to the Master Plan)

Deliverables:

Materials for those meetings including summaries of discussions A draft Notice of Intent to Proceed with a Master Plan update to be refined and distributed by the City

A Community Engagement Plan and calendar of events





PHASE 2: DISCOVERY (DATA COLLECTION & ANALYSIS, INCLUDING PARKING & INFRASTRUCTURE ANALYSIS)

MONTHS 2-4

During this phase, we will work with city staff and other organizations to collect available data. This information will be evaluated for its influence on the Master Plan. We will also tour the City to begin to identify focus areas. This Discovery Phase will include the following tasks.

Review of past plans. We are already familiar with most of the previous plans in the City that will be a foundation for this plan. We will review and summarize those plans including those listed in the RFP: the Downtown 2016 Plan, Eton Road (Rail District), Triangle District, Alley and Passages, Multi-Modal Transportation and Parks and Recreation Plan. Since one purpose of the Master Plan is to support the zoning ordinance, we also want to discuss the South Woodward Plan, recent amendments to the zoning ordinance and map, any key zoning disputes, and other planning and zoning analyses. As part of this process, we will have a meeting with City staff, and perhaps some representatives of the Planning Board to discuss the status of those plans. This will include acknowledgement of recommendations that have been implemented, and a review of those that have not been acted upon. This will help us identify the components on the previous plans to carry forward in this process.

Community Profile – Existing Situation and Trends. We will prepare a community profile that includes important data to consider. This will include population and employment trends/projections, housing statistics such as age of housing stock, demographic characteristics of residents, and similar information. We will use the US Census, American Community Survey, ESRI Business Analyst (home values, commercial spending habits, etc.), and SEMCOG Traffic Analysis Zone data. This information will be supplemented through our conversations with key stakeholders in the real estate and development sectors plus conversations with representatives of the Birmingham School District and private school leadership.

Existing Land Use and Focus Areas. A key element of this process is to agree on how to classify certain uses. This will consider the use, its location and the distinction of uses in the zoning ordinance. The existing land use will be mapped and described to serve as a base for the future land use plan. Unlike older-style plans, this exercise will produce a series of maps and illustrations that will guide development of the Plan. This will include locations where the current land use is non-conforming or where there are major dimensional nonconformities that could influence redevelopment. This exercise will also provide a basis for identifying barriers and impediments to desired land use and development patterns that will be promoted in the future land use plan, to be developed as part of the Master Plan. We will also begin to identify sites that appear to be ripe for redevelopment. This may include vacant lots, obsolete buildings, sites in the vicinity of recent development or sites abutting more intense uses.

Transportation and Infrastructure Analysis. This will include street classifications, traffic volumes and projections, bike facilities, SMART transit ridership and bus stop features, and planned improvements. We will compare the Birmingham network with the latest recommendations from NACTO, ITE and other organizations. MKSK and Nelson\Nygaard will present best practice examples including new Complete Street and Vital Street public realm design manuals for Ann Arbor, Grand Rapids, Lansing, Traverse City plus notable places outside of Michigan. Fleiss & Vandenbrink engineers will also have discussions with the city engineering department construction practices. Best practices used by other communities will be identified in a tech memo for consideration during the process.

Parking Related Data. On the parking side, this will include a projected demand assessment, review of the downtown Parking Assessment district, the current residential permit parking zones, zoning requirements v best practices and other topics described in the section on Parking.





Community Tour/Audit. We will photo-document and qualitatively assess the pattern of lots, streets and home design forms in the various neighborhoods, corridors, and districts.

Meetings:

1 with City staff

1 with the Planning Board

Deliverables:

Existing land use map and description

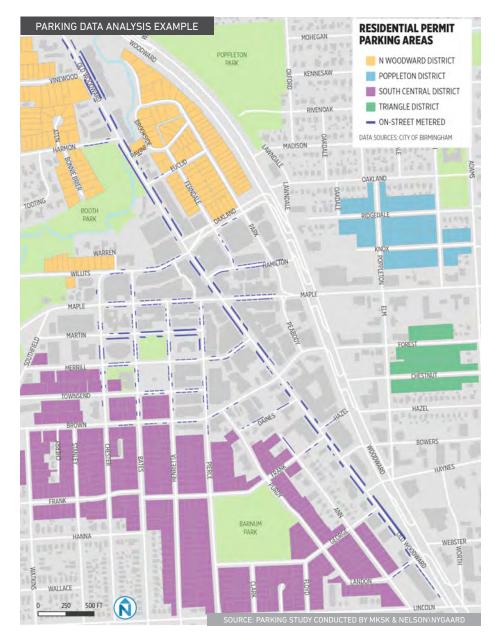
Summary of Current Plans

Outline for Neighborhood Pattern Book or typologies

Existing transportation and parking assessment including maps

Preparation of Community Meeting, Website & Targeted Outreach

Presentations & Materials for city review and approval to announce events in the upcoming Phase







PHASE 3: VISIONING

MONTHS 3-5

We will facilitate a two-day session of information gathering and listening workshops. This will help build a deeper understanding around the needs of the project and the vision that residents and stakeholders have for the Master Plan. Discussions will involve a vision for the future of Birmingham overall, with specific ideas about certain districts, corridors and places.

The agenda for the two days would include meetings with the City staff, key stakeholder interviews and focus groups. Those invited for an interview or focus group may include key developers, property owners, representatives of neighborhoods and others identified by the City. This will also include an Agency Day meeting with staff or an official from Bloomfield Township, Bloomfield Hills, Royal Oak, Troy, SMART, MDOT and Oakland County.

During the late afternoon or evening of each day, we will host a community input meeting. At these sessions we will exhibit the data evaluation findings. Best practice concepts that similar communities have done well will be described to discuss what could be applied or adapted to the City of Birmingham. Ample opportunities will be provided for attendees to describe what they most value in the City. This discussion will include input on the elements of the City that are most cherished that should be conserved, places that need to be enhanced, and locations where some type of more significant change is desired or feared. Elements for discussion will include specific policy strategies or initiatives and targeted geographic focus areas and redevelopment sites. Ideas discussed will be mapped. These discussions will help form a draft Vision that will be reviewed with and refined by the Planning Board. These sessions will be held at either the downtown library or at another location secured by the city.

Following these initial listening sessions, our team will develop a list of emerging themes and directions to explore for each of the areas of the city (the neighborhoods, Downtown and the Triangle, the Rail District, and South Woodward). This visioning effort will include discussion of initial placemaking, land use, development, and transportation concepts. The critical focus of the visioning effort will be on specific, strategic goals, objectives, and actions that will

improve the quality of life and opportunity for citizens, businesses and visitors, both existing and future. The visioning will respond to market opportunities and demand forecasts for new housing and commercial space and coordinated public realm and infrastructure improvements necessary to support and potentially catalyze desired private investments.

Meetings:

- 1 with City staff
- 1 with the Planning Board (Optional or could be done by City staff)
- 1 Briefing with the City Commission
- A two-day session of interviews, focus groups, and a community event

Deliverables:

- Listening/Visioning Session Materials
- List of Emerging Community Themes (Goals and Desired Outcomes)





PHASE 4: EXPLORATION (LAND USE, DESIGN & PARKING)

MONTHS 6-8

There are two main efforts in this Phase. First is the Master Plan and design recommendation that will evolved through a four-day charrette process and then be refined through subsequent meetings. The second is the analysis of the various parking topics outlined in the City's RFP.

CHARRETTE

The Charrette process will consist of a 4-day workshop to develop concepts and to share with the community and elicit input and feedback. Days 1 and 2 would consist of reconvening stakeholders around each of the areas. The team would hold 4 mini-workshops (1 on Monday and 3 on Tuesday) focused on the various residential neighborhoods, Downtown and the Triangle, the Rail District, and South Woodward. Key stakeholders would be invited to participate, discuss best practices, and provide input. Day 3 would focus on development of the ideas, with a client pin-up on Wednesday afternoon/evening. Thursday would be dedicated to final production and a client/elected and appointed officials preview, culminating in a community presentation Thursday evening. This process will allow for extensive community and stakeholder participation, while ensuring the client team is comfortable with the development and direction throughout the week.

These sessions will be used to discuss alternative design concepts, land use strategies, multi-modal options and other topics. The outcome will be a series of maps and illustrations that will be refined following the charrette. These will include typologies for the residential neighborhoods using photos and plan view sketches (lot sizes, shapes, setbacks, streets, sidewalks and street trees. There will be a map that identifies where the different typologies are found or recommended. This will be a concise, fairly simple document, sometimes called a Pattern Book, that could be the basis or Regulating Plan for any zoning changes or a form-based code. UDA offers a more detailed Pattern Book as a separate document as an additional service in the budget.

PARKING ANALYSIS & STRATEGIES

There is a daunting (and increasing) level of uncertainty regarding the future of mobility in vibrant, walkable, urban centers, but two components of this future appear relatively certain: per square foot parking demand will decline gradually and the extent of non-driving trips will affect that the velocity of that change. Getting the parking right in such an environment will necessitate a new planning paradigm, one that abandons conventional parking requirements in favor of public/shared investments including funding for non-parking mobility and demand-management initiatives.

NN will lead the development of a parking analysis and a comprehensive set of recommendations. This will include a review of the parking requirements in the zoning ordinance specific to both uses and their district. We will identify supply-based solutions including shared parking strategies, management opportunities, curbside and off-street regulations including residential permit parking approaches, ADA parking needs, and overall funding opportunities. Our analysis will be based on a local understanding of key issues and opportunities, paired with an unparalleled understanding of national best practices and their appropriate application to Birmingham circumstances.

Particular focus areas will include:

- Projected Demand Assessment A study of build-out capacity and its likely impacts on parking supply and demand conditions and perceived parking issues Downtown
 - This assessment will be informed by an analysis of the impact of ride sharing, autonomous vehicles, bikeshare and carshare, and other forms of "emerging mobility", as well as mass transit, on future parking needs as it pertains to the Metro Detroit area.
- Review of the Central Business District Parking Assessment District To ensure that concerns about constrained public parking supplies do not stifle desired growth





- This assessment will focus on restructuring the district program and the
 assessment framework to ensure stable funding and investment flexibility,
 and to minimize resistance to otherwise appropriate and desirable
 development.
- A complementary focus will be to assess opportunities to apply a similar approach in new, emerging growth districts.
- Growth District strategies The potential need for a municipal parking system, and proactive public-parking management, in the Triangle District and the Rail District, with reference to recent analysis and recommendations
 - This will also include an analysis of the need for other public parking structures and locations, along with ideas on financing strategies.
- Zoning Standards A comprehensive review of the Zoning Ordinance parking regulations that apply outside of the Parking Assessment District
- Residential Permit Parking and Alternatives A review of conditions, concerns, and best-practice-based regulatory strategies for a citywide RPP toolkit
- Adaptive Re-Use Strategies A comparison of options for creating more resilient infrastructure in the face of increasing uncertainty toward the Future of Parking, including:
 - Design solutions to allow the transition public parking decks to other uses in the future if demand for parking declines.
- Land-banking alternatives that focus on peripheral surface lots for nearterm supply expansions, which can be redeveloped as mixed-use projects should parking needs decline over time.
- Shifting more development to incorporate shared/public parking solutions for on-site parking needs, allowing this infrastructure to be "re-used" by a larger set of land uses should parking-demand rates decline.
- Review of Downtown Parking Study Findings Review of findings and recommendations emerging from this study, and their applicability beyond the Downtown, including:

- The need for demand-based pricing, to maintain consistent availability, both on the street and in the structures.
- Development of a policy for electric vehicle charging stations.
- The need for restricted on-street parking between 2am-6am.

Meetings:

4-day charrette including a series of meetings and events as described Nelson\Nygaard to attend 1 of the scheduled meetings with City staff Nelson\Nygaard will be involved in two of the charrette days including a public event

An Optional meeting with the Planning Board or the Parking Committee or Ad Hoc Parking Committee (or joint meeting)

Deliverables:

Assessment of Findings and Technical Report, including Best Practices Summary for Inclusion in the Master Plan document

Charrette Deliverables, including:

Urban Design Analysis (diagrams and photographs)

Neighborhood typologies (diagrams, drawings, and photographs)

Birmingham building types (diagrams and models)

Documentation of architectural character (photography and diagrams)

3 illustrative perspectives (eye-level and low aerial)

Community Pattern Book (Additional Deliverable, if authorized), including:

Community Patterns Description

Urban Patterns for Infill

Building Types

Architectural, Landscape, and Garden Patterns

Green Building Guidelines

Home Owners' Guide





PHASE 5: PREPARATION OF DRAFT PLAN

MONTHS 9-12

The planning process described in the Phases above will culminate with the synthesis of the visioning, plan concepts, future land use plan, multi-modal transportation, parking and other topics into a complete document. The Master Plan will be a graphic-rich, user-friendly document that describes how the community desires to move forward. As requested, the draft plan will be issued in a series of documents – the first at a 50% completion that will be a framework version with options identified for discussion. Following input at a meeting with the Planning Board, we will continue and develop a 75% (or more) complete version. While the RFP states a 75% draft, our experience with dozens of Master Plans that follow Michigan's adoption requirements suggests that this should instead be a 90% draft that can be endorsed to begin the Official Public Review Period.

It is anticipated the document will include the following chapters.

- 1. A separate one-page summary brochure with infographics on key goals and recommendations
- 2. Introduction the Role of the Master Plan

A summary of the community engagement process

Acknowledgement of Current Plans and how they are integrated

A brief community profile that includes info-graphics and background information on trends that influence the future

- 3. A review of the existing land use, including its form, for the districts and neighborhoods
- 4. A neighborhood typology (simple pattern book) to guide development in the neiahborhoods
- 5. The Multi-Modal Transportation Plan, with an updated Map, and description of additional "best practice" design concepts based on NACTO, ITE and other publications

General infrastructure assessment including construction protocols

- 6. A Zoning Plan that compares future land use categories to zoning, and identifies potential zoning ordinance amendments to support Plan recommendations
- 7. A draft Implementation Section including recommendations for Policies, Programs, Capital Improvements, Regulations and other Topics (priorities and benchmarking/monitoring procedures to be agreed upon in the next Phase)
- 8. Technical appendices including the parking assessments

Meetings:

2 with City staff (one is Optional)

2 with the Planning Board

1 with the Multi-Modal Board (covered by our separate contract)

A briefing for the City Commission on the 50% draft for input (by city staff, Optional for MKSK)

1 Meeting with the City Commission (preferably a joint meeting with the Planning Board)

Deliverables:

Meeting materials including a briefing presentation for city staff to use with the City Community

Draft one-page summary

1 reproducible PDF and 20 hard copies of a 50% draft plan

1 reproducible PDF and 20 hard copies of a 75-90% draft plan (the Public Hearing Draft)





PHASE 6: PRESENTATION & ADOPTION

MONTHS 12-16

Once the Proposed Draft Plan is approved for public review, MKSK will work with City Staff to schedule a series of events to review the draft Master Plan with city officials, agencies, stakeholders and the public. For public review, in addition to comments received during the review process and the required public hearing, we recommend a Public Open House. Summaries of the Master Plan would be displayed and participants will be able to provide input on priorities or elements they feel are missing. This would be an informal, less intimidating opportunity for people to review the draft plan. It also allows discussions with City staff, the consultants and officials who volunteer to assist.

As comments are received on the draft during the review period, we will work in conjunction with city staff to prepare and update a matrix that summarizes suggested changes to the draft Master Plan. This document will note the request, relevant page, and a suggested response. This will be developed in conjunction with city staff, to be used at discussions with the Planning Board and City Commission. Our review and adoption process includes the meetings listed below.

Meetings:

- 2 with City staff
- 1 with the Planning Board to set priorities for the Action Plan (Optional, could be done by City staff)
- 1 with the Planning Board to review and recommend the City Commission initiate the Official Public Review Period (Optional, could be led by City staff)

 1 with the City Commission to approve distribution of the draft and the commencement of the Official Public Review Period (our team will join City staff if needed)
- 1 day of focus group meetings to present the draft to the same groups involved earlier
- 1 informal public open house on the draft plan and priorities held the same day as the focus groups
- A public hearing conducted by the Planning Board at the conclusion of the

- 63-day Review Period
- 1 Additional Meeting with the Planning Board (if needed) to review revisions made based on discussion at the public hearing
- 1 Adoption meeting with the City Commission

Deliverables:

- Information to update the City's project website
- Materials for meetings described above
- A matrix that summarizes suggested changes to the draft Master Plan identified during the public open house and review period.
- A final one-page Master Plan summary
- 1 reproducible PDF and 20 hard copies of the adopted Master Plan including a web-ready version

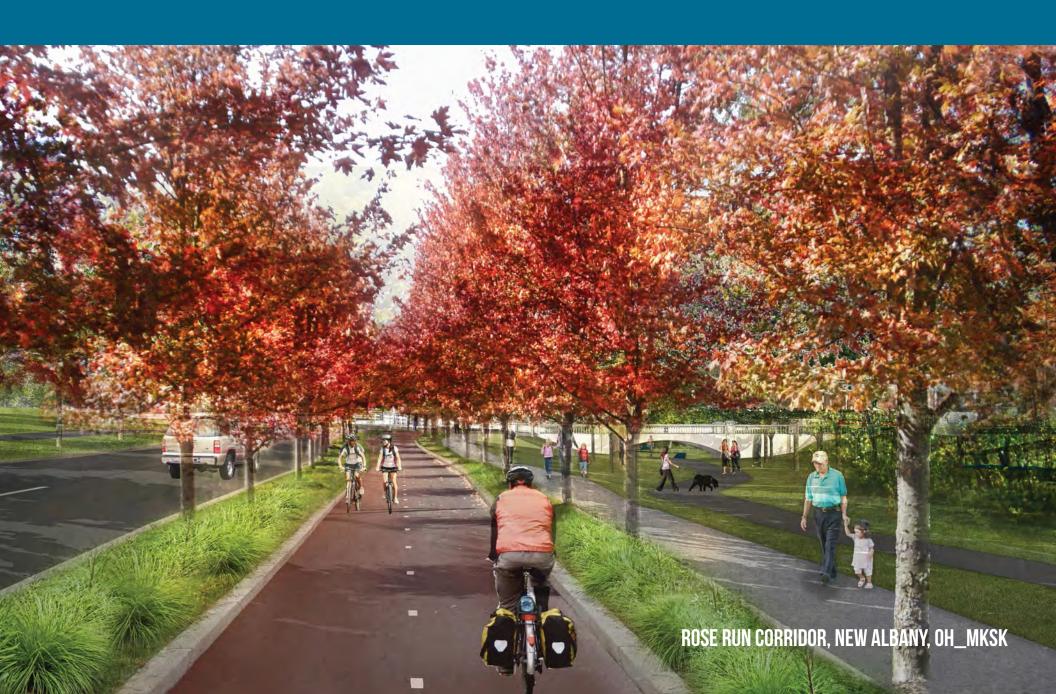
TIME FRAME





	PHASE 1. PROJECT LAUNCH COMPREHENSIVE COMMUNITY ENGAGEMENT PLAN DEVELOPMENT	PHASE 2. DISCOVERY DATA COLLECTION & ANALYSIS, INCLUDING PARKING & INFRASTRUCTURE ANALYSIS	PHASE 3. VISIONING	PHASE 4. EXPLORATION LAND USE DESIGN & PARKING	PHASE 5. PREPARATION OF DRAFT PLAN	6. PRESENTATION & ADOPTION
KEY TASKS	 Kickoff meeting with City staff Kickoff meeting with the Planning Board Project start-up briefings with the Multi-Modal Board and City Commission Possible second meeting with city staff to agree on any refinements to the Work Plan and Schedule Initiation of community engagement including a page on the City's website, calendar of events, lists of key stakeholders to invite to focus group meetings 	 Review of Past Plans Prepare a Community Profile - Existing Situation & Trends Exiting Land Use & Focus Areas Transportation & Parking Related Data Community Tour Audit 	 Facilitation of a two-day session of information gathering & listening workshops Interviews with key developers, property owners, representatives of neighborhoods, and others identified by the City Community input meetings Emerging themes and directions to explore for each of the areas of the city: Downtown, the Triangle, the Rail District, and South Woodward Discussion of initial placemaking, land use, development, and transportation concepts 	 4-day workshop to develop concepts and to share with the community and elicit input and feedback. Development of a parking analysis and a comprehensive set of recommendations, including a review of the parking requirements in the zoning ordinance Identification of supply-based solutions, including shared parking strategies, management opportunities, curbside and off-street regulations Review of Downtown Parking Study findings 	Preparation of draft document to deliver a 50% completion and a 90% completion to the Planning Board	Review the draft Master Plan with city officials, agencies, stakeholders and the public Preparation of a matrix that summarizes suggested changes to the draft Master Plan Delivery of the adopted Master Plan including a web-ready version
DELIVERABLES	MPREHENSIVE COMMUNITY ENGAGEMENT Materials for those meetings including summaries of discussions A draft Notice of Intent to Proceed with a Master Plan update to be refined and distributed by the City A Community Engagement Plan and calendar of events	Existing land use map and description Summary of Current Plans Outline for Neighborhood Pattern Book or typologies Existing transportation and parking assessment including maps Community Meeting, Website & Targeted Outreach Presentations & Materials	Listening/Visioning Session Materials List of Emerging Community Themes (Goals and Desired Outcomes)	Assessment of Findings and Technical Report, including Best Practices Summary for Inclusion in the Master Plan document Charrette Deliverables Community Pattern Book (Optional)	Meeting materials including a briefing presentation for city staff to use with the City Community Draft one-page summary 1 reproducible PDF and 20 hard copies of a 50% draft plan 1 reproducible PDF and 20 hard copies of a 75-90% draft plan (the Public Hearing Draft)	Information to update the City's project website Materials for meetings described above A matrix that summarizes suggested changes to the draft Master Plan identified during the public open house and review period A final one-page Master Plan summary 1 reproducible PDF and 20 hard copies of the adopted Master Plan including a web-ready version
MEETINGS	with City staff (1 is Optional) with the Planning Board briefing for the Multi-Modal Board at our regular meeting (not charged to the Master Plan)	1 with City staff 1 with the Planning Board	with City staff with the Planning Board (Optional or could be done by City staff) Briefing with the City Commission A two-day session of interviews, focus groups, and a community event	4-day charrette including a series of meetings and events as described Nelson\Nygaard to attend 1 of the scheduled meetings with City staff Nelson\Nygaard will be involved in two of the charrette days including a public event An Optional meeting with the Planning Board or the Parking Committee or Ad Hoc Parking Committee (or joint meeting)	2 with City staff (one is Optional) 2 with the Planning Board 1 with the Multi-Modal Board (covered by our separate contract) A briefing for the City Commission on the 50% draft for input (by city staff, Optional for MKSK) 1 Meeting with the City Commission (preferably a joint meeting with the Planning Board)	2 with City staff 1 with the Planning Board (Action Plan, Optional) 1 with the Planning Board (Official Public Review Period Optional) 1 with the City Commission (Commencement of the Official Public Review Period - team will join City staff if needed) 1 day of focus group meetings 1 informal public open house A public hearing conducted by the Planning Board at the conclusion of the 63- day Review Period 1 Additional Meeting with the Planning Board (if needed) 1 Adoption meeting with the City Commission
	MONTHS 1-2	MONTHS 2-4	MONTHS 3-5	MONTHS 6-8	MONTHS 9-12	MONTHS 12-16

ATTACHMENTS



ATTACHMENT B - BIDDER'S AGREEMENT FOR MASTER PLAN UPDATE

In submitting this proposal, as herein described, the Contractor agrees that:

- 1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- 2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

5/31/2018
DATE
5/31/2018
DATE
chermann@mkskstudios.com
E-MAIL ADDRESS
614.686.0128
PHONE
PHONE

ATTACHMENT C - COST PROPOSAL FOR MASTER PLAN UPDATE

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be itemized as follows:

Project Elements 1. Comprehensive Community Engagement Plan 2. Updated Data Collection and Analysis 3. Infrastructure Analysis 4. Parking Analysis 5. Attendance at Meetings 6. Plan Preparation 7. Finalization and Adoption	\$ \$ \$ \$ \$ \$	104,500. 30,000. 33,000. 35,000. 34,600. 29,800. 23,000.		
TOTAL AMOUNT	\$	289,900.		
Additional Meeting Charge	\$	per PERSON/per MEETING (not including preparation of any new materials)	900.	per meeting
Additional Services Recommended (if	\$	92-190	/ houi	- MKSK
any):	\$	156-192	/ houi	- UDA
Additional Services will be billed hourly at Standard Rates, plus Expenses. Additional Services will be scoped with an estimate provided to the City for	\$	140-180	/ houi	- N\N
approval.	\$		/ houi	-
	\$		/ houi	-
	\$		/ houi	-
	\$		/ houi	•

Firm Name	MSK2, LLC (dba MKSK)		
Authorized sig	nature Chrin Heumann	Date	5/31/2018

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM

FOR MASTER PLAN UPDATE

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

Chris Hermann	5/31/2018
PREPARED BY	DATE
(Print Name)	
AICP, Principal	5/31/2018
TITLE	DATE
Chris Hermonn	chermann@mkskstudios.com
AUTHORIZED SIGNATURE	E-MAIL ADDRESS
MSK2, LLC (dba MKSK)	
COMPANY	
4219 Woodward Avenue, Suite 305, Detroit, MI 48201	614.686.0128
ADDRESS	PHONE
NAME OF PARENT COMPANY	PHONE
ADDRESS	
45-3413259	
TAXPAYER I.D.#	

DPZ CODESIGN

REQUEST FOR PROPOSALS

C I T Y O F BIRMINGHAM MASTER PLAN U P D A T E

SUBMITTED TO
THE CITY OF
BIRMINGHAM
MICHIGAN

MAY 25, 2018

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1023 SW 25th Avenue Miami Fl 33135 Tel: 305 644 1023 Fax: 305 644 1021 senen@dpz.com May 25th, 2018

City of Birmingham 151 Martin Street Birmingham MI 48012-3001

Tel: 248 530 1841

FAO: Ms Jana L. Ecker Planning Director

Dear Ms. Ecker,

REQUEST FOR PROPOSALS (RFP) CITY OF BIRMINGHAM MASTER PLAN UPDATE

DPZ Partners, LLC (DPZ, DPZ CoDESIGN) are pleased to submit to the City of Birmingham our proposal for providing the above captioned services.

We look forward to assisting the City with its planning, urban design, and development efforts, towards reinforcing the City of Birmingham as a unique, lively, well-connected community; a great place to live, work, visit, and recreate; an important focus of community pride; a model of sustainable growth; and an economic success.

As you may already know, DPZ and its selected sub consultants, Mckenna, Gibbs Planning Group, and Jacobs offer renowned expertise and prowess in the best and latest practices in land use, planning, urban design, and coding; infrastructure planning and engineering; traffic and parking analysis; economic development and market demand analysis; and community engagement for sustainable cities and downtowns. We have the capacity and capability to undertake and complete the contemplated scope in a timely, cost-efficient manner, as demonstrated by the emergent success of our many prior master plans and infrastructure studies. Last but not least, DPZ and its sub consultants have worked for and within the City of Birmingham previously and is highly familiar with the issues at hand. We are excited about the prospect of collaborating with the City again and are committed to providing you with the highest quality of work.

If required, we are willing and able to discuss our proposal with you in greater detail as the procurement process moves forward. Please feel free to contact me at 305 644 1023 x 1012 or at senen@dpz.com for any questions or requests for additional information.

Sincerely,

Senen M. A. Antonio

Partner

DPZ CoDESIGN, LLC 305 644 1023 x 1012

senen@dpz.com





B. OUTLINE OF QUALIFICATIONS - OVERVIEW

Introduction

The DPZ team represents a set of balanced abilities matched to the various aspects of the multi-task scope of this proposal. The professionals identified are deeply experienced in drafting and implementing plans and policies that incorporate Traditional Neighborhood Design principles, together with evidence-based and practical knowledge. They are experts in balancing the economic, social, infrastructural, and sustainabilty needs of the community and through their local experience well versed in the issues at hand.

The Organizational Chart below illustrates the team's structure, including key personnel and sub consultants. Team members and sub-consultants will be assigned to accomplish the project task in the most effective manner. DPZ shall be responsible for the preparation of draft and final documents, project coordination, and managing and overseeing the quality of input from sub consultants.

Team Organizational Chart

CLIENT

CITY OF BIRMINGHAM

LEAD CONSULTANT

DPZ CoDESIGN

Planning, Urban Design, Zoning and Coding, Architecture, and Community Development

Matt Lambert
Partner and Project Manager
Andres Duany
Project Principal and Advisor

Senen Antonio
Senior Planner / Designer

Judith Bell Senior Planner / Designer

Mike Huston Senior Planner / Designer

SUB CONSULTANTS

GIBBS PLANNING GROUP

Economics, Demographics, Market Analysis, Landscape Design

> Robert J. Gibbs Commercial and Real Estate Advisor Andrew Littman Research Director David Magnum Planner / Designer

JACOBS

Transportation, Parking, Infrastructure

Adam James
Transportation Planner
John Wirtz
Transportation Engineer

MCKENNA

Sustainability, Local Support to Planning, Urban Design, Zoning & Coding, Community Engagement

John R. Jackson
Senior Planner / Designer
Sarah Traxler
Planner / Community Developer
Paul Lippens
Transportation Planner / Designer

B. OUTLINE OF QUALIFICATIONS - OVERVIEW

Lead Consultant

DPZ CoDESIGN will lead the project team under the guidance of Partner Matt Lambert and Founding Partner Andres Duany. Matt is well versed in preparing master plans, land use zoning, and form-based codes including Orange County, FL, Reinvent Phoenix AZ, Windward Pointe MI, City of Pontiac MI, and numerous other planning efforts in the United States and abroad. Matt also serves on the board of the CNU Form-Based Codes Institute. Working alongside Matt will be Andres Duany who has extensive experience in preparing plans, guidelines and codes, as well as with politically sensitive planning undertakings. He will provide project direction and oversight. Andres was part of the team that prepared Downtown Birmingham 2016 Plan and recently was invited back to the City to undertake an assessment of the plan's implementation and make recommendations.

Additional support is provided by senior planners / designers Senen Antonio, Judith Bell, and Mike Huston who are also focused on master planning, form-based codes, municipal projects, and sustainable initiatives.

Sub-consultants

Gibbs Planning Group (GPG) are the authority on retail design and regulations in the Traditional Neighborhood Development context. Robert J. Gibbs has completed hundreds of charrettes and workshops and is an expert at preparing proposals for retail and mixed use development and is also a licensed landscape architect. A frequent consultant/advisor for DPZ, including the Birmingham 2016 Plan and recent plan assessment, Rob-

ert wrote the award-winning Principles of Urban Retail Planning and Development. Based in Michigan, the GPG team includes the experienced Andrew Littman, as Research Director and David Magnum, a Planner and Designer. They will lead the demographic, commercial and residential trends analysis, as well as landscape matters.

Jacobs are one of the world's largest and most diverse providers of professional and technical services, including all aspects of community planning and zoning. Adam James and John Wirtz are experts in multi-model transportation and parking analysis and have carried out studies throughout the United States. They are considered to be leaders within their industries, driving innovation towards real-world solutions, drawn from global expertise and local knowledge. Their approach builds strong partnerships with the client and within the team and ensures a thorough analysis and effective solutions.

Mckenna's multidisciplinary team places importance on understanding and incorporating the bigger picture into communities at every level. The locally based team, led by John Jackson and Sarah Traxler, have extensive experience in community engagement projects that have helped create consensus and a vision by providing residents with the opportunity to directly impact the physical, social, and economic future of their community. Mckenna has worked on a number of planning and urban design projects for the City of Birmingham, including the Birmingham 2016 Plan and more recently the Parks & Recreation Master Plan. They also prepared the Sustainable Rochester Plan where their approach to sustainabilty was sensitive to history, size, scale, population, demographics, and diversity of people and place.

Team Skills Blend

REQUIRED SKILLS	DPZ CoDESIGN	Mckenna	Jacobs	GPG
Project Management/Coordination	L			
Urban design	L	•	•	•
Multi-modal transportation	•		L	
Sustainability	•	L	•	•
Urban planning	L	•	•	•
Zoning and form-based code	L	•		•
Architecture	L	•		
Physical design	L	•	•	•
Landscape architecture	•	•	•	L
Transportation engineering	•	•	L	•
Parking expertise	•	•	L	•
NCI certification and/or training		•		•
Data analysis and trends	•	•		L

L Lead • Contributor











DPZ CODESIGN

DPZ Firm Profile

DPZ CoDESIGN (DPZ Partners, LLC, DPZ) is a leader in form-based planning, urban design, coding, and architecture, with over 350 projects for new and existing communities in the U.S. and internationally. DPZ's contributions to planning, design, and regulations have been widely recognized for their excellence and influence on the making of walkable urbanism, complete neighborhoods, and resilient communities – including multiple efforts within the State of Michigan as well as in the surrounding region.

DPZ was founded in 1980 with its main office in Miami, FL, with satellite offices in Gaithersburg, MD and Portland, OR, as well as affiliates in Europe, Asia, and Latin America. A tightly-knit company of 33, DPZ operates as a protean organization; DPZ collaborates with others, retaining the flexibility of a small office, while providing the capacity and expertise of a larger multi-disciplinary firm. DPZ Partners and staff play key roles in the Congress for the New Urbanism (CNU), whose Charter encapsulates the firm's philosophy. DPZ staff are skilled in managing the public process of design, including the deployment of the Charrette, a concentrated working session that assembles professionals and decision-makers to produce informed plans and implementable solutions.

DPZ is distinguished from other firms by its:

- volume of built and implemented work at the regional, local, lot, block, and building scales and the lessons learned from these projects;
- ongoing pursuit of innovative solutions, early adoption of technology (including but limited to AutoCAD, GIS, Photoshop, InDesign, SketchUp, etc.), and creation of new planning and design techniques;
- public process, including the DPZ Charrette and rapid prototyping;
- business efficiency, as a small firm that collaborates with others; and
- Partners' renown in the field.

DPZ is the recognized leader in Traditional Neighborhood Development (TND) design and our many built examples of authentic TNDs have been used as models throughout the industry to effect change in planning, regulatory, development, marketing, and financing practices in the United States and around the world.

The firm is an active proponent in the movement to replace suburban sprawl with a return to neighborhood-based planning. Its Founding Partners, Andres Duany and Elizabeth Plater-Zyberk, are founding members of the CNU, a non-profit organization established with the goal of reforming the built environment. The term New Urbanism, was a conscious invention to bring attention to the crisis of ad hoc suburban development and to propose a less wasteful alternative to sprawl.

The basic principles behind the movement are universal. They promote the creation of real communities with pedestrian-oriented neighborhoods, mixed uses and streets shaped by buildings and landscape. The movement, initially called "neotraditional" planning, has grown to broad application and acceptance, its principles extending to a wide range of development contexts, densities and design. The principles project an ideal of a sustainable quality of life that competes with the

Contact: Senen Antonio, Partner DPZ CoDESIGN, LLC

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prevalent suburban dream, and also provide a conceptual framework for contemporary development. At the neighborhood level the New Urbanism promotes such compact, mixed-use, mixed-income, pedestrian-friendly increments of community building.

Sustainable Planning, Design, and Development

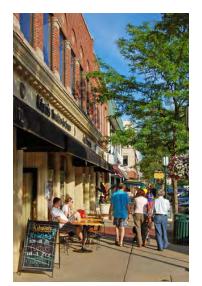
ture; and zero energy/waste/stormwater impacts.





In the 1980s, Seaside was designed with light infrastructure, innovative stormwater management techniques, hurricane-resilient construction methods, preserving existing terrain and dunes, and adopting a code-mandated xeriscape. Seaside initiated a "common sense" green approach, which has evolved with subsequent DPZ projects such as Kentlands, Maryland and Middleton Hills, Wisconsin.

A second generation of more comprehensively environmental projects includes regional plans such as those for Northwest Hillsborough County, Florida and Onondaga County, New York; and urban expansions such as Cornell, Ontario, Canada; and redevelopment/retrofit efforts such as Liberty Harbor North, New Jersey and Legacy Town Center, Texas. The proposals for these plans/studies involved more



ambitious interventions and mitigation strategies.

The third and current generation of environmental plans include projects offering advanced environmental technologies developed from empirical review of the performance of previous project-generations; these latest include Alys Beach and Sky, Florida; Tornagrain, Scotland; Schooner Bay, the Bahamas; and East Fraserlands and Southlands, Canada, among others. These projects incorporate innovative concepts such as Light Imprint New Urbanism; off-grid development; urban agricul-

All images are of DPZ projects and workshops/charrettes.

The ultimate goal of DPZ projects is to create benevolent urbanism in the form of cities and downtowns, towns and villages, which encourage walking, diversity and complexity. Safe and pedestrian-friendly streets encourage people to walk and interact with the built and natural surroundings. A well-designed public realm, including the "third places" (after home and work), facilitate the creation of social networks and affiliations, in contrast with the alienation propagated by suburban development.

Recent studies correlate the impact of physical environment on human health and well-being; sprawl has been blamed for the erosion of relationships within society and community. The objective for each of DPZ's projects is to create places that weave a fabric of traditional urbanism to generate the physical framework for a fulfilling human existence. DPZ's built projects show that, given the choice, people enjoy living in sustainable communities. People seek out our neighborhoods instead of suburban enclaves, to be environmentally responsible, but also because they promote individual well-being within community.

The New Urban principles for planning and urban design underpinning DPZ's work align with many of the energy and environmental strategies advocated by the U.S. Green Building Council (USGBC). DPZ's projects employ sustainable development strategies, including but not limited to, increased development densities; redevelopment and infill; transit oriented development and walkable communities; and the integration of development with open space frameworks.

These are all principles embodied in the USGBC's Leadership in Energy and Environmental Design (LEED) Green Building Rating System. DPZ participated in the de-

THE TRANSECT



T4 GENERAL URBAN ZONE T5 URBAN CENTER ZONE T6 URBAN CORE ZONE

velopment and fine-tuning of the LEED standards for Neighborhood Development (LEED-ND), the first national standard for environmentally sustainable neighborhood design and master planning. In addition, DPZ has also developed the Light Imprint (LI) initiative, a comprehensive development approach for sustainable civil engineering practices calibrated across the rural to urban Transect (see the description following).

The Transect, Form-Based Design, and Form-Based Coding

A significant aspect of DPZ's work is its innovative planning regulations which accompany each design. Tailored to the individual project, the codes, standards and regulations address the manner in which buildings are formed and located to ensure that they create useful and distinctive public spaces. Both broad-based (such as the DPZ's various form-based codes) and project-specific (such as DPZ's Urban and Architectural Regulations), these codes are provided to make projects more successful and to ease their implementation.

DPZ pioneered form-based planning, design, and coding, beginning with the very first modern form-based code - for Seaside, Florida - and including the development of the aforementioned SmartCode, which have been adopted by municipalities and developers across the United States and internationally.

Appropriate design of public space such as streets and their interface with private building ensures the comfort and safety of the pedestrian. The varying degrees of density and their corresponding built forms are governed by the Transect - an organizational concept developed by DPZ that proposes detailing (lot sizes, road widths, building form and function, etc.) according to each development's classification within a continuum from rural to urban context.

A transect of nature is a geographical cross-section of a region that reveals the sequence of environments. It examines the many symbiotic elements that contribute to habitats where certain plants and animals thrive. The transect was first used for biogeographical analysis by naturalist Alexander von Humboldt in the late 18th Century. In the late 20th century, Andres Duany, working with New Urbanist colleagues, identified the rural-to-urban Transect of the built environment, ranging across densities from unbuilt preserve land to the dense urban core.

Human beings thrive in a variety of habitats: some would never choose to live in the urban core and others would wither in a rural place. To provide meaningful choices in living arrangements, the rural-to-urban Transect is divided into six T-zones for use in zoning ordinances. These six habitats vary by the ratio and level of intensity of their natural, built, and social components. The T-zones are coordinated to all scales of planning, from the region, through the community and neighborhood, to













"Third places" in traditional neighborhoods are important elements, such as the central basin, canals, and waterfront promenades in DPZ's master plan for DownCity Providence, Rhode Island (top left); an active Shain Square, City of Birmingham, discussed during DPZ's recent review of the Birmingham 2016 Plan (middle left); or a more intimate square at DPZ's Mashpee Commons (top right). Meanwhile, sustainability strategies are creatively integrated at all scales of planning and design, such as introducing a canal network as a stormwater management tool as well as a public space and community amenity for New Town at St. Charles, Missouri (middle right). Last but not least, sustainability also extends to the use of contextual architectural forms and materials to create meaningful, enduring places, as evidenced in the results from DPZ's master plan for Norton Commons, Kentucky (bottom left), and the successful implementation of DPZ's Birmingham 2016 Plan, Michigan (bottom right).

the individual lot and building. The platform of the Transect allows the integration of the design protocols of traffic engineering, public works, town planning, architecture, landscape architecture and ecology. This is the foundation of form-based planning, design, and coding.

DPZ is closely affiliated with the Form-Based Codes Institute (FBCI). Founding Partner Andres Duany is an FBCI Emeritus Board Member and an Instructor. Similarly, Duany, along with DPZ Partners Galina Tachieva, Marina Khoury, and Matthew Lambert are members of the Transect Codes Council, the advisory board to the Center for Applied Transect Studies (CATS).

Relevant Initiatives and Publications

As a progressive, cutting-edge think tank, the firm's most recognized initiatives, publications, and contributions include, but are not limited to:

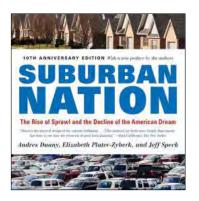
Suburban Nation: The Rise of Sprawl and the Decline of the American Dream, the New Urbanism/Smart Growth "bible," which examines, and offers solutions to, the failures of postwar planning.

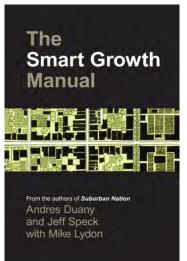
The Smart Growth Manual, a handbook of best practices describing and illustrating planning goals and techniques of implementation. With their landmark book Suburban Nation, Andres Duany and Jeff Speck "set forth more clearly than anyone has done in our time the elements of good town planning" (The New Yorker). With this long-awaited companion volume, the authors have organized the latest contributions of new urbanism, green design, and healthy communities into a comprehensive handbook, fully illustrated with the built work of the nation's leading practitioners. This manual is designed as a quick reference guide, readily accessible as a talking tool to facilitate meetings. Though only recently released, the manual has quickly become a staple item for charrettes, public fora, and other discussions.

Form-Based Development Standards and Guidelines and the SmartCode, an open-source model form-based code. The SmartCode is a model design and development code, as well as the only unified transect-based code available for all scales of planning, from the region to the community to the block and building. As a form-based code, it keeps towns compact and rural lands open, while reforming the destructive sprawl-producing patterns of separated-use zoning.

As an integrated land development ordinance, the SmartCode folds zoning, subdivision regulations, urban design, public works standards and basic architectural controls into one compact document. It is also a unified ordinance, spanning the regional, community, and building scales. The SmartCode also enables the implementation of a community's vision by coding the specific outcomes desired in particular places. It allows for distinctly different approaches in different areas within the community, unlike a one-size-fits-all conventional code.

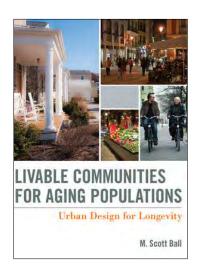
The SmartCode is designed to support walkable and mixed-use neighborhoods, transportation options, conservation of open lands, local character, housing diversity, and vibrant downtowns. Because the SmartCode is presented in primarily graphic form, it is increasingly known as a user friendly and" transparent" alternative to conventional zoning codes, which often confuse the layperson and expert alike. Today, the SmartCode is being used and adopted in a growing number of communities across the United States.

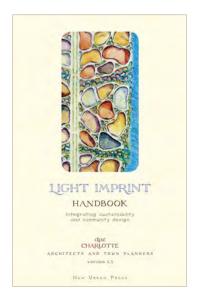












Sprawl Repair Manual, a compendium of techniques and processes for addressing the suburban condition. The Sprawl Repair Manual offers comprehensive guidance for transforming fragmented, isolated and car-dependent development into "complete communities". Polemical as well as practical, the manual is designed to equip readers - from professional planners, designers and developers to regulators and concerned citizens - with strategies drawn from two decades of successful repair projects. In contrast to sprawl - characterized by an abundance of congested highways, strip development and gated cul-de-sac subdivisions - complete communities are diverse in terms of uses, transportation options and population. They are walkable, with most daily needs close by.

There is a wealth of research and literature explaining the origins and problems of suburban sprawl, as well as the urgent need to repair it. However, the Sprawl Repair Manual is the first book to provide a step-by-step design, regulatory and implementation process. From the scale of the region to the building - turning subdivisions into walkable neighborhoods, shopping centers and malls into town centers and more - today's sprawl can be saved.

Lifelong Communities: Metropolitan planning organizations are increasingly challenged by the live, work, transport and healthcare challenges of their aging populations. The negative impacts of sprawling development patterns fall disproportionately hard on seniors who wish to remain in their homes as they age.

Consider the market segments labeled "Baby Boomers" (born 1946-1964) and "Millennials" (born 1977-1996) comprise the two largest global generations. Both generations are entering life stages where urban living within pedestrian-oriented, mixed-use, sustainable, light imprint environments, from village center to a reviving downtown core, is increasingly attractive. From a public sector perspective, both age groups can be much more effectively supported when they reside in the healthy and socially supportive context of a vibrant pedestrian oriented neighborhood.

This type of convergence of intergenerational need and opportunity is unprecedented. It is within this framework that DPZ, working with organizations such as the AARP and the Robert Wood Johnson Foundation, has created age inclusive community models to integrate the interdepartmental age-related concerns of health service delivery, transportation, workforce development and land use planning. Lifelong Communities proactively steers outward sprawl inward towards existing urban and suburban locations adjacent to urban centers, and in doing so, produces healthy and socially engaging communities for people of all ages and abilities. As part of this initiative, DPZ has developed concise and practical guidelines/criteria that help local elected and planning officials evaluate the qualities of specific developments as they come forward for review.

Light Imprint New Urbanism, a comprehensive development approach for the sensitive placement of development via coordinated sustainable engineering practices and New Urbanist design techniques, calibrated across the Transect. Light Imprint planning/engineering techniques balance environmental considerations with design objectives such as connectivity and a well-defined public realm.

While New Urbanist planning, by definition, respects terrain, geographical conditions, topography and public space, Light Imprint provides a toolkit for stormwater management using natural drainage, traditional engineering infrastructure and filtration practices, employed collectively at the scales of the sector, the neighborhood and the block. This toolkit offers a set of context-sensitive design solutions that generate a range of environmental benefits combined with an aesthetic approach to green infrastructure, while significantly lowering construction and engineering costs.

Lean Urbanism is an initiative advocating small-scale, incremental community-building that requires fewer resources to incubate and mature. It seeks to lower the barriers to community-building, to make it easier to start businesses, and to provide more attainable housing and development, "making Small Possible". It is open-access, allowing more people to participate in the building of their homes, businesses, and communities. It is open-source, creating tools and techniques for all to use, and is open-ended, focusing on incremental and ongoing improvement.



The Project for Lean Urbanism will restore common sense to the processes of development, building, starting small businesses, community engagement, and acquiring the necessary skills. It includes the development of tools so that community-building takes less time, reduces the resources required for compliance, and frustrates fewer well-intentioned entrepreneurs, by providing ways to work around onerous financial, bureaucratic, and regulatory processes. The tools will be made freely available to governments and organizations seeking to get things done, to entrepreneurs without the knowhow to overcome hurdles, and to small builders or homeowners who could build well in an economical, low-tech way.

Meaningful Stakeholder Engagement

The **Charrette approach** is the method of planning which DPZ has adopted and developed in our traditional planning practice. A charrette is typically a 7- to 9-day series of meetings, presentations and sessions, during which a design team generates a comprehensive planning and development strategy while soliciting the input of key project decision-makers. Designers and stakeholders gather as a group, typically in a single space on the site of the project, to study, develop, review, and revise proposals in a concentrated period of time.

A primary feature of Charrettes is that they are specifically organized to **encourage the participation of all parties who are interested in the project**, whether they represent the interests of the regulators, the developers or community stakeholders. The exact level of stakeholder/community engagement shall be determined in close coordination with the client project team; it is preferable that the Charrette be held on or close to the project area, to facilitate the intensive interaction among the DPZ team and the client team, local leadership, and other decision-makers over the duration of the workshop.



A typical DPZ Charrette

The DPZ team sets up a design studio, typically in the neighborhood, and leads a collaborative design process intended to incorporate the contributions of the client project team, and, as appropriate, municipal agencies and leaders, community stakeholders, and other consultants, with the design team committed to the project entirely over the course of the workshop. Through a sequence of meetings, design sessions and presentations, the proposals unfold in real time response to decisions made by the client team, other decision-makers/stakeholders, and the DPZ team.

Charrettes provide a forum for ideas, offer immediate feedback to the planners/designers and give mutual authorship to the Plan by all those who participate. The Charrettes that DPZ orchestrates accomplish the following goals:

- 1. all those influential to the project develop a vested interest in the design and the shared experience of the Charrette builds broad support for its vision;
- 2. the various design disciplines work in concert to produce a set of finished documents that address all aspects of design;
- 3. inputs of all the players are collectively organized at one meeting and thereby eliminates the need for prolonged, sequential discussions that can delay conventional planning projects and lose the momentum of constituents; and
- 4. a better final product is created through the assimilation of many ideas in a dynamic, collaborative and cost effective process.

DPZ has conducted over 300 such Charrettes with various clients in both the private and public sectors, and is adept at marshalling all the technical information that goes into the design of sustainable streets, neighborhoods and communities, while respecting and incorporating the local planning and cultural context, as well as managing the local development politics.



Specifically, the Charrette scope of services includes:

- An opening lecture on the first night of the Charrette. This lecture can be delivered to the immediate participants only, or (as is frequently done) it can be highly publicized and used as the first marketing event for the project.
- Leadership of the DPZ design team. DPZ assembles and manages a multidisciplinary team to prepare all of the graphic planning documents and provide technical information as required. We are typically responsible for paying the sub-consultants that we bring for their time spent at the Charrette. Other subconsultants that the client brings to the charrette shall be compensated by the client. Should additional reports or studies be required, these can be contracted directly with the pertinent sub-consultant.
- Organization and coordination of all Charrette meetings and presentations. The client and DPZ shall coordinate to arrange the necessary meetings with all appropriate decision-making groups, agencies and offices and/or approval bodies. With the DPZ Partner/Director and Project Manager leading the sessions, the charrette participants prepare broad development schemes leading to the recommended development option. The design team's proposals and strategies are tested with the client project team and other decision-makers over the course of the Charrette, so it is impossible to take an unacceptable scheme too far.
- A final presentation on the last night of the Charrette. As with the opening lecture, the media exposure and size of this event is up to the client. The presentation of the plans shapes the perception of the project. All of the work produced during the Charrette is presented and explained at this time.
- Completion and refinement of the deliverables following the charrette. We anticipate that minor refinements may need to be made to the documents after the Charrette. Often, new information becomes available that may affect the work. Our fee includes a full generation of post-Charrette revisions to the planning documents, if requested.

The team produces concept alternatives beginning on day one, quickly moving forward to the preferred planning proposals, vetted by the client project team and completed by the end of the charrette, with alternatives feasibility testing; feedback loops with the client and other decision-makers; and planning/design revision inbetween – all within a finite, sequential number of days.

The Charrette is aimed at bringing the stakeholders (i.e. the client team and other participants) into the decision-making-with-design process *in real time*; as such, most deliverables are integrated and/or correlated. DPZ would seek to have all decision-makers, experts representing the multiple disciplines to be integrated (market/economics, traffic, parks/open space/environment, civil), builders, developers, and if required/requested, public officials and community members, participate and have them decide on the planning proposals as the team presents the various plan alternatives and instantaneously responds to requested changes. The main refinements are actually done at the Charrette in the presence of the decision-makers and with the entire design and planning team intact, through the repeated feedback loops – this is why DPZ's Charrettes are slightly longer, but highly more effective, than most, and why we typically undertake a single, intensive workshop effort.

More information on DPZ Charrettes – including links to videos of past DPZ Charrettes – is available at http://www.dpz.com/Charrettes/About

- I Charrette team designers works on a
- 2 Team engineers review site constraints at a DPZ charrette
- 3 A charrette stakeholders meeting
- 4 A charrette public presentation









Selected Awards

2018

- Congress for the New Urbanism Charter Award, Village of Providence, Huntsville, AL 2017
- NAHB Best in American Living Awards (BALA) Hall of Fame Inductee: Andres Duany 2016
- Congress for the New Urbanism Merit Award, East End Transformation, Richmond, VA 2015
- Inaugural Transect Codes Council (TCC) Innovation Award Winner, Saratoga Springs, UT 2014
- Global Human Settlements Award in Planning and Design; Global Forum on Human Settlements, for Miami 21

2013

Congress for the New Urbanism Charter Award, Honorable Mention, The Scottish Sustainable Communities Initiative Charrette Series Report, Scotland, UK

2012

- John Nolen Medal; Congress for the New Urbanism Florida Chapter 2011
- National Planning Excellence Award for Best Practice for Miami 21, Miami, FL American Planning Association (APA)

2010

- Charter Award for Southlands: Agricultural Urbanism, Tsawwassen, Canada: Congress for the New Urbanism
- Charter Award for Lifelong Communities, Atlanta, Georgia: Congress for the New Urbanism
- Richard H. Driehaus Charitable Lead Trust Form-Based Code Award to DPZ, for Miami 21, Miami, FL

2009

- Charter Award for the Hertfordshire Guide to Growth 2021, UK: Congress for the New Urbanism
- Charter Award for the SmartCode: Congress for the New Urbanism 2008
- Richard H. Driehaus Prize for Classical Architecture to Andres Duany and Elizabeth Plater-Zyberk

2007

Neighborhood Planning Excellence Award for East Fraserlands, Vancouver, Canada: Canadian Institute of Planners

2006

• Civitas: Traditional Urbanism in Contemporary Practice, The National Building Museum, Washington, DC

2005

- BALA Platinum Award for Outstanding Community Design for Habersham, Beaufort, SC 2004
- Charter Award for NW Hillsborough County, FL: Congress for the New Urbanism 2003
- Award for Excellence to the Town of Seaside: Urban Land Institute

Other awards for DPZ may be viewed at http://www.dpz.com/Media/Awards

Press

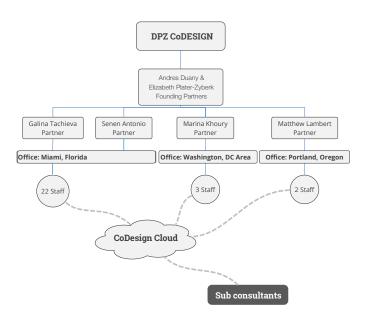
DPZ has been featured in national and international media such as NBC News, ABC News, Time, Newsweek, The New York Times, Washington Post, The Scotsman, The Guardian, and a number of professional publications. A sampling of the firm's various mentions in the press may be viewed at http://www.dpz.com/Media/Press.

Work Load, Availability, and Capacity

DPZ has sufficient capacity to perform the work as contemplated in the RFP, and are committed to the City of Birmingham in providing quality master planning and design services under the anticipated contract. Our confidence in this regard stems from our experience with other similar projects and from an office methodology which is geared to providing a responsive level of service to a limited client base. We have chosen to remain a small office in order to maintain complete control over quality of our work and to be able to respond promptly and thoroughly to client requests and project issues. We consistently receive more offers of employment that our firm can handle, and we have responded by selecting only those projects that best exemplify our professional objectives. DPZ has built an extensive network of consultants that can be utilized when required and that share our philosophy and approach. This is the case for this proposal where the team of consultants complement DPZs national expertise by providing the best blend of professional skills and local knowledge.

We only respond to RFQs/Ps when we believe that there exists and opportunity for us to make a significant contribution. When we are selected to work on a specific project, we dedicate the majority of our resources to that project in anticipation of finishing it quickly. Most of the significant work is progressed during the Charrette process, which – as described in the previous section – is a significant factor in the timely provision of our services.

DPZ Firm Structure Diagram







Matthew Lambert, CNU - Partner and Project Manager

Matthew Lambert is an architectural and urban designer and planner with more than a decade of experience that covers a broad range of project types, from multi-county regional plans, to new community and redevelopment plans and regulations, to affordable and modular housing design. Since he joined DPZ in 2000, he has managed projects for campus master plans and hospital strategic master plans (including program distribution); form-based codes; resort towns; new towns and urban infill; and disaster recovery plans, throughout the U.S. He has worked with communities in the Caribbean, Europe and the Middle East.

Lambertisactive in the Congress for the New Urbanism (CNU); he is an early leader of the CNU Next-Gen. As a member of the Trasect Codes Council, he is contributing to the evolution of the Smart Code. He contributes to Form-based Code education by co-organizing and lecturing at CNU 202 education sessions. He served as DPZ's Project Manager for our work with Hendrix College, among other various campus master planning efforts.

Selected Projects

Windward Pointe, MI Master Plan

City of Pontiac, MI - CNU Legacy Charrette, Downtown Revitalization Master Plan

Bay City, MI

Hot Springs Village, AR Master Plan

Central Avenue TOD Plan, Albuquerque, NM

Tigard Lean Code, Tigard, OR

Doña Ana County Comprehensive Plan, NM

Reinvent Phoenix TOD Form Based Codes and Master Plans, AZ

Vista Field Airport Redevelopment Plan, Kennewick, WA

Albuquerque, NM - Economic Development-based Infill and Zoning Analysis with Zoning Update Recommendations

Doña Ana County, NM - Regional Scenario Planning and Comprehensive Plan

Downtown Mobile, AL - Downtown Master Plan and Form-based Code

Hendrix College/The Village at Hendrix, Conway, AK - Campus & College Town Master Plan

Palmer Trinity School Master Plan, Miami, FL Campus Master Plan

Edinburgh Garden District, Edinburgh, Scotland - Greenfield New Town/Airport and Rail TOD

Buckeye Lake, OH

Green Tree Master Plan and Code, Vacaville, CA

Little Rock Towers, Little Rock, AR

Project Trek, Philippines

Ignite High Point, NC - Downtown Master Plan, Urban Infill, Mall Retrofit Uptown Dardenne Prairie, MO - Inner City Retrofit and Form-Based Code

East End, Richmond, VA: APA VA Award, 2011 - Medical-initiated Infill Development

St. Mary's Hospital, Richmond, VA - Medical Campus Redevelopment Federal City, New Orleans, LA - Military Base/Campus Redevelopment

Academic

2005 Bachelor of Architecture in Architecture and Computer Science, Magna Cum Laude, University of Miami, Miami, FL

Affiliations and Service

2001-Present	Congress for the New Orbanism (CNU)
2003-2012	Next Generation of the New Urbanism (CNU), Steering Committee
2006-Present	Transect Codes Council, Board Member
2012-Present	CNU Form-based Codes 202, Co-organizer and Lecturer
2015-Present	Codes Study, Contributor



Andres Duany, FAIA CNU Founding Partner and Project Advisor

Andrés Duany, architect, urban designer, planner and author, has dedicated over three decades to pioneering a vision for sustainable urban development and its implementation. He has influenced planners and designers worldwide, redirected government policies in the U.S. and abroad, and produced plans for hundreds of new and renewed communities of enduring value.

Duany's leadership can be credited with the plan and code for Seaside, the first new traditional community; the Traditional Neighborhood Development (TND) zoning ordinance; the development of the SmartCode, a form-based zoning code, adopted by numerous municipalities seeking to encourage compact, mixed-use, walkable communities; the definition of the rural to urban Transect and Agrarian Urbanism; as well as inventive affordable housing designs, including Carpet Cottages and Cabanons.

Duany is the author of many essay and articles, and co-author of several books, including Suburban Nation: the Rise of Sprawl and the Decline of the American Dream. The SmartCode, The Smart Growth Manual, Garden Cities: Agricultural Urbanism, and The New Civic Art. Duany's work has been recognized with numerous awards, including the Richard Driehaus Award, the Jefferson Medal, The Vincent Scully Prize and several honorary doctorates.

Selected Projects

Downtown Birmingham Master Plan 2016 and Birmingham 2016 Plan Assessment, MI

High Point, NC

Downtown West Palm Beach, FL

Downtown Mobile, AL

Al Ain Central Business District Plan and Code, Abu Dhabi, UAE

Bon Secours St. Mary's Hospital Campus Extension, Richmond, VA

DownCity Providence, Downtown Revitalization Plan and Code, Providence RI

Study of Westminster, Washington and Thayer Streets, Providence RI

Markham Master Plan and Code, Ontario, Canada

The Village at Hendrix, Conway, AR

Historic Gateway, Roswell, GA

Seaside, Walton Co., FL: National AIA Award, Progressive Architecture Award

Fifth Avenue South, Naples, FL

Downtown Sarasota Master Plan, FL: CNU Charter Award

Downtown Fort Myers Master Plan, FL

Downtown Stuart, FL: Florida Governor's Award for Urban Design

Hannibal Square, Winter Park, FL

Plan Baton Rouge, LA: Sierra Club Smart Growth Award

Mississippi Renewal Forum

Louisiana Speaks (multiple municipal master plans and codes)

NW Hillsborough Plan, FL: CNU Charter Award

Legacy Town Center, Plano, TX

Academic

1980-1995 Visiting Professorship at Harvard, Princetion, Yale, and Virginia 1974 Master of Architecture, Yale School of Architecture

1972 Ecole de Beaux Arts, Paris, Ancien Eleve

1971 B.A. Architecture and Urban Planning, Princeton University

Affiliations and Service

1996 Elected, American Institute of Architecture, College of Fellows

1993-2004 Congress for the New Urbanism, Co-Founder and Board Member

Registered Architect, NCARB # 33870 Design awards juror for many organizations



Senen Antonio, Partner and Senior Planner/Designer

Senen M. A. Antonio possesses over twenty years of international experience in sustainable design and planning, including plans for regions, downtowns, transit-oriented development, disaster recovery, urban revitalization and infill, resorts, and new towns, in the Americas, Europe, Africa, and Asia. A major part of his firm-wide responsibility is to help define the future of the practice, working with fellow Partners in projecting industry trends and seeking project opportunities for breaking new areas of knowledge and technique in the New Urbanism. He remains involved in several key project assignments, managing projects across all phases from conceptual design through construction. He lectures widely across the United States, in the Middle East, and throughout Asia, and contributes articles to professional journals. He is co-writing, with Andres Duany, a book on sustainable communities. He is a member of the Congress for the New Urbanism and is a LEED-accredited professional.

Selected Projects

Windward Pointe, MI Master Plan

ABQ Central Corridor TOD Planning Study, TOD/Urban Infill Planning and Coding Analysis, Albuquerque, NM

Vista Field Redevelopment, Urban Infill/Brownfield Redevelopment, Kennewick, WA Downtown Monroe Master Plan, Urban Infill, Monroe, LA

Uptown Dardenne Prairie, Urban Infill & Form-Based Code, Dardenne Prairie, MO Newburgh Waterfront, Urban Revitalization Plan & Form-Based Code, Newburgh, NY Scottish Sustainable Communities Initiative, Regional Plan & Pilot Projects, Scotland, UK Hertfordshire Guide to Growth Study, Regional Plan & Pilot Projects, Hertfordshire, UK ARC Lifelong Communities, Regional Plan and Code, Atlanta, GA,

Green Tree Master Plan, Urban Infill/New Town Plan & Form-Based Code, Vacaville, CA Glenridge/Aria Master Plan, Urban Infill/New Village Plan & Form-Based Code, Atlanta, GA Stanboroughbury/Symondshyde, Urban Infill/New Village Plan, Hertfordshire Co., UK The Hills of Depoe Bay, Urban Infill/New Village Plan & Form-Based Code, Depoe Bay, OR Wittenbeck, Urban Infill/New Village, Heiligendamm, Germany

Melana Village Centers, Incremental Village Development, Pretoria, South Africa Southlands, Agrarian Urbanism, Tsawwassen, Canada

Publications (Selected)

Green By Design: The Four Communities of Florida's EcoCoast (with Andres Duany and Christian Wagley), to be published in 2018

Seminars and Lectures

- 2017 Session Speaker "New Urbanism vs. New York Urbanism", APA National Plan ning Conference, New York
- 2015 Featured Speaker United Nations Environmental Programme- Sustainable Buildings and Climate Initiative (UNEP-SBCI), the Global Forum on Human Settle ments (GFHS), and China Railways Group (CRG), Shanghai
- 2013 Featured Speaker Philippine Green Building Council (PhilGBC), Manila
- 2012 Featured Speaker Municipality of Makkah Smart Growth Workshop, Jeddah Featured Speaker US Speaker and Specialist Grant, Bureau of International Information Programs, US Department of State/US Embassy Laos Featured Speaker, New Urbanism and SmartCode Workshop, Ministry of Public Works, Indonesia Key Speaker and Seminar Presenter, "Sustainable Cities Dialogues 2012", Cebu
- 2011 Invited Speaker, 3rd League of Cities of the Philippines Global Convention, Manila Keynote Speaker, 2011 Indonesia World Town Planning Day, Jakarta, Indonesia

Affiliations and Academic

- 2010 Present Congress for the New Urbanism Accredited Professional (CNU-A)
- 2004 Present USGBC LEED Accredited Professional
- 2001 Present The Congress for the New Urbanism, member
- 1992 Present Registered Architect, Philippines, No. 11026
- 1995 Master of Urban Design, With Honors, The University of Hong Kong
- 1990 B.Sc. Architecture, magna cum laude, The University of the Philippines

B. OUTLINE OF QUALIFICATIONS - DPZ



Mike Huston, Senior Planner/Designer

Michael Huston is a licensed architect, urban designer and planner, with over twenty years of professional experience. His background includes a decade of designing educational facilities, a number of years devoted to downtown revitalization in Louisville, KY, working first with city government and subsequently in partnership with a developer, and many years in private practice.

Huston's experience in all phases of development and design has been an important contribution to his work at DPZ on master plans for transit oriented development and sprawl repair, as well as on building type studies for those plans.

Selected Projects

"Bayside" Retail Town Center for Skipjack Properties, South Padre Island, TX Syosset Park Town Center for Simon Property Group, Oyster Bay, New York Town Madison, Retail Town Center, Madison, AL

City Sao Paolo, Pirituba, Brazil Midtown 2050, Omaha, NE

Alys Beach "Main Street" Plan Update, Alys Beach, FL

Bethel TOD, Bethel CT

Wild Cherry Canyon Master Plan, San Luis Obispo, CA

West Haven TOD, West Haven CT

South Point Master Plan, Ribeirao Preto, Brazil

Itahye Master Plan, Sao Paulo, Brazil Westside Master Plan, Houston, TX The Hills of Depoe Bay, Depoe Bay, OR Renn Farm Master Plan, Frederick, MD Ignite High Point Master Plan, NC

Reinvent Phoenix TOD Master Plan, AZ Coconut Grove BID Plan, Miami, FL

Westview South Park, Urban Infill, Frederick, MD Bon Secours DePaul Medical Center, Norfolk, VA

Bon Secours Memorial Regional Medical Center, Hanover County, VA

The Land, Tulsa, OK

Economic Development Strategic Plan, Orem, UT

University Mall Urban Infill Plan, Provo, UT

Academic

University of Kentucky, Bachelor of Architecture

University of Florida, Bachelor of Arts

Affiliations and Service

Affiliations and Service: Registered Architect, Kentucky (#4170), Florida (AR# 94985)

Congress for the New Urbanism (CNU)

U.S. Green Building Council (USGBC), LEED Accredited Professional

B. OUTLINE OF QUALIFICATIONS - DPZ



Judith I. Bell, CNU-A LEED AP - Senior Planner/Designer

Judith I. Bell is a planner and urban and architectural designer with twelve years of experience in a variety of project types, from regional plans and new community master plans, urban revitalization and infill plans, and design guidelines and zoning codes. She has participated in projects in North and South America, the Caribbean, Europe and China, and she has lectured on the New Urbanism and the SmartCode. She also contributes to the firm's publications and marketing process by improving and streamlining reports, book layouts and presentation graphics. Judith is fluent in both English and Spanish, received her Bachelors and Masters degrees in Architecture from the University of Miami and is a LEED-accredited professional.

Selected Projects

Windward Pointe, MI Master Plan

City of Pontiac, MI - CNU Legacy Charrette, Downtown Revitalization Master Plan Miami 21, Vision Plan and Form-Based Code, Miami, FL

Reinvent Phoenix, Multiple Transit District Master Plans and SmartCode, Phoenix, AZ City of Charleston, The B.A.R Process, Charleston, SC

Bull Street, Campus Redevelopment, Community Master Plan, Form-Based Code, Columbia. SC

New Town St. Charles, Community Master Plan and Urban Regulations, St. Charles, MO Scottish Sustainable Communities Initiative Charrette Series, Regional Visioning, Scotland, UK: CNU Charter Award, 2013

Chapelton of Elsick, Community Master Plan & Urban Regs., Aberdeen, Scotland, UK Grandhome, Community Master Plan, Aberdeen, Scotland, UK

City of Charleston, The B.A.R Process, Charleston, SC

Ave Maria School of Law, Campus Master Plan Exploration, Naples, FL

Olowalu, Community Master Plan and Urban Regulations, Maui, HI

Alys Beach, Community Master Plan, Walton County, FL

Beachtown New Village, Community Master Plan, Galveston, TX

The Land Urban Infill Master Plan, Tulsa, OK

River District (East Fraserlands), Urban Infill Master Plan and Code, Vancouver, Canada Southlands Master Plan, Tsawwassen, British Columbia, Canada

Village at Niagara on the Lake, Community Master Plan & Urban Regs., Toronto, Canada Big Bay Point Resort, Village Master Plan and Urban Regulations, Inisfill, Ontario, Canada

Porta Norte, Community Master Plan and Code, City of Panama, Panama Schooner Bay, Prototypical Houses, Great Abaco Island, The Bahamas

Xi Shui Dong, Urban Infill, Wuxi, China

Marina Rio Lujan, Infill Village Plan, Tigre, Argentina

Academic

M. Architecture in Urban Design, University of Miami, FL 2004 B. Architecture, cum laude, Minor in Business Administration, 2003 University of Miami, FL

Affiliations and Service

Registered Architect, Florida State Board of Architecture and Interior Design AR 99161 CNU-Accredited Professional, Congress for New Urbanism LEED Accredited Professional, US Green Building Council

Selected Publications and Lectures

2014 - Presen	t Guest Juror, University of Miami School of Architecture
2012	Graphics Editor, Garden Cities: Theory & Practice of Agrarian Urbanism,
	(The Prince's Foundation)
2011	Lecturer, Smartcode Calibration 202, Congress of New Urbanism
	(CNU 19), Madison, WI
2010	Lecturer, "Principles of New Urbanism", Universidad Americana de
	Asunción, Paraguay
2010	Contributor, Sprawl Repair Manual, (Island Press)

B. OUTLINE OF QUALIFICATIONS - REFERENCES

Team Leader Reference - Matt Lambert, Partner and Project Manager

City of Phoenix, Arizona

Scope: Reinvent PHX; Urban Infill, Transit-Oriented Development, Form-Based Code; Planning, Urban Design, Coding, Green Infrastructure Planning and De-

sign; Community Engagement

Date: 2012-2015

Contact: Katherine Coles, Planner

Telephone: 602-534-9938

Email: katherine.coles@phoenix.gov

DPZ CoDESIGN References

City of Pontiac, Michigan

Scope: Downtown Visioning and Master Plan, with Community Outreach

Date: 2017

Contact: Jane Bais DiSessa, Deputy Mayor, City of Pontiac

Email: jbais-disessa@pontiac.mi.us

Telephone: 248-758-3322

City of Kirkwood, Missouri

Scope: Master Plan and Parking Study, with Community Outreach

Date: 2017

Contact: Jonathan D. Raiche, AICP, City Planner

Telephone: 314-984-5926 Email: raichejd@kirkwoodmo.org

City of Derby, Connecticut

Scope: Revitalization Plan, Community Outreach and Zoning Code Adjustments.

Date: 2016

Contact: Lynn DiGiovanni, Previous Project Manager and Mayor's Advisor

Telephone: 203-650-5599 Email: digiovannil@luchs.com

City of Miami, Florida

Scope: City-wide Zoning Code Overhaul; Planning and Land Use, Urban Design,

Zoning/Coding, Transportation/Infrastructure, Community Engagement

Date: 2004 - 2010

Contact: Manny Diaz former Mayor of Miami

Telephone: 305 416 3180

Email: manny@lydeckerdiaz.com



Offices: 240 Martin Street Birmingham, Michigan 48009 Tel: 248 642-4800 Fax: 248 642-5758

President: Robert J. Gibbs, AICP, ASLA, CNU-A

Firm Profile

Gibbs Planning Group (GPG) is a Michigan corporation, founded in 1988. GPG offers urban planning, landscape architectural and real estate market research services for hotels, office, residential and retail developments. GPG's expertise allows us to formulate and refine a proven and focused approach to accomplish the market research. GPG is dedicated to providing practical, actionable results, which reflect economic development realities and not just theoretical research.

GPG has a broad range of both private and public-sector experience across North America. Public urban retail consulting clients include: Alexandria, Bay City, Birmingham, MI, Cambridge, Charleston, Chicago, Fargo, Kalamazoo, Grand Rapids, Houston, Knoxville, Madison, Mackinac Island, Marquette, Miami, Palm Desert, Petoskey, Portland, Troy, Traverse City and Seattle.

GPG's private sector clients include EDS, Pulte Homes, Rosemary Beach, Steiner Associates, The St. Joe Company, The Taubman Company, Simon Property Group and the Walt Disney Company. GPG has also conducted market research for Brown University and the Universities of Pennsylvania and Miami. GPG has provided consulting services for over 500 town centers and communities across the United States, Central America, Europe and the Pacific Rim.



Gibbs Planning Group - Robert J. Gibbs, APA, CNU Commercial Real Estate Advisor

Robert Gibbs serves as GPG's president and managing director. Gibbs is considered one of the foremost urban retail planners in America. For more than two decades, his expertise has been sought by some of the most respected mayors, renowned architects, and successful real-estate developers in the country. Profiled in The New York Times, The Wall Street Journal, and Urban Land, Gibbs has, writes The Atlantic Monthly, "a commercial sensibility unlike anything possessed by the urban planners who usually design downtown-renewal efforts." He is also a recognized leader in the New Urbanism, having pioneered the implementation of its environmentally sustainable principles of Traditional Town Planning and Smart Growth.

For the past 30 years, Gibbs has been active in developing innovative yet practical methods for applying modern trends in commercial development to more than 400 town centers and historic cities here and abroad. He also planned Michigan's first ten New Urban communities and Form Based Codes. A speaker at the First Congress of the New Urbanism in 1992 and twenty subsequent CNUs, Gibbs lectures frequently throughout the country. He is the author of Principles of Urban Retail Planning and Development and the Retail Module of the SmartCode and has contributed articles to numerous books and publications. For the past 22 years, he has taught "Urban Retail Planning" in the Executive Education Program at the Harvard Graduate School of Design. In 2012, Gibbs was honored by the Clinton Presidential Library for his life's contributions to urban planning and development, and by the City of Auckland, New Zealand for his planning innovations.

Gibbs serves as president, supervising all operations, planning, and research

Selected Projects

Birmingham, MI
Holland, MI
Corridor, Marquette, MI
Boyne Resort, MI
Grosse Pointe, MI
Farmington, MI
Downtown Des Moines, IA
Downtown Hartford, CT
Florida Hosp., Orlando, FL
Freshfields Village, SC
High Street, Atlanta, GA
Indian School Rd. Transit
District, Phoenix, AZ

Kennesaw, GA
Marquette Third Street
Cuyahoga Falls, OH
Niagara-on-the-Lake, ON
Palm Beach Gardens, FL
Panama Pacifico,
Panama, Central America
Patrick Sq., Clemson, SC
Sarasota, FL
Seabrook, WA
South Memphis, TN
Stonecrest Mall, GA
South Bend, IN

Academic

Master of Landscape Architecture, University of Michigan - Ann Arbor Bachelor of Arts in History, Oakland University, Auburn Hills, Michigan

Affiliations and Service

American Institute of Certified Planners
American Planning Association
American Society of Landscape Architects
Congress for the New Urbanism, Charter Member
CNU-Michigan, Board Member
Form Based Code Institute, Board Member
Michigan ASLA
Urban Land Institute
NCI Charrette System
Form-Based Code Institute



Representative Market Analysis Experience

Bangor Township, MI Clemson, SC Conyers, GA Detroit Fairgrounds, MI Downtown Jackson, MI Fresno, CA Hilton Head, NC Las Cruces, NM Leander, TX Montclair, CA Muskegon, MI Pittsboro, NC Santa Cruz, CA Savannah, GA Troy, MI Wilsonville, OR

Andrew L. Littman, J.D., CNU-A Director of Research

Email: andrew@gibbsplanning.com

Andrew Littman serves as Director of Research at GPG where he oversees its hotel, office, residential and retail market research for cities and new town centers across the country. Prior to joining GPG in 2016, Andrew practiced law (initially in private practice and later as a staff attorney at the Wayne County Circuit Court) and then worked as a broker at Marcus & Millichap.

Andrew is a graduate of Skidmore College, the Moritz College of Law at The Ohio State University and obtained a graduate certificate in real estate development from the University of Michigan. He is a member of the State Bar of Michigan and the Congress for the New Urbanism, as well as being a licensed real estate salesperson.

Gibbs Planning Group

May 2016 - Present

Relevant Training

Completed Harvard University Graduate School of Design class "Urban Retail: Essential Planning, Design, and Management Practices".

Education

University of Michigan – Ann Arbor
Taubman College of Architecture & Urban Planning Graduate
Certificate in Real Estate Development
The Ohio State University
Moritz College of Law
Juris Doctor Skidmore College
Bachelor of Arts in Government

Memberships

State Bar of Michigan Congress for the New Urbanism graduate



David N. Mangum, CNU-A, LEED APND Director Urban Planning & Design

Email: david@gibbsplanning.com

David Mangum serves as GPG's Director of Urban Design and Planning and has been intricately involved in GPG's urban design and town planning efforts, market research and charrette leadership. David was recently project manager and head planner for GPG's Troy Town Center master plan, a 100-acre mixed-use walkable community planned for the city's existing civic center.

Recent projects include Boyne Resorts, Detroit Fairgrounds, Farmington, Frankenmuth, Grosse Pointe, Highland Park, Holland and new mixed-use town centers for the cities of Troy, Warren and Wixom, MI; David has also consulted for Nob Hill District of Albuquerque, NM; Cuyahoga Falls OH; Hot Springs, AR; Midtown Omaha, NE; Panama Pacifico in Panama, Central America; Sarasota, FL; Uptown Normal, IL; and South Bend, IN. He spearheaded alternative master plan projects for city clients Fort Wayne, IN; Three Rivers, Troy and Wixom, MI; and Longwood, FL, and has helped organize and lead charrettes for East Lansing, Marquette, Oak Park, Palmer Park (Detroit), and Woodward Avenue, MI.

David has given extensive public lectures and workshops and has also presented and participated in panel discussions at the "1st Moscow International Forum- Culture: A Look into the Future" on the contemporary integration of urban retail formats in modern cities.

Gibbs Planning Group

May 2013 - Present

Presentations

The 1st Moscow International Forum - Culture: A Look into the Future: "Urban Retail Planning Principles & New Trends in Commercial Development" 2014 CNU 22 - The Resilient Community: "Retail Success: Rebuilding Cities & Towns" 2014

CNU 26 - Surviving the Retail Apocalypse

Relevant Training

NCI Charrette System Training, December 2013
Form-Based Code Institute, November 2013 (Courses 101e & 301)
MI Place Initiative, October 2013
Placemaking Strategy Development Trainer

Education

Wayne State University
Department of Urban Studies & Planning
Master of Urban Planning
University of Michigan - Ann Arbor
Taubman College of Architecture & Urban Planning
Bachelor of Science in Architecture

Memberships

American Planning Association (Michigan Chapter) U.S. Green Building Council (Detroit Regional Chapter) Congress for New Urbanism

Publications & Awards

MIASLA Award of Merit: Palmer Park Master Plan
Michigan Association of Planning Award of Excellence: Marquette Third Street Master Plan
Crain's Detroit Business
Detroit Free Press
SITES

Planning and Urban Design

Alternative & Interim Master Plans, S. Fort Wayne, IN Chandler Crossings Master Plan, Lansing, MI Eddington Farms Master Plan, Rochester Hills, MI Fallen Timbers Master Plan, Marietta, OH Frankenmuth, Michigan Gateway Innovation District, Lansing, MI Historic Hospital Master Plan, Three Rivers, MI Palmer Park Master Plan. Detroit, MI Retail Implementation Strategy: Longwood, FL Shelby Town Center, Shelby Twp., MI Troy Town Center, Troy, MI Warren, MI Streetscape Plan Wixom, MI Town Center, Woodward-I 696 Complete Streets Analysis, R.O., MI

Representative Market

Analysis Experience Boyne Resort, MI Cuyahoga Falls, OH Downtown Des Moines, IA Downtown Hartford, CT Farmington, MI Florida Hosp., Orlando, FL Freshfields Village, SC Grosse Pointe, MI High Street, Atlanta, GA Historic Richmond Town, Staten Island, NY Holland, MI Indian School Rd. Transit District, Phoenix, AZ Kennesaw, GA Marquette Third Street Corridor, Marquette, MI Niagara-on-the-Lake, ON Palm Beach Gardens, FL Panama Pacifico, Panama, Central America Patrick Sq., Clemson, SC Sarasota, FL Seabrook, WA South Memphis, TN Stonecrest Mall, GA South Bend, IN S. Fort Wayne, IN

B. OUTLINE OF QUALIFICATIONS - JACOBS



Firm Profile

Jacobs is a multidisciplinary firm offering a comprehensive range of master planning, engineering, environmental, civil/site, and other professional services extending from the initial analysis phase of a project through design, bidding and construction. Founded in 1947, we serve clients in both private and public sectors, including municipalities, corporations, and government agencies. Our Midwest offices include Detroit, Columbus, Chicago and St. Louis.

Our Infrastructure Planners and Engineers provide an array of services including:

- Parking analysis and design
- Roadway and traffic signage
- Bridges/Structural Design
- Streetscapes
- Site development
- Recreational trails and bicycle paths
- Utilities
- Intelligent Transportation Systems (ITS)
- Traffic studies and modeling
- Interchanges
- Drainage and flood protection
- Transit

Jacobs is working with clients to evaluate the changing impacts of new forms of transportation. These new forms of transportation are reshaping how we think about infrastructure planning, design, and construction to accommodate technologies like ride sharing, connected and autonomous vehicles, and automated transportation systems





Adam James Garms, AICP Transportation Planner

Adam Garms' transportation experience includes traffic control plans, data collection, travel demand and traffic simulation modeling, construction staging alternatives, and parking studies. He has been involved in the planning and design of Geographic Information Systems (GIS) and Intelligent Transportation Systems (ITS) He also has experience with traffic signal design and sign design. He has worked extensively with ArcGIS, ArcPad, TransCAD, Cube, VISUM, Microscopic Transportation Simulation Model (MITSIM), VISSIM, SimTraffic, SYNCHRO, Highway Capacity Software (HCS), aSIDRA, Turbo Architecture, MicroStation, AutoCAD, and GuidSign

Selected Projects

Kirkwood Downtown Master Plan, Kirkwood – Kirkwood, MO. Transportation Planner conducted an analysis of the current and future parking supply and demand to determine the sufficiency of the parking system through an inventory of the existing system, the identification of deficiencies, and the identification of possible improvement solutions. Adjustments to the zoning codes and modifications to the parking systems where included as part of the recommendations. (2017-2018)

Doniphan Drive Corridor Study, TxDOT – El Paso, TX. Transportation Planner using the El Paso MPO's travel demand model to forecast traffic volumes along the Doniphan Drive corridor from Racetrack Drive to the New Mexico border. The demographics in the travel demand model were modified for a redevelopment scenario and the roadway network was expanded to include additional intersections. The forecasted traffic volumes were used as part of the process to develop future traffic volumes for the project corridor. (2016 – present)

Master Plan Update, Webster University – St. Louis, MO. Transportation Planner evaluating vehicular circulation, pedestrian circulation, and parking for existing conditions and proposed future conditions. Proposed several traffic calming methods for campus streets and travel demand management techniques. Developed parking forecasts for proposed future conditions. ArcGIS was used to produce maps of the vehicular/pedestrian circulation and existing parking conditions. (2011-2012)

Traffic Operations Study, Missouri DOT – Troy and Moscow Mills, MO. Transportation Planner developing a SYN-CHRO model used for operational analysis roadway network, including eight miles of divided highway and ten miles of arterial/collector roads in east central Missouri. The model was used to determine capacity issues and to test various mitigation alternatives. (2005)

Technical Papers/Publications

"Data on the Fly" article published in Roads and Bridges magazine, April 2007

"Comprehensive Use of Semipermanent Dynamic Message Signs for Regionwide ATIS Programs" at Transportation Research Board 86th Annual Meeting (January 2007)

"Access Management Plan and Program for Des Moines, Iowa, Metropolitan Area" at Transportation Research Board 85th Annual Meeting (January 2006)

"Development and Calibration of a Large-Scale Microscopic Traffic Simulation Model" at Transportation Research Board 83rd Annual Meeting. Published in Transportation Research Record: Journal of the Transportation Research Board 1876, December 2004 (January 2004)

Academic B.S., Community and Regional Planning, Iowa State University (Ames), 2002

Affiliations and Service

American Institute of Certified Planners, 2005 (#136126)
Indiana DOT NEPA and CE Certified, 2014
TxDOT Pre-Certification Categories: 1.3.1 and 1.4.1
American Planning Association (APA)
Transportation Engineering Association of Metropolitan St. Louis

Transportation Engineering Association of Metropolitan St. Louis (TEAM STL) Board Member Institute of Transportation Engineers (ITE)

B. OUTLINE OF QUALIFICATIONS - JACOBS



John Wirtz, PE, PTOE Transportation Engineer

John is a project manager with over 13 years of traffic engineering and transportation planning experience. He is passionate about multi-modal transportation, complete streets, and traffic safety; and has served as a guest lecturer for a graduate level Complete Streets courses at the University of Illinois at Chicago and the Illinois Institute of Technology. John has a deep understanding of traffic engineering for urban streets due to his four-year tenure as an on-site consultant for the Chicago Department of Transportation. He has also worked on various NEPA studies, including environmental impact statements (EIS) for major freight and transit projects. As Project Manager, John has led the design of over 35 miles of protected bike lanes and buffered bike lanes as part of CDOT's Streets for Cycling Phase I/II project. John's strengths include data analysis, creative engineering solutions, and technical writing.

QUALIFICATIONS EDUCATION

M.S., Transportation Engineering, Northwestern University, 2004

B.S., Civil Engineering, The Ohio State University, 2002

REGISTRATIONS/ CERTIFICATIONS

Professional Engineer:

IL #062-060954 (2008, Expires 11/30/2017)

Certified Professional Traffic Operations Engineer, 2010

MEMBERSHIPS AND AFFILIATIONS

Institute of Transportation Engineers Illinois Section, President (2017), Vice President (2016), Secretary (2015), Director of Operations (2011-2015)

ITE 2016 Midwestern District Conference Planning Committee, Technical Program Co-Chair

Illinois Complete Streets Coalition (2016-Present)

Illinois Safe Routes to Schools Task Force (2006-2008)

Transport Chicago Conference Planning Committee, Vice President

Areas of Expertise

- Complete Streets Planning and Design
- Traffic Operations Analysis
- Crash and Safety Analysis
- On-Street Bicycle Facility Design
- Streetscape Design
- Synchro Traffic Modeling
- Project Prioritization
- NEPA/Environmental Analysis
- Technical Writing

Selected Projects

Milwaukee Avenue / Logan Square Phase I and II – Chicago, IL Title/Role: Project Manager 04/2017 to Present,

Scope: Preliminary engineering and final design services for a 1.3-mile segment of Milwaukee Avenue, including the roadways surrounding historic Logan Square. The scope includes reevaluating a previous study to incorporate complete streets elements, and a once-in-a-generation opportunity to redesign Logan Square.

Western Avenue Streetscape Master Plan – Chicago, IL Title/Role: Project Engineer 04/2010 to 05/2013

Scope: This project included a 3.5-mile segment of Western Avenue in Chicago's Beverly and Morgan Park neighborhood. The primary goal of the study was to recommend streetscape improvements to improve the walkability of the area and create a more vibrant local business district in an area that is currently largely auto-oriented.

Chicago Streets for Cycling Phase I and II – Chicago, IL Title/Role: Project Manager 02/2013 to 11/2017 Scope/Description: The City's goal was to create 100 miles of improved bike lanes. Jacobs has helped CDOT meet that goal through the design of 35.3 miles of buffered and protected bike lanes in 29 separate corridors.

Red Line Extension Project Environmental Impact Statement – Chicago, IL Title/Role: Transportation Planner 04/2012 to 12/2013 Scope/Description: A joint venture team to complete an Environmental Impact Statement for several alternatives to extend public transit service south from the existing 95th Street Red Line Terminal to the far south side of Chicago, including two heavy rail transit (HRT) corridors and one bus rapid transit (BRT) corridor.



Firm Profile



McKenna's downtown Northville, Michigan headquarters – a repurposed Ford Motor Company plant designed by Albert Kahn, built in the 1930s. Our work spaces reflect McKenna's commitment to our people, our communities, sustainable design and the rich technology heritage of the Midwest.

McKenna's team of talented planning, design and building professionals help municipal leaders develop and maintain communities for real life. From street festivals, neighborhood parks, and storefronts, to parking spots, coffee shops, and farmers' markets, we want your community to thrive. Headquartered in Northville with offices in Detroit and Kalamazoo, Michigan, McKenna provides planning, zoning, landscape architecture, community and economic development and urban design assistance to cities, villages, townships, counties, and regional agencies, as well as select private clients. Our success can be measured by the physical improvements to hundreds of McKenna client communities, and by our 40-year record of client satisfaction and on-time, on-budget delivery.

McKenna currently provides project services to more than 85 communities and private land investors in Michigan, Ohio, Kentucky, Indiana, and Illinois. Anticipating and responding to change is a major distinction of McKenna's practice. McKenna's innovation and depth of experience is a resource for public and private decision-makers; we are a corporation of roughly 20 planners, urban designers, and landscape architects formed under the laws of Michigan on May 2, 1978.

HEADQUARTERS

235 East Main Street Suite 105 Northville, MI 48167

O 248.596.0920 **F** 248.596.0930

E info@mcka.com

WEST MICHIGAN

151 South Rose Street Suite 190 Kalamazoo, MI 49007

O 269.382.4443 **F** 248.596.0930

E info@mcka.com

DETROIT

28 West Adams Street **Suite 1000** Detroit, MI 48226

F 248.596.0930

O 313.888.9882 E info@mcka.com

MCKA.COM

Areas of Service

Community Planning

- Master Plans (Cities, Villages, Townships, Counties and Regions)
- · Neighborhood Preservation Plans
- · Redevelopment Plans
- · Corridor Plans
- Downtown Plans
- · Growth Management Plans
- · Park and Recreation Plans
- · Capital Improvements Programs
- · Community and Fiscal Impact Analysis
- Waterfront Planning
- · Open Space Planning
- · Historic Preservation Plans
- Transportation and Parking Plans
- · GIS Analysis and Alternative Testing
- Access Management

Economic Development

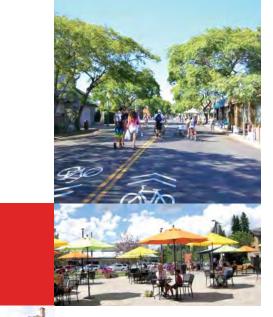
- Public/Private Partnerships
- Brownfield Redevelopment Planning
- Downtown Redevelopment Action Plans
- · Corridor Redevelopment
- Tax Increment Finance Plans
- · Grant Applications
- Redevelopment Project Management
- Market Studies: Retail, Commercial, Residential, Industrial, Institutional
- · Redevelopment Financing Assistance
- Land Assembly/Eminent Domain Assistance

Building Department Administration

- · Zoning Administration
- · Building Code and Zoning Enforcement
- · Building Inspection
- Electrical, Mechanical and Plumbing Inspections
- · Property Maintenance and Housing Inspection
- · Landscape Construction Observation
- Code Enforcement
- · Compliance with State
- · Department Management Plans

Parks and Recreation

- · Parks and Recreation Master Plans
- · Park Design (neighborhood, community, regional)
- Ball Field Planning and Design
- · Park and Recreation Facilities Design
- Bikeway and Trail Planning and Design
- Grant Applications
- · Public Participation
- Universal and ADA Accessibility
- · Park and Recreation Furnishings



On-Site Management Services

- · Zoning and Planning Administration
- Tax Increment Finance Authority Management
- · Downtown Development Authority Administration
- · CDBG Administration
- · Housing Rehabilitation
- · Project Management Capital Improvement Projects
- Redevelopment Project Administration
- · Community Development Administration
- Economic Development Administration

Development Codes

- Zoning Ordinance
- · Zoning Ordinance and Resolution Review and Preparation
- Continuing Advisory Services to Elected and Appointed Officials, Planning and Zoning Commissions, and Boards of Appeal
- · Subdivision and Condominium Regulations
- Form-Based Codes
- Environmental Regulations Wetlands, Woodlands
- · Expert Witnessing and Court Testimony on Zoning
- Sign Regulations
- · Annexation Advisory Assistance
- · Sex-Oriented Business Regulations and GIS Testing
- · Open Space Regulations
- Planning and Zoning Code Training Seminars
- On-Site Zoning Administration

Complete Streets and Transportation Planning

- · Complete Streets Policy Development
- · Complete Streets Design Guidelines
- · Complete Streets Procedure and Implementation
- · Corridor Plans
- · Streetscape Plans
- · Bicycle & Pedestrian Plans
- · Bicycle Parking Plans
- · Bicycle Sign Plans
- · Bike Share Feasibility Studies
- · Intersection Design & Crossing Plans
- · Zoning and Regulatory Review
- · User Maps and Wayfinding Studies
- Transportation Master Plans
- · Site Plan Review of Transportation Facilities
- · Circulation Studies Vehicles and Pedestrian
- · TOD Studies
- · Education and Training
- Transportation and Parking Plans
- · Access Management
- Parking Studies

Public Participation (NCI Certified)

- · Charrettes
- · Hands-on Workshops
- · Focus Groups
- · Roundtable Discussions
- · Surveys (telephone, online, direct mail)
- · Public Hearings
- Open Houses
- Interactive Citizen Advisory Committees
- · Youth Outreach
- · Community Walks and Bike Rides
- Pop-Up / Storefront Workshops
- · Consensus Building
- · Participatory Decision-Making
- · Interviews (one-on-one, intercept)
- · Community Preference Surveys

Community Development

- · HUD CDBG Administration
- · Analysis of Impediments to Fair Housing
- Environmental Review Records
- · Consolidated Plans
- · Elderly Housing Assistance
- · Five Year and Annual Action Plans
- CDBG Program Planning and Applications
- · Housing Rehabilitation Administration
- Market Studies Market Rate, Elderly and Assisted Housing
- · Housing Market Studies (MSHDA approved)

Urban Design

- · Community Design Plans
- · Placemaking Strategies
- · Parks, Greens, Commons and Plaza Design
- · Streetscape Design
- Site Planning
- · Community Character Planning
- · Historic Park Design
- Computer Visualization (before/after)
- · Design Review
- · Site Evaluation and Selection
- · Design Manuals
- · Neo-Traditional Design (TND)
- Urban Form Pattern Books
- Mixed Use (residential, retail, office, public, institutional) Design
- Public Art

Sustainability Plans

- Sustainability Indicators Analysis, Evaluation Criteria, and Program Improvements
- · Develop Neighborhood Stabilization Plans
- Green Infrastructure Plan for Community's Public Property
- Walkable/Bikeable Audits and Implementation Plans
- Community Master Plan, Strategic Plan, or Capital Improvement Plan
- Plan for Low Impact Development (LID) Components
- · Local Planning and Zoning
- Access Management Plans for Transportation Corridors

Landscape Architecture

- Residential Development Plans (single family detached/attached; multi-family, elderly, mixed use, townhouses) Conventional & Cluster
- Site Analysis and Design
- Site Layout and Planning
- · Construction Drawings and Construction Observation
- Landscape Architecture (MSHDA-approved)
- Arborist Services (tree surveys and maintenance plans)
- · Greenways and Trail Planning and Design
- · Native Plant Landscapes
- · Wayfinding, Signs, and Interpretive Stations
- · Environmental Performance Standards
- · Public Art Development
- Public Space Design Greenways, Bikeways, Streetscapes
- Wetlands, Woodlands, Groundwater, Aesthetic, and Vista Protection Regulations
- Sustainable Landscape Design

Awards and Accolades





McKenna has been honored by its peers and public with planning and design awards. We take pride in consistently delivering exceptional planning and personal service to public officials across the Midwest.

2017 Award for Excellence in Transportation Planning, Michigan Association of Planning. Delhi Charter Township (Ingham County), MI – Realize Cedar: Urban Design Framework.

2016 Award for Excellence in Transportation Planning, Michigan Association of Planning. City of Livonia, MI – Bike/Walk Livonia: A Future Transportation Plan.

2011 Outstanding Implementation Project, Michigan Association of Planning. City of Grosse Pointe, MI – Downtown Revitalization Program.

2010 Site Design/Parks Award, Michigan Recreation and Park Association. Van Buren Charter Township (Wayne County), MI – Riggs Heritage Park.

2009 Outstanding Implementation Project, Michigan Association of Planning. Buena Vista Charter Township (Saginaw County), MI –Town Center Project.

2008 Merit Award, Outstanding Design, American Society of Landscape Architects, Michigan Chapter. Brighton, MI – Green Oak Village Plan.

2007 Planner of Year Award, Michigan Association of Planning. Phillip C. McKenna, AICP, PCP.

2007 Interactive Mapping Tool GIS for Everyone Award, Improving Michigan's Access to Geographic Information Networks (IMAGIN). River Rouge, MI.

2005 CAM Magazine Year End Special Issue, Construction Association of Michigan in recognition of outstanding facility planning and design. Flat Rock, MI – Community Center Site Design and Boardwalk.

2004 Innovative Park Resource Award, Michigan Recreation and Park Association.

Downriver (Southeast MI) Linked Greenways – Wayside Companion Trail Signage and Wayfinding Manual.

2004 Outstanding Small Business Award, Crain's Detroit Business, McKenna.

2002 MRPA Master Plan Award, Michigan Recreation and Park Association. Oakland County, MI, Orion Oaks County – Park Site (1,000 acre) Master Plan.

2001 Award for Landscape Architectural Design, Michigan Society of Landscape Architects Flat Rock, MI — Community Fields Ballfield/Community Park Complex.

2001 Outstanding Facility Design Award, Michigan Recreation and Park Association. Flat Rock, MI – Community Fields Ballfield/Community Park Complex.

2001 Award for Excellence in Comprehensive Planning- Large Jurisdiction, Ohio Planning Conference. Dayton, OH – West View Development Opportunity Redevelopment Plan.

1999 Outstanding Planning Project Award, Michigan Association of Planning & Michigan Society of Planning Officials. Hamburg Township (Livingston County), MI – Open Space Development.

1996 Outstanding Planning Project Award Michigan Association of Planning & Michigan Society of Planning Officials. Plymouth Charter Township (Wayne County), MI – Ann Arbor Corridor Plan Commercial Corridor.

McKenna and its planners and designers have also been selected for other awards including Crain's Detroit Business 20-in-their-20's; Crain's Detroit Business "Coolest Places to Work"; and the Michigan Business and Professional Association's The 101 Best and Brightest Places to Work in Southeast and West Michigan.



John R. Jackson, AICP, CNU, NCI

PRESIDENT

EDUCATION

Master of Urban Planning Taubman College University of Michigan **Bachelor of Environmental Design** Miami University, Oxford, OH

HONORS

Planning Excellence Award for Implementation of "Downtown Grosse Pointe Revitalization Program" City of Grosse Pointe, MI, Michigan Association of Planning.

Outstanding Planning Project Award for Open Space Development,

Hamburg Township (Livingston County), MI, Michigan Association of Planning and Michigan Society of Planning Officials.

PROFESSIONAL EXPERIENCE

Comprehensive Planning

Prepared comprehensive plans for rural and urban communities based upon community goals and land capability. Prepared zoning ordinances, capital improvement programs and regulatory mechanisms for communities from 4,000 to 60,000 populations.

Community Planning and Zoning

Directed preparation of the master plans, urban design plans, and updated zoning ordinances. Provided day-to-day advisory services on comprehensive planning, zoning, site design and subdivision regulations for municipal, legal and real estate clients.

Zoning

Prepared complete zoning ordinances, overlay districts, form-based standards, and comprehensive text and map amendments for cities, villages, and townships in Michigan. Advised legislative bodies, Planning Commissions, and Zoning Boards of Appeals on land use regulation and proposed development and redevelopment in a number of communities of various sizes and character. Prepared form-based and hybrid zoning ordinances for municipalities to promote quality predictable development.

Urban Design

Prepared and implemented regulatory instruments addressing architectural design, form-based standards, aesthetic character, historic preservations, site plan review, and streetscape design.

Economic Development Planning and Management

Provided planning and execution assistance in all phases of economic and community development and tax increment financing including planning, acquisition, rehabilitation, public improvements, citizen participation, financing and administration for redevelopment projects using DDA, TIFA, LDFA, and Brownfield mechanisms.

Real Estate Development

Created redevelopment strategies for single and multiple sites in Michigan communities. Tasks included performing economic and political/social feasibility studies, researching and developing appropriate use concepts for the site, and guiding the design process to complement the surrounding areas.

Central Business District Planning

Directed major urban design efforts for downtowns of cities, including retail, office, institutional, tourism, redevelopment, placemaking, circulation and parking planning and redevelopment financing.

Commercial Corridor Redevelopment

Directed preparation of corridor plans to revitalize older commercial strips and to accommodate public and private improvements through merchant and citizen involvement in the economic development process.

MEMBERSHIPS

American Institute of Certified Planners American Planning Association Michigan Association of Planning Congress for the New Urbanism Michigan Downtown Association Michigan Farmland and Community Alliance American Institute of Architects, Affiliate Member

B. OUTLINE OF QUALIFICATIONS - MCKENNA



Sarah Traxler, AICP, NCI

VICE PRESIDENT

EDUCATION

Master of Urban Planning Taubman College University of Michigan **Bachelor of Arts (with honors)** Sociology University of California at Santa Cruz

HONORS

Excellence Award for Implementation of the "Downtown Marketing and Strategic Plan" Buena Vista Charter Township, Michigan Association of Planning.

Outstanding Student Project Award for "New Directions for Vehicle City: a Framework for Brownfield Reuse" Michigan Association of Planning.

Raoul K. Wallenberg Scholarship Recipient

University of Michigan, Taubman College of Architecture and Urban Planning.

PROFESSIONAL EXPERIENCE

Comprehensive and Master Planning

Managed numerous master and comprehensive planning efforts for diverse Midwestern communities, including thoughtful public engagement, sustainable future land use analyses, corridor re-imagining, and housing typologies and planning, all with a focus on effective and easy-to-administer implementation strategies. Managed and prepared parks and recreation plans for diverse communities, focusing on the future of play, inclusive / universal design, and equity planning for the provision of parks and recreation in a contextualized manner.

Redevelopment Planning and Management

Managed urban and suburban redevelopment projects including project planning, land acquisition, relocation, citizen participation, budgeting and finance, grantsmanship, public improvements, site design, zoning, strategic planning, land disposition, and scheduling. Successfully functions as project manager for municipality acquiring vacant, blighted 380,000 sq. ft. shopping mall using eminent domain. Prepared a brownfield reuse strategy for a Brownfield Redevelopment Authority. Created an inventory of probable brownfields; crafted reuse goals; developed criteria to target areas where brownfield redevelopment could best fulfill reuse goals; and created frameworks for reuse in areas with the highest redevelopment potential. Reuse strategy recipient of a state planning award.

Zoning

Prepared complete zoning ordinances, overlay districts, form-based standards, and comprehensive text and map amendments for cities, villages, and townships in Michigan. Advised legislative bodies, Planning Commissions, and Zoning Boards of Appeals on land use regulation and proposed development and redevelopment in a number of communities of various sizes and character. Provided on-site administration of zoning and other land use and building regulations for a community of 25,000.

Real Estate Development

Created redevelopment strategies for single and multiple sites in Michigan communities. Tasks included performing economic and political/social feasibility studies, researching and developing appropriate use concepts for the site, and guiding the design process to complement the surrounding areas.

Neighborhood Planning

Managed and prepared Neighborhood Plans for Michigan and Indiana communities. Plan elements include housing and commercial market analyses, placemaking strategies, capital improvement prioritization, funding recommendations and implementation matrices.

Community Development

Managed annual Community Development Block Grant programs for three inner-ring suburbs (two entitlement communities and one Urban County program sub-recipient). Responsibilities included preparation of annual Action Plans, Environmental Review Records (ERRs), Consolidated Action Plan Evaluation Reports (CAPERs), applications to County for funding, and administration of projects, including Housing Rehabilitation. Administered Neighborhood Stabilization Program with \$1.65 M budget, including preparation of ERR, program and policy design, managing other consultants and project implementation.

MEMBERSHIPS

American Institute of Certified Planners American Planning Association Michigan Association of Planning International Council of Shopping Centers



M. Paul Lippens, AICP, NCI

DIRECTOR OF TRANSPORTATION AND URBAN DESIGN

EDUCATION

Master of Urban Planning Taubman College University of Michigan **Bachelor of Arts** Hampshire College

HONORS

Award for Excellence in Transportation Planning for "Realize Cedar: Urban Design Framework" Delhi Charter Township (Ingham County), MI, Michigan Association of Planning

Award for Excellence in Transportation Planning for "Bike/Walk Livonia: A Future Transportation Plan" City of Livonia, MI, Michigan Association of Planning

Implementation Award, 2013

Illinois American Planning Association

Best Practices Award, 2012

Illinois American Planning Association

PROFESSIONAL EXPERIENCE

Urban Design

Led the Indianapolis East 10th Street Urban Design and Gateway Plan to improve the pedestrian environment and promote walkable access and crossing areas. The plan defines parking and parking management for businesses and residences, as well as the creation of bicycle facilities. Plan recommends improved bus shelters and bus pull-offs and intersection traffic management and improved vehicular traffic flow. Developed design alternatives for balanced multimodal transportation, and corridor/district placemaking, as well as destination functions; district identity elements; and public open space with design recommendations, construction budgets and implementation strategies.

Complete Streets Policy and Implementation

Award winning author of the Complete Streets, Complete Networks Design Manual, which combines the physical planning of infrastructure with an institutional understanding of project management, funding and prioritization. The manual provides guidance on the implementation of complete streets policy and presents a structure for evaluating street design, mode prioritization, network optimization and placemaking. Also coauthored the Complete Streets Chicago: Design Guide - Chicago's, Complete Streets v2.0.

Bicycle and Pedestrian Plans and Safety

Led award winning bicycle and pedestrian planning in Livonia, Delhi Township, Frenchtown Township, and Paw Paw (Michigan) Evanston, Midlothian, Palos Heights and Winfield (Illinois) and Lowell (Indiana), as well as sub regional bike plans in Chicago suburbs. Studied sidewalk gaps, and recommended bike lanes, sharrows, trails, and protected bikeways. Improved crossing safety and intersection design for people walking, biking, and taking transit. Made network recommendations which considered traffic vehicular volume, roadway configuration, MMLOS, destinations, delay, directness, and public perception.

Trail Planning and Access Studies

Lead planner and designer for the Fort Wayne Downtown/South Central Area Connectivity Plan. Planned a network of non-motorized transportation options to support neighborhood residential development, equity, and accessibility to regional amenities. The network is highlighted by an urban greenway linear park loop. A greenway extends the current Rivergreenway system as an armature linking neighborhoods with shared recreational, cultural and commercial resources. Additionally, led design and access studies on the Des Plaines River Trail, the Illinois Prairie Path, and Chicago's world famous Lakefront Trail.

Multi-Modal Transportation System Planning and Design

Led multi-modal planning projects in Indianapolis and Carmel, Indiana, which initiated transportation systems to integrate bicycle, pedestrian and transit modes in a network of streets that form typology-specific corridors. Designed system to encourage development of a place-based transportation, principally pulling land use analysis, housing and neighborhood planning, economic development potential, and green infrastructure into the plan to assure a comprehensive approach to add value to residents.

MEMBERSHIPS

American Institute of Certified Planners American Planning Association

Michigan Association of Planning Congress for New Urbanism

CERTIFICATIONS

National Charrette Institute

Charrette Systems and Management and Facilitation





C. OUTLINE OF CONTRACTORS' EXPERIENCE - OVERVIEW

DPZ, Jacobs, Gibbs Planning Group, and Mckenna have strong track records of collaborating and providing master planning, urban design, zoning and coding services for various successful cities and downtowns; towns and town centers; and villages throughout the United States and internationally. These include multiple projects for the City of Birmingham and a number more in the surrounding region. The team possesses unparalleled experience working with various authorities, agencies, and municipalities, including, where required, in venues with a great degree of community engagement. In carrying public sector projects forward, we intensively coordinate stakeholders, agencies, and levels of municipal governments from work order through the approval processes.

The DPZ projects on the following pages comprise several recent planning efforts which are consistent with the goals of traditional pedestrian-oriented place making; sensitive, sustainable development; responsible economic growth; and integration/coordination with the local municipal framework. These include master plans projects that emphasized the importance of effective community engagement and information dissemination – a method that is critical with the interrelated planning, design, transportation, economic, and sociocultural issues typically associated with municipal development/redevelopment.

Similarly, our sub consultants project samples included herein highlight each firm's experience in similar municipal planning work and technical studies to that identified in this RFP. They include projects for the City of Birmingham as well as others in the region.



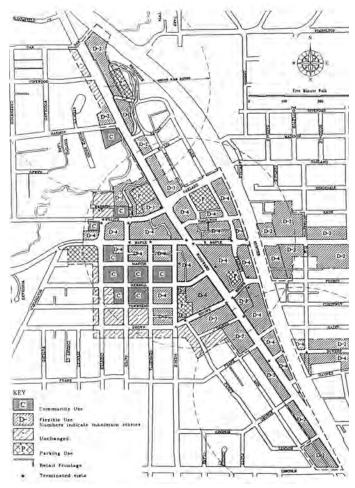








The DPZ Team has been involved over the past several decades in the planning and revitalization efforts for the City of Birmingham, MI.



Downtown Birmingham 2016 Regulating Plan

The Name 100 Th

Tenant Mix Plan

DOWNTOWN BIRMINGHAM 2016

Location: City of Birmingham, Michigan

Type: Master Plan

Year Design: 1996 Status: Adopted

During a week long charrette DPZ, together with local consultants Robert Gibbs and McKenna Associates, collaborated with the City of Birmingham to plan Downtown Birmingham to 2016. Benefitting from effective community engagement during the process the adopted plan served as a strategic guide though the next two decades of the City's development. It was designed to be broad and visionary, with tactical studies, designs, and partnerships to follow.

The Master Plan recommendations included:

- Downtown as a regional traffic destination, but not a traffic conduit.
- Birmingham to evolve gracefully into a small city, and not be held to the standards of a village.
- Decisions lead to mixed-use public spaces uncontaminated by suburban traffic & parking standards.
- Additional plans to safeguard local neighborhoods, with their small town character, from degradation.
- Design reflects Birmingham's preeminent position as a regional arts center, and not diminished by technocratic standards or economic determinism.









Illustrations depicting specific policies and interventions

BIRMINGHAM 2016 PLAN ASSESSMENT

Location: City of Birmingham, Michigan Type: Implementation Assessment

and Proposals

Year: 2014 Status: Complete

At the request of the City Commission and Planning Board, Andrés Duany returned to Birmingham in 2014, to review the Birmingham 2016 Plan's implementation. Over the course of three days, DPZ and consultant Bob Gibbs held meetings with authorities, stakeholders, developers, and residents. Responding to concerns, DPZ shared observations, made recommendations and emphasized the need to plan for the next generation. Building on the success of the Birmingham Plan a number of untapped opportunities were identified; including:

- Further improvements to the streetscape, infrastructure and civic spaces.
- Review and, when necessary, expand the parking
- Library Plaza Improvements.
- Short and medium interventions activate Shain Park.
- Complete the Booth Park Connector.
- A highway link connecting northeast and northwest.
- Transform 555 Building to create landmark gateway.



The quality of the streetscape was one of the issues assesed









A walking tour and stakeholder meetings allowed specific topics and locations to be examined and a way forward considered.



Downtown Master Plan supports the shared vision



Steps connecting the re-imagined Phoenix Center

PONTIAC CNU LEGACY PROJECT

Location: City of Pontiac, Michigan
Type: Downtown Revitalization Plan

Year Design: 2016

Status: Implementation in progress

Size: 190 acres

Contact: Jane Bais DiSessa,

Deputy Mayor, City of Pontiac

Each year, CNU's Legacy Charrettes work in the Congress host region to empower local leaders, advocates, and communities to implement New Urbanist principles and build places where people and businesses can thrive and prosper. In 2016, the City of Pontiac was selected as one of four projects commissioned that year.

The early analysis identified much of the urban fabric still intact, pioneering local entrepreneurs, and market demand ready for housing and commercial uses. What was missing was a coherent, continuous, pedestrian-friendly framework for businesses, shops, restaurants and citizens to flourish. During the Charrette the team met with many of the City leaders, local business owners, developers and members of the community. Enthusiasm was built around a shared vision to see Downtown improved, made pedestrian-friendly, opened up to investment opportunities and a broad mix of housing and other uses accommodated.

The Vision encompassed practical steps to revitalize Downtown Pontiac in a rational, phased process. The re-striping of streets to double the number of on-street parking, and making streets two-way again to help local businesses to be done right away; improving and reusing the Phoenix Center as a sports venue to begin soon after; the transportation recommendations be put in motion concurrently; a public market, pop-up retail and incentives for infill and redevelopment can come soon after.







Focus areas include short and medium term actions that underpins the overall Master Plan vision

FORT MEYERS DOWNTOWN PLAN

Location: Fort Myers, Florida Type: Downtown Plans Year Design: 2001, 1986

Status: Under Construction

Size: 540 Acres

Contact: Don Paight, Executive Director

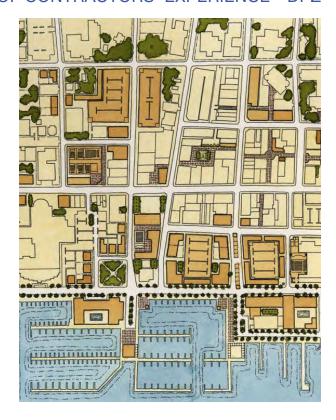
Downtown Redevelopment Agency

DPZ worked with Genesis Group to complete a master plan for this 540-acre study area in downtown Fort Myers. While the previous master plan, prepared in 1986, had succeeded in spurring reinvestment in the downtown area, the following years saw dramatic changes in the local politics and demographics. To address this new reality more effectively, the City retained DPZ to prepare a fresh and cohesive development program that could be implemented through public and private partnerships.

The DPZ master plan reflects a new way of approaching urban planning and development, one that views the collaboration of public and private actions as a continuous and evolving process that begins months before the design team's efforts and continues for years afterwards. The plan aims to identify general initiatives and specific projects that will maximize private investment while enhancing the public realm of downtown.

The master plan is to be used in conjunction with three separate documents: the SmartCode, the Fort Myers Retail Analysis, and the Downtown Fort Myers Streetscape Plan. The SmartCode is an alternative zoning ordinance that can be implemented as either a replacement to existing ordinances or as an optional alternative to function in parallel with existing ordinances.

The plan reflects 17 specific interventions. These are pilot projects that highlight areas the City should encourage in its efforts to improve the downtown.









Visualizations of steetscapes proposed by the Downtown Master Plan.

MIAMI21

Location: Miami, Florida

Scope and Services: City-wide Zoning Code Overhaul;

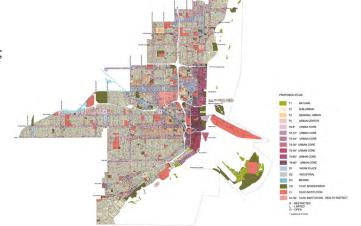
Planning and Land Use, Urban

Design, Zoning/Coding, Transportation/Infrastructure, Community Engagement

Date: 2004 - 2010 Size: 35 Sq. Miles Client Contact: Manny Diaz

Former Mayor of Miami

Lydecker Diaz



Responding to Miami's rapid growth, the City's Planning Department commissioned DPZ to embark on an unprecedented mission: a complete overhaul of the City's zoning code with the largest known application of a form based code.

The project name "Miami21" represents the "Miami of the 21st Century" and entails a holistic approach to land use and urban planning, broadening the scope of a traditional zoning code to become a truly comprehensive plan. Miami21 will provide a clear vision for the City that will be supported by specific guidelines and regulations to: address the public and private realm, create a more efficient permitting process, and provide a stable environment for investment.

Miami21 proposes dual yet distinct goals of conservation and development. Conservation goals are intended to preserve neighborhoods and historic site, create sustainable development through green building incentives, conserve energy through green initiatives, improve connectedness for walkability, increase access to natural environments and improve quality of life for residents. Development goals are intended to develop corridors to

function as transit-oriented centers, ensure predictable environment for growth and appropriate development, incentivize LEED and maintain future growth capacity of downtown.

Six elements, in particular, serve as the linchpins in the development of the blueprint: a Form-based Code, Economic Development, Transportation, Parks and Open Spaces, Arts and Culture, and Historic Preservation.

The project was a huge cooperative venture with many public meetings and meetings with the Office of Mayor Manuel A. Diaz, the Office of City Manager Pedro G. Hernandez, the Offices of City Commissioners, the Planning Department, the Office of Zoning, the Department of Economic Development, the Department of Capital Improvements and Transportation, the Office of the City Attorney, the Neighborhood Enhancement Team (NET), CitiStat, the Office of Communications, the Department of Public Works, the Department of Parks and Recreation, and the Department of Code Enforcement.

Miami21 was fully adopted – as DPZ had submitted it – in May 2010.

Awards

2014 Global Human Settlements Award in Planning and Design, Global Forum on Human Settlements

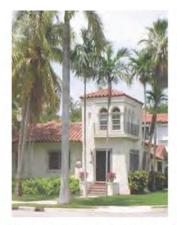
2014 AIA Institute Honor Award for Regional and Urban Design; The American Institute of Architects

2011 APA National Planning Excellence Award for Best Practice

2010 Driehaus Form-Based Code Award

2010 Paul Crawford Distinction for a Ground-Breaking Code

APA FL 2010 Award of Excellence, Best Practices Category

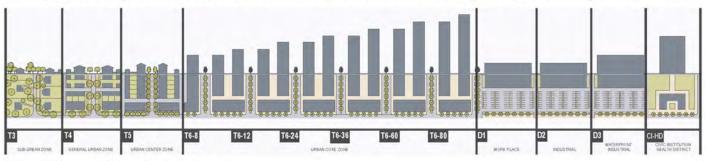








Goals depicted here: Neighborhood Conservation, Pedestrian Friendly Environment, Economic Vitality, Civic Space Accessibility, Historic Preservation



Miami 21 Transect Zones - Graphic Description





An inactive street can be transformed by removing large blank walls and creating walkable, active streets by bringing buildings closer to the sidewalk with active sidewalk storefronts and frequent entrances.





Mixed-use neighborhood corridors with medium densities provide jobs, neighborhood services, live-work options, and transit opportunities—all within walking distance of one another. In this example the transportation corridor goes from just being a way to get to a destination—to a destination in-and-of itself.

REINVENT PHOENIX

Location: 5 TOD Districts and Corridors in Downtown Phoenix, Arizona

Scope and Downtown Revitalization,

Services: Urban Infill, Transit-Oriented Development, Form-Based Code; Planning,

Urban Design, Coding, Green Infrastructure Planning and Design; Com-

munity Engagement

Date: 2013-2014 Size: Varies

Contact: Curt Upton, City of Denver, formerly City of Phoenix Planning and Devel-

opment Department









(Left): Illustration of the new plan proposals; (Middle); Excerpt from the proposed form-based code; (Right): One among a set of several proposed corridor transformations resulting from the form-based code

Beginning in early 2013, DPZ began the design, coding, and implementation plan for five TOD districts located along the existing Metro light rail corridor in the City of Phoenix.

As the prime consultant, DPZ lead a team with over a dozen national and local consultants; the DPZ Team also worked closely with the Gateway Steering Committee representing the local community, the City of Phoenix Planning and Development Department and other departments, agencies and organizations, as well as the City's partners, Arizona State University (ASU), and St. Luke Health Initiative.

The City of Phoenix started the process of defining a new vision for a more livable and equitable development future. The DPZ Team was privileged to be a part of this process and work with the City and its partners to create long-term, sustainable vision and plans for the five TOD Districts, and to help stimulate growth within them while also positively influencing the larger city.

The six main components of this vision include:

- Diverse and Affordable Housing
- Thriving Economic Development
- Green Infrastructure
- Balanced Land Use
- Connected Mobility
- Health and Vitality

The multi-year process included large scale planning, envisioning potential futures and best-use scenarios addressing land-use, transportation, utilities, affordability, and development regulations. The primary goal of DPZ's engagement was a new zoning code addressing land within 1/2 mile of light-rail stations.

Reinvent Phoenix has resulted in a number of small-scale interventions continuing to transform the city, as well as commitment to major thoroughfare reconfigurations now secured through CIP. The TOD code was adopted in July 2015.

DOWNTOWN KIRKWOOD MASTER PLAN

Location: Kirkwood, MO
Type: Master Plan
Status: Design / Adopted

Size: 275 Acres

Contact: Jonathan Raiche

City of Kirkwood

DPZ was commissioned by the City of Kirkwood, Missouri to do a downtown Master Plan and Parking Study. A full study of existing conditions, zoning regulations, potential development sites, demographics, and a complete market potential analysis was undertaken. These studies informed a week-long public charrette held in October 2017 in which a consensus downtown master plan was drafted. The Master Plan recommendations and proposed changes to the Zoning Code were approved in 2018.

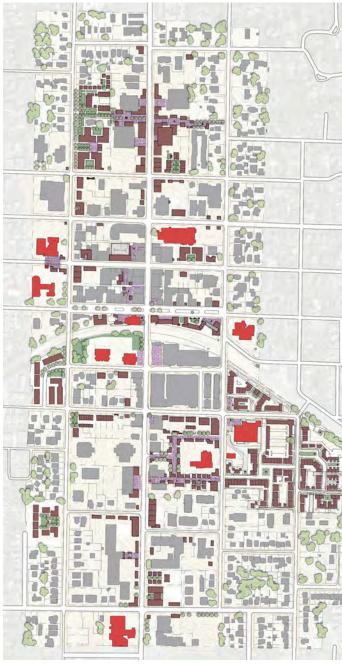
Following a recent Comprehensive Plan and based on a series of analyses looking at the zoning code, parking, and market helped shape the overall master plan. The master plan identified strategic locations for redevelopment opportunities and proposed methods for stitching the downtown fabric back together again.

Rebuilding the historic block structure, defining pedestrian priority streets, identifying parking strategies were key in the implementation of the downtown master plan for Kirkwood. Additionally, new building types were proposed that were missing from the region, due to constraints in zoning. These building types along with small revisions to the zoning code will allow residents to remain in the city as they age.

The master plan, while designed over private property, provided a unified vision forward for the city which residents and the city can utilize as they move forward in the redevelopment of their downtown.



A cross-block pedestrian passage



Full build-out plan



Visulaization of the code proposals

MIDTOWN OMAHA 2050

Location: Omaha, Nebraska

Scope and Services: Midtown Development Vision and Master Plan;

Planning, Urban Design, Preliminary Coding, Community Engagement

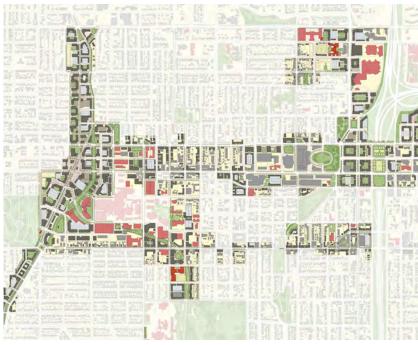
Date: 2016

Size: ~5 Square Miles

Client Contact: D.J. Thayer, Executive Director, International & Domestic Business Affairs







Midtown Vision 2050 – comprising 5 square miles of Omaha that stretch from downtown to Dundee, generally extending from 20th Street on the east to 48th Street on the west, and from Center Street on the south to Cuming Street on the north – serves as a framework for Midtown Omaha's growth, as shepherded by a new nonprofit group led by some of the city's largest employers in collaboration with DPZ. The planning proposals are aimed towards maximizing Midtown's potential by connecting its existing corporate and university campuses and neighborhoods, and filling in the gaps between them with new development designed to complement each other and support an urban lifestyle.

A main component of the plan is the introduction of a modern streetcar line down Farnam Street that would connect midtown, downtown and the riverfront. The plan envisions the establishment of neighborhood nodes with shops, restaurants, and offices sensitively transitioning to residential areas. Proposals also include the conversion of many one-way streets in the area to two-way traffic, as well as the narrowing of other overly-wide

streets and the addition of bike lanes and wider, pedestrian-friendly sidewalks. Last but not least, the plan also recommends revisions to city zoning regulations to create better design standards and more cohesive neighborhoods.

"Midtown Vision 2050 is a visionary plan that guides growth and redevelopment in midtown Omaha for the next several decades," said Ken Cook, chairman of Midtown 2050's board. Midtown 2050 is backed by Mutual of Omaha, the University of Nebraska Medical Center, Nebraska Medicine, Kiewit Corp., Creighton University, the philanthropic nonprofit Heritage Services, and the Midtown Neighborhood Alliance.

Midtown 2050 considers a more robust redevelopment of midtown as crucial to metropolitan Omaha's economic progress. Not only would it generate more activity and tax revenue in a half-empty part of the city's urban core, but it would be vital to attracting talented young employees and entrepreneurs.

DOWNTOWN WEST PALM BEACH

Location: West Palm Beach, Florida

Scope and Services: Downtown Master Plan and Form-Based Code;

Planning, Urban Design, Coding, Community Engagement

Date: 1993 Size: 700 Acres

Client Contact: Dana Little, Urban Design Director

Treasure Coast Regional Planning Council



This revitalization plan for the 700-acre area of downtown West Palm Beach was a collaborative process and involved twenty-two improvement initiatives that were underway before the April 1993 charrette began. The goal of the initial effort was to bring these disparate projects together and place them within a coherent context. The resulting master plan reinforces the unique character of each of the downtown neighborhoods, districts, and corridors; supports the improvements underway; describes additional improvements required to fight deterioration; and provides strategies to inspire confidence in a healthy urban fixture. Each action proposed by the plan is related to the following six strategies, produced during the planning process:

- 1. reinforce the identity of each neighborhood, district, and corridor,
- 2. balance vehicular and pedestrian comfort on down-town streets.

- 3. focus retail growth by area and type,
- 4. provide a regulatory framework for physical predictability.
- 5. encourage housing downtown,
- 6. identify sites for future civic buildings

The new code is simple and succinct. It promotes small-scale, incremental growth. The coding of buildings is based on building type rather than on an abstract floor-area ratio. In conjunction with the regulating plan, the height and physical configuration of a building is described in advance. The code and master plan have been adopted and are in the process of implementation. Immediate successes have been the rebirth of Clematis Street and the development of City Place. Both projects hinged on zoning ordinance changes introduced by the master plan. New projects based on the DPZ plan include a performing arts center and a library.

ALBUQUERQUE CENTRAL CORRIDOR TOD PLANNING STUDY

Location: Albuquerque, NM

Type: TOD

Status: Planning Study
Size: 1500 Acres +/Contact: Susan Henderson

Principal Town Planner



Downtown Albuquerque and EDo comprise downtown Albuquerque but are divided due to a rail line splitting the two down the middle. A master plan was done to bridge the two neighborhoods and allow them to support one another rather than complete against each other.

Central Avenue, the main east west spine, has several opportunities for development including activating the ground floors to provide a consistent, comfortable pedestrian experience. Development on the west is primarily revitalization opportunities around future transit stations while the east side (East Downtown) has become the tech hub of Albuquerque. This has increased interest in some of the surrounding underutilized parcels as potential infill opportunities.

The rail line which runs north/south and is the physical divide between the Downtown on the west and East Downtown has numerous underutilized parcels along it and with Innovate ABQ reinvigorating the neighborhood there are unique opportunities for small-scale develop-

ment along some of the vacant sites, facing the rail line. Some of this development would otherwise be unrealistic, by virtue of the size and scale. The rail line is an amenity to be capitalized on with development fronting it. Envisioned to be an arts distric with restaurants and outdoor seating along the promenade with the potential to include a BRT within the underutilized right-of-way, tieing Downtown to Old Town through a transit loop. The rail line provides the opportunity to stitch the core of the city back together.

During the workshop, all of the in-progress development projects and many of those parcels highly likely to develop were analyzed and illustrated with the Integrated Development Ordinance (IDO) metrics. Innovate ABQ alone projects approximately 600,000 square feet of new development across office, research, institutional, retail, hospitality, and residential uses, including nearly 400 student units. Outside of Innovate, approximately 800 residential units and 800,000 square feet of new non-residential development is possible.



DOWNTOWN SARASOTA

Location: Sarasota, FL

Type: Downtown Master Plan
Date: 2000 (Completed in 2001)

Contact: Peter Katz

Director of Smart Growth/Urban

Planning

Sarasota County, FL

The Transect board Regulating Flori

The Downtown Sarasota Master Plan was prepared by DPZ in conjunction with Cardinal Carlson + Parks, Hall Planning & Engineering and James Moore, in collaboration with the Sarasota CRA.

The Master Plan draws upon earlier plans for the downtown, including those of 1986, 1983 and John Nolen's plan of 1925.

This version's main contribution is an increase in precision, the assignment of priorities and the provision of tools for implementation - specifically a new form-based code. Since Sarasota is a relatively young city, the Master Plan and code will provide the guidance and discipline needed to bring the city into a period of graceful maturity.

Major themes in the new plan included:

- Connecting the downtown to the bay front
- A system of walkable streets
- A balanced transportation system
- · Walk-to-town neighborhoods
- Civic improvements
- Strategic, pragmatic implementation

To realize the city's motto, "A city of urban amenities with a small town feeling," it is necessary to create an urban downtown proper surrounded by small town neighborhoods. The study area of this plan includes the three inner-city neighborhoods, Rosemary, Gillespie Park and Park East, recognizing that together with the downtown proper they form an integral part of the pedestrian experience and must be conceived of as a single sector.

By designating each of the city's streets either 'A,' pedestrianoriented, or 'B,' auto-oriented, based on what currently exists, the Master Plan provides a guide for future growth.

Sarasota will be able to fulfill the potential of its existing street network, creating a cohesive and functional system that facilitates vehicular movement and at the same time creates a viable and pleasant system for pedestrians and bicyclists.



Street standards were prescribed to encourage street-level activity such as retail and restaurants; sidewalk design specifically allowed spillover dining creating a dynamic urban environment.





The form-based code created a wider mix of urban residential uses in downtown, including condominiums, apartments, townhouses and courtyard homes.

DOWNTOWN DORAL

Location: Doral, Florida

Type: Downtown redevelopment.

Sprawl Repair Urban Infill

Date: 2005

Status: Under Construction

Size: 120 Acres

Contact: Anna Codina Barlick, Codina

Partners



By revamping an out-of-date office park into a high-density, mixed-use development, the Downtown Doral project will provide the City of Doral with a central business and civic district. The City, which was independently incorporated in 2003, initially grew as a series of disparate parcels that included a world renowned golf club, isolated subdivisions, shopping centers, and a warehouse district. It never had a pedestrian-oriented core.

Responding to the City's growing population and need for an identifiable center, Armando Codina, now with Flagler Development Group, hired Cooper-Carry's Atlanta office to initiate a design for the conversion of a former industrial and office zone into a mixed-use downtown neighborhood. In August of 2005, DPZ was brought on board to conduct a charrette to refine the plan and draft the code documents.

Downtown Doral will replace one million square feet of office space with 2,840 residential units, over 1 million square feet of commercial space---including 180,000 sf of retail and 400,000 sf of new class "A" office space -- and civic features such as an elementary school, a library and a new City Hall. The current municipal cen-

ter is housed in one of the existing office buildings. The master plan preserves the existing public rights-of-way and underground infrastructure, yet introduces new structures, thoroughfares and public spaces. All of the streets will be scaled for the pedestrian, with high-density condominium towers rising above a steady podium of residential and retail uses that screen mid-block parking structures. All the main thoroughfares shall be lined with ground floor shops and/or townhouses.

A main feature in the Cooper-Carry design, a broad linear park called the Paseo Doral was reinforced in DPZ's charrette plan. The Paseo's greenway is on a cross-axis with Downtown Doral's new Main Street and is framed by townhouses in a manner reminiscent of Boston's Commonwealth Avenue. The plan also features a 4-acre City Park overlooked by the site for the new library. DPZ's regulating plan, urban regulations and thoroughfare standards were approved by the City in 2006 as part of a special downtown district zone. Together, these documents will dictate the size and placement of Downtown Doral's buildings. Construction is underway for the first residential tower by Perkins + Will.





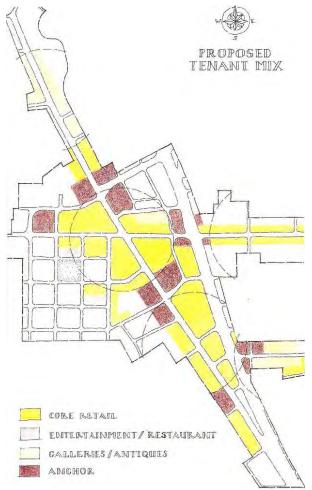
Gibbs Planning Group

EXPERIENCE

Urban intelligence

2016 Master Plan, Birmingham, Michigan





With the completion of a massive regional mall in the near vicinity, downtown Birmingham, Michigan was feeling the pressure of changing retail/shopping trends. The City decided to commission a planning study in an effort to nurture and enhance future downtown growth.

GPG, with McKenna Associates and Duany Plater-Zyberk, was hired to develop a downtown master plan. The team held a week-long Charrette in downtown Birmingham and conducted a series of public meetings and presentations while designing the City's future *in public*. From viable retail expansion quantities to proposals for mixed-use "liner buildings" to conceal parking decks, the planning study was comprehensive. The plan was approved by the City, and many of the recommendations, such as a renovated central city park and traffic calming measures in the North Woodward gateway are continually in the process of being implemented.

Principal: Robert Gibbs Client: City of Birmingham, Michigan Contact: Jana Ecker, Planning Director PO BOX 3001 Birmingham, MI 48012-3001

Tel: (248) 530-1090 Email: jeckerplanner@mainlink.net



C. OUTLINE OF CONTRACTORS' EXPERIENCE - GIBBS PLANNING GROUP

Gibbs Planning Group

EXPERIENCE

Urban intelligence

The Grosse Pointe Communities, Michigan



The Grosse Pointe Chamber of Commerce, with the cooperation of the five municipalities that make up Grosse Pointe, commissioned Gibbs Planning Group (GPG) to do a study of the community from a commercial, retail and restaurant perspective.

GPG conducted market studies for the four major commercial areas servicing the Grosse Pointes: Mack Avenue from Alter Road on the west to just past 8 Mile Rd./Vernier Rd., and three primary shopping areas along Kercheval Rd. commonly referred to as "The Park, The Village and The Hill." Exceptional public services, schools and parks, combined with several private clubs and four unique commercial areas, amount to a high quality of life enigmatic of the Grosse Pointes' metropolitan reputation.

GPG found that adding to the critical mass of retailers and restaurants in the four study areas could increase vibrancy in the commercial districts and further economic development within each study area as they evolve into desirable, mixed-use, urban places. The trade area demographics represent a pent up market for traditional main street commerce, furthering the potential for sustainable retail development. Leading categories of supportable retail growth are grocery stores, restaurants, pharmacy and department store merchandise.

The four study areas could presently support up to 563,200 additional sf of retail and restaurant development, generating as much as \$164.1 million in new sales. By 2021, household income growth could increase the total captured sales to \$172.4 million. Demand could partially be absorbed by existing businesses and/or with the opening of 165 to 225 new restaurants and





Client: Grosse Pointe Chamber of Commerce Contact: Jennifer Palms Boettcher, Executive Director 63 Kercheval, Suite 16, Grosse Pointe, Michigan 48236 Tel: (313) 881-4722

Email: jboettcher@grossepointechamber.com

C. OUTLINE OF CONTRACTORS' EXPERIENCE - GIBBS PLANNING GROUP

Gibbs Planning Group

EXPERIENCE

Urban intelligence

DOWNTOWN RETAIL ANALYSIS, Holland, Michigan



2014

GPG conducted a retail analysis for the City of Holland's Downtown. While historic charm, stable employment and exceptional infrastructure make downtown Holland a desirable location for local, regional and national retailers, the study proposed that just beyond some densely developed blocks, several advantageously located sites are suitable for infill or redevelopment.

A steadily increasing population in a fast-growing region, coupled with strong tourism and events, positions Holland for new commercial development to complement the existing supply of successful retailers and restaurants. GPG's market study identified and quantified the retail demand generated by residents, workers, students and a year-round supply of tourists, ultimately discovering opportunities for existing retailers to expand their presence or for new retailers to enter the market. Adding to the critical mass of retailers and restaurants downtown can further the broad appeal to tourists and contribute to increased expenditure within the downtown development district. Leading categories of supportable retail growth are restaurants, department store merchandise, apparel, furniture and jewelry.

GPG offered guidance in marketing and distributing the study, as well as equipping the DDA with a list of potential tenants to fill the retail gaps, and consequently, property owners have fully embraced the study.





Principal: Robert Gibbs Client: City of Holland Contact: Dana Kollewehr, Downtown Manager 44 West Ninth Street, Holland, Tel: (616) 928-0676 Email:D.Kollewehr@cityofholland.com

Gibbs Planning Group

EXPERIENCE

Urban intelligence

HISTORIC DOWNTOWN NAPLES, Florida







GPG first teamed with Duany Plater-Zyberk Architects (DPZ) in 1995 to develop a master plan that would turn downtown Naples into a more vibrant mixed-use city center. GPG discovered a significant pent-up demand for upscale residential, office, shopping and dining in the region. The demand was being suppressed by a lack of parking, local zoning codes and little incentive for property owners to redevelop. Naples elected to increase downtown density, building heights and its commercial area, and to attract more diverse retail and restaurants into the downtown areas.

Another market analysis was conducted in 2010, which made the following recommendations to enhance Fifth Avenue's commercial sustainability:

- Implement a Business Improvement District or similar for improved business retention, new business recruitment, expanded marketing and central management.
- Improve landscape lighting, parking design, and streetscape amenities.
- Expand marketing to include all local and national businesses (the website and publications list only association members).
- Conduct parking meter beta test to measure effectiveness of improved shopper parking in relation to retail sales.
- Encourage more outside dining areas and live entertainment for restaurants.
- Encourage business employees to park in parking garages by increasing the rate of on-street parking, by implementing a progressive parking ticket policy.
- Temporary pop-up stores in key locations/ vacant storefronts.

Principal: Robert Gibbs

Client: Fifth Avenue South Business Association Contact: Lou Vlasho, Property Owners' Steering Committee 700 Fifth Avenue South, Naples, Florida 34102 Tel: (239) 659-0040

Email: louvlasho1@comcast.net

Butler Township, OH
Butler Township Miller
Lane and North Dixie
Drive Plan

Butler Township, Montgomery County, OH

Owner:

Erica Vogel Township Administrator evogel@butlertownship.com

Butler Township, OH 8524 North Dixie Drive Dayton, OH 45414 937.898.6735



Land Use Planning

Data Collection and Analysis

Wayfinding

Transportation Planning

Zoning

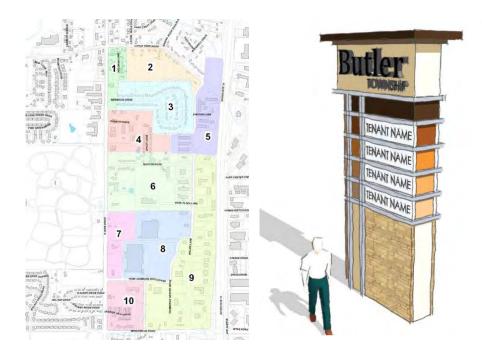
Redevelopment Strategies

Streetscapes

Access Management

Project Duration:

2013 - 14 Months



Butler Township retained Jacobs to prepare a comprehensive plan and land use strategies for the primary retail area bordered by I-75 to the east, Little York Road to the north, North Dixie Drive to the west and Benchwood Road to the south. The need for this plan was driven by several factors including: the closure of an interchange on I-75 at Little York (north), the opening of a new interchange at Benchwood Lane (south) and decades of piecemeal, uncoordinated development resulting in severe disinvestment in the northern portion of the study area.

This plan analyzed existing conditions including land use, utilities, transportation linkages, gaps in goods and services and established a detailed vision and goals for the preservation, development and redevelopment of this important commercial shopping destination in the greater Dayton region.

The study area was divided into 10 policy areas, each exhibiting unique characteristics for which future policies and implementation strategies were established. Key to this effort was the establishment of sustainable land use patterns, a wayfinding, streetscape and gateway signage program to cohesively identify and tie together the individual policy areas.

Recommendations ranged from maintaining and protecting certain policy areas and structures to a complete revised vision for other areas which included the establishment of a mixed use, high density, Town Center main street concept to attract new residents and smaller service and retail types businesses – a niche missing in this region.

Deliverables include a comprehensive plan including recommendations for land use, zoning, streetscapes, transportation and wayfinding signage.

The plan was unanimously adopted by the Township Planning and Zoning Commission and the Township Trustees in April, 2013. Construction of wayfinding signage began in early 2014.

Downtown Amarillo Inc.

Downtown Amarillo Parking Study

Amarillo, TX

Owner:

Downtown Amarillo, Inc. 801 S. Fillmore, Ste. 205 Amarillo, TX 79102 806.640.4406

Brief Description:

Parking Study Transportation Planning

Project Duration:

2012





In order to make ensure that downtown's future parking needs and concerns are fully identified, Jacobs was hired by Downtown Amarillo, Inc (DAI) to conduct a parking study encompassing a 45 block area in Amarillo Texas. The study entailed a four step process including:

- Assembling existing conditions information including GIS data and base mapping, identification of public and private parking facility players, summarizing previous parking studies, identification of public and private parking facility locations (both on and off street), identification of public transit routes and stop locations, and a summary of zoning regulations that affect downtown development;
- Conducting an analysis of existing on and off-street parking areas and layouts including the identification of the number of parking spaces and determining parking occupancy/utilization counts as it relates to existing land use patterns;
- 3. Establishing strategies and alternatives for identified parking needs as it relates to current and future land uses which included, but were not limited to: identifying deficiencies that may exist in the current parking system, evaluating opportunities to better utilize parking through reconfiguration, offsetting demand through various parking demand strategies, investigating joint or shared parking opportunities, the potential establishment of new parking areas and identifying changes that are recommended to be made in the zoning code with respect to required parking.
- 4. Preparing a final study and recommendations which will enable DAI to: understand current and future parking conditions in the downtown area; determine if and where parking issues currently exist and identify methods for minimizing them, understand the impact of expected future development on downtown parking, understand if additional parking capacity is needed and where it may be needed, and understand alternative ways to better utilize existing parking systems downtown.

Chicago Streets Cycling Plan 2020

Client

Sam Schwartz Engineering 505 North LaSalle Drive Suite 300 Chicago, IL 60654

Chicago Department of Transportation 30 North LaSalle Street Room 500 Chicago, IL 60602

Contact

Mark de la Vergne Sam Schwartz Engineering 773.305.0800

Mike Amsden Chicago Department of Transportation 312.742.2973

Services

- Planning
- Traffic Analysis
- Conceptual Design

Project Completion 2012

Cost

Contract Value: \$40K

Key Personnel

John Wirtz
 Project Manager





Chicago's Streets for Cycling 2020 Plan recommends a 645-mile network of bike facilities for innovative treatments with the goal of making all Chicagoans feel safe bicycling on the city's streets.

Jacobs teamed with Sam Schwartz Engineering to plan the future bikeway network by identifying gaps in the existing bicycle system, opportunities for improvement, and implementation challenges. The network was divided into three types of routes:

- Spoke Routes (60 miles) Seven bicycle priority corridors radiating in all
 directions from downtown, with protected bike lanes and buffered bike lanes as the preferred
 design treatment, colorized pavement, and extra branding effort.
- Crosstown Bike Routes (275 miles) Major through streets with protected bike lanes and buffered bike lanes as the preferred design treatment.
- Neighborhood Bike Routes (310 miles) Local streets with neighborhood greenways as the
 preferred treatment. Neighborhood greenways would prioritize traffic control for the bike route and
 use traffic calming to reduce automobile speeds and volumes.

Jacobs is responsible for the route planning in three of the nine city sub-regions, including the central business district. We developed a methodology to rate and prioritize individual corridors based on factors such as existing bike commute mode share, population density, proximity to destinations (transit, schools, parks), and network connectivity. We also performed design review of concept geometry and traffic analysis for the West Side Boulevards corridor, and assisted with Community Advisory Group and public meetings. Jacobs is currently working on design and implementation of the project through a separate contract.

Webster University, MO Parking Analysis and Projection Strategy

Owner:

Webster University 470 East Lockwood Ave. Webster Groves, MO 314.981.9801

Brief Description:

Parking Usage and Master Planning

Project Duration:

2010



As part of the Webster University Master Plan Update, Jacobs collected data on existing parking usage across the campus and anticipated future parking needs for the campus. This included parking in a garage, multiple lots, and on street parking. Parking lot counts were used to determine the usage of the parking lots and recommend a program to manage the parking needs across the campus. Recommendations were also provided for future parking locations and options to accommodate anticipated future growth on the campus.

Milwaukee Avenue, Logan Boulevard to Belmont Avenue - Phase I and II

Client

Chicago Department of Transportation 30 North LaSalle Street, #400 Chicago, IL 60602

Contact

Mr. Nathan Roseberry 312.744.5936

Services

Topographic Survey
Geotechnical Analysis
Concept Design
Complete Streets Design
Traffic Analysis
Traffic Modeling
Landscape Architecture
Street Lighting Design
Structural Design
ADA Ramp Design
Contract Plan Development
Contract Specifications
Cost Estimating
Stakeholder Outreach

Project Completion

2017 to Present

Cost

Contract Value: \$1.55 M Construction Cost: ≈\$20 M

Key Personnel

Chad Hammerl – Project Principal John Wirtz – Project Manager / Project Engineer Craig Jakobsen – Lead Civil Engineer

Subconsultants

AAA Engineering – Lighting Design Altamanu – Landscape and Streetscape Design Blue Daring – Stakeholder Outreach DB Sterlin – Topographic Survey Quality Counts – Traffic Counts Sam Schwartz – Phase I Design Wang Engineering – Geotechnical Analysis CDOT previously completed a Phase I Project Development Report (PDR) for eight miles of Milwaukee Avenue from Grand Avenue to Jefferson Park in 2003, an Addendum to the PDR in 2006, and has since reconstructed four segments of Milwaukee Avenue moving from northwest to southeast. However, in the time since the PDR and its Addendum were approved, CDOT has adopted a more concentrated focus on developing complete streets design solutions that consider the needs of all roadway users.

Simultaneously, in 2012, a group of Logan Square neighborhood residents began reimagining the



Logan Square Concept 4 - "The Bend"

design of the streets surrounding the Square, including rerouting Milwaukee Avenue around the Square to create a single park space, and realigning Kedzie Avenue to the west of an existing transit terminal to create a large new public plaza adjacent to businesses and restaurants on the east side of Kedzie Avenue. This group referred to their concept as the Bicentennial Improvements Plan.

CDOT selected Jacobs to reevaluate the previous Phase I study for a 1.3-mile segment of Milwaukee Avenue between Logan Boulevard and Belmont Avenue, including a once-in-a-generation opportunity to redesign the roadways surrounding Logan Square. We began by meeting with local elected officials, assembling a project study group comprised of key local stakeholders, collecting data, and hosting a public meeting to discuss existing conditions in the study area. The data collection effort included a unique origin-destination study using data from mobile devices provided by Streetlight, and multiple parking observations on different days and times to analyze utilization.

Jacobs developed four concepts for the design of Logan Square and two for Milwaukee Avenue that were presented at a second PSG and Public Meeting.

- The Logan Square design concepts included a minor change option, a "traffic oval" option similar to the design proposed by the resident-generated Bicentennial Improvement Plan, a two-way option that keeps Milwaukee Avenue through the Square and Kedzie Avenue in its existing location, and a two-way option that "bends" Milwaukee Avenue around the north and east sides of the square instead of going through the Square.
- The Milwaukee Avenue design concepts included one option for additional complete streets improvements such as dashed bike lanes and curb extensions to improve pedestrian crossings, and one option that would narrow the roadway and remove parking to provide fully separated bike lanes.

All concepts were compared for impacts on public spaces, historic integrity, pedestrians, bicyclists, transit users, traffic operations, parking supply, and constructability.

C. OUTLINE OF CONTRACTORS' EXPERIENCE - MCKENNA

What we did:



Communities for real life.

PLANNING

Parks and Recreation
Public Engagement

Parks & Recreation Master Plan

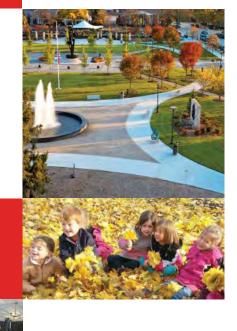
CITY OF BIRMINGHAM, MICHIGAN

The City of Birmingham is one of Michigan's premier communities, and part of its reputation and tradition of excellence is its longstanding commitment to world-class parks design and recreation provision. The City engaged McKenna to prepare a rewrite of its Parks and Recreation Master Plan, which—in Michigan—is the basis for access to State and other grants and loans for acquisition, design, and development of parks. Additionally, the Parks and Recreation Board wished to reexamine its overall planning priorities, as well as specific plans for each of its 26 parks, which cover more than 230 acres or 10% of the City's total acreage.

McKenna designed a robust public engagement program; City leaders had desired to extensively engage residents, who are extremely passionate about Birmingham parks. Throughout the multipronged engagement process, which included a "Field Day" at the Fall Harvest Farmer's Market, a comprehensive online and paper survey, key stakeholder roundtable discussions, and public presentations, a significant number of residents indicated that the parks and recreation programs were key to their choosing to invest and stay in Birmingham.

McKenna's beautifully-designed, easy to interpret Parks and Recreation Master Plan document included all information required by the State, as well as best practice and strategic recommendations on features that the City wished to investigate for future development, including restrooms in public parks, green stormwater handling, and other special planning topics.

City leaders are highly satisfied with the process and resulting document, and are incorporating the plan features into their other robust planning and design priorities city-wide for a comprehensive, coordinated program of community planning and design excellence.



C. OUTLINE OF CONTRACTORS' EXPERIENCE - MCKENNA

MCKENNA

Communities for real life.

What we did:

PLANNING

Master Planning
Downtown Planning
Neighborhood Planning
Public Engagement

Sustainable Rochester Plan

CITY OF ROCHESTER, MICHIGAN

Rochester, one of Michigan's premier medium-sized cities located north of Detroit, is surrounded by fast-growing communities—and thus has been subject to extreme development pressure. Rochester's walkability, vibrant downtown, and traditional neighborhoods have made it the center of this highly attractive suburban area in metro Detroit.

The City's recently updated Master Plan identified a number of "potential intensity change areas"—sites likely to redevelop in the near future. Rochester experienced a building boom of mixed-use and residential development in its downtown consistent with the Master Plan. However, City leaders saw the need to gain a thorough understanding of the impact each of these projects would have on the character of the community, as well as impacts on the community's natural, historic, and man-made systems.

Rochester engaged McKenna to develop a sustainability tool that would establish key measurable indicators. McKenna analyzed and developed 20 Rochester-specific indicators including tree coverage, traffic, parking, stormwater, and financial impact. McKenna's analysis included a determination of the baseline for each indicator; then, working closely with the Interdisciplinary Working Committee through a robust public process, McKenna developed optimal levels for each indicator based on the objectives of the Master Plan. The McKenna team developed a scoring system, on which each new development is scored—ensuring that future development is sustainable and consistent with the established and envisioned character of the community. In addition, the City appointed McKenna to its Sustainability Directorship.

Rochester leaders are highly satisfied with the Sustainable Rochester process and resulting sustainability tool, and have directed McKenna to incorporate the program into the development review process for a comprehensive, coordinated approach to community planning and design excellence.



C. OUTLINE OF CONTRACTORS' EXPERIENCE - MCKENNA

MCKENNA

What we did:

PLANNING

Transportation Planning
Public Engagement

Communities for real life.

Eton Road Corridor Plan

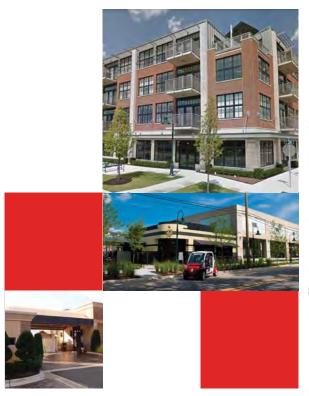
BIRMINGHAM, MICHIGAN

The City of Birmingham was confronted by redevelopment proposals for an area of the City located along Eton Road between Maple and Lincoln which was perceived by the private market to be underdeveloped. The area contained a variety of uses, most commonly older industrial. The City judged redevelopment proposals to be premature without a land use and transportation plan first in place and retained McKenna to create a master plan to guide the transformation.

As part of the process, McKenna developed a master plan amendment to set the vision for the area and a zoning ordinance amendment to implement the recommendations of the plan. The plan resulted in a vision for a mixed use corridor with a range of commercial, service, light industrial and residential uses. The plan called for high quality, cohesive development, compatible with existing uses in the corridor and adjacent single-family neighborhoods.

The area has since redeveloped according to the Eton Road Corridor Plan, which included detailed implementation, marketing, and design guidelines. Major features of the process included community input, a visioning workshop which employed a development potential map, and a land use and transportation evaluation matrix.

As a result of the plan, more than 300 residential dwelling units were built and five industrial buildings revitalized for a variety of uses in the Eton Road corridor. The area transformed from a first-generation industrial area to a vibrant, mixed use area in the decade following the adoption of the plan.







D. SCOPE OF WORK



D. SCOPE OF WORK - INTRODUCTION

Our team has long standing relationships and a history of highly collaborative project execution. This is key to keep in mind while reviewing the work plan. Tasks specified are highly dependent upon each other and touch many hands within the team. No one team member has all of the answers; we gain insight through collaborative cross-over, engagement with stakeholders, and consultation with area experts. In order to facilitate this relationship, we ill ensure close coordination between DPZ, GPG, McKenna, and Jacobs during the collaborative charrette and for the duration of the full project cycle.

The following approach is prepared prior to direct discussion with the City of Birmingham. Therefore it makes assumptions based on our understanding of the scope and may be refined as the project moves forward in order to meet the City's expectations. We envision execution of specific tasks to occur within bursts of overlapping activity, as identified in the project time frame (Section E). Our team will be available according to the proposed time frame. The majority of tasks outlined below are related to others and cross boundaries of team members. We have found over decades of working on projects similar to this one that huddling cross-disciplinary expertise and immediate analysis and feedback on proposals is the best path to success. Organizing our work with a focus on the Charrette is key to achieving this.



DPZ Charrette and Public Engagement during a Charrette held in the City of Pontiac, MI

D. SCOPE OF WORK - (I) COMMUNITY ENGAGEMENT PLAN

Community Engagement Understanding

The DPZ Team is experienced in all forms of public outreach and engagement techniques. Our blend of national and local experts will ensure the community engagement plan not only encompasses appropriate and innovative techniques but also is manageable, properly resourced, and accounts for any regional sensitivities.

Our team has proven success in appropriately and comprehensively engaging Birmingham residents - both in the prior Birmingham 2016 Plan preparation and more recently during the Parks and Recreation Master Plan process. For this initiative we understand that Birmingham is again desirous of an inclusive, comprehensive community engagement approach for the master planning effort and that Birmingham residents are engaged, highly educated, and passionate about local opportunities and constraints.

The type and extent of consultation must be tailored to the scope of the project and proper planning ensures the agreed approach will be strategic, targeted and fully effective at each stage of the project. The Project Initiation meeting (Task 1) will confirm with the City the proposed approach and timings of initiatives and make any necessary refinements. This includes agreeing a schedule of meetings, presentations and workshops, publicity strategy, and the deployment of online communication tools such as a website and social media strategy.

Framework for Engagement

Our team will be considerate of how residents and other stakeholders wish to be engaged. Thus, our team will:

- Be respectful of residents' and other stakeholders' time and attitudes.
- Provide multiple opportunities for input.
- Be straightforward and forthcoming in establishing the role their participation will play in decision-making, whether they are empowered (most powerful role) or advised (least powerful role) – though most engagement processes fall somewhere in between those two poles.
- Fashion the approach around the role the City wishes to grant its stakeholders.
- Proactively engage all age groups and account for all knowledge levels.
- Conduct community activities with friendly yet professional demeanors.
- Follow through on any and every promise made to the community.



Community engagement during the Birmingham Parks and Recreation Plan process

D. SCOPE OF WORK - (I) COMMUNITY ENGAGEMENT PLAN

Baseline Engagement Acknowledged

The RFP identified a number of events and meetings that together comprise the base-line for community engagement, from a multi-day Charrette to working sessions with the Planning Board. Our proposal includes all of the base meetings as identified in the RFP and the significant engagement elements are described in more detail below.

Communication / Publicity Tools

A communication strategy will be agreed as an early task (Task 1). We will work with the City to utilize existing and/or set up and manage new communication tools to enable extensive publicity of the project, key events and dates, and provide further engagement opportunities as reports and documents are prepared and published. This will include both a website, (see screenshots on the following page of websites previously set up by McKenna), and the use of the City's Social Media Applications, as appropriate.

Interactive Workshop / Charrette

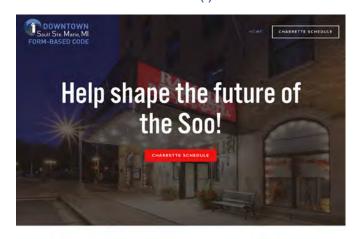
As mentioned, DPZ utilizes short focused workshops (Charrettes) as our preferred method to intensively engage stakeholders and communities in our traditional planning practice and this will be a principle part of this project's scope (Tasks 6 & 7). Our team comprise expert Charrette facilitators and includes personnel certified by the National Charrette Institute in both its NCI Charrette System program and the NCI Charrette Management and Facilitation program. The Charrette will assemble key decision-makers to collaborate with the DPZ team in information sharing, creating iterative proposals, listening to feedback, and agreeing revisions. A sample Charrette schedule is shown below.

Community engagement is an important aspect of the proposed Charrette and will encourage input and produce valuable political and audience feedback. Professionals and stakeholders will identify options that will be rapidly prototyped and judged in public sessions, enabling informed decisions and save months of sequential coordination. The dynamic and inclusive process, with frequent presentations, is a fast method of identifying and overcoming obstacles and objections. The shared experience will vest interest in the proposals and build support for the vision.

Locations		Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
Presentations	8:00 am								
City of Birmingham Location	9:00 am	Set-Up Studio	DPZ Team Briefing	DPZ Team Briefing	DPZ Team Briefing		DPZ Team Briefing	DPZ Team Briefing	DPZ Team Briefing
Topic Meetings & Studio	10:00 am	DPZ Team Briefing	Meeting I:	Meeting 4: Utilities and			Meeting 7:		
Topic Preesings & Studio	11:00 am		Transportation	Stormwater	Analysis / Planning / Design		Sustainability	Design and Production	Design and Production
City of Birmingham Location	Noon	Site Tour	Analysis / Planning / Design	Analysis / Planning / Design			Analysis / Planning / Design		1-11
Presentations and Discussions	1:00 pm	Lunch Que	Harich In	Handh In Hundh In	Lundy In		Lunch In	Linich In	Lunch In
Public Welcome	2:00 pm		Meeting 2: Environment	Meeting 5: Housing Market	Analysis / Planning / Design	Day Off	Meeting 8:		
Topical Meetings	3:00 pm		Analysis / Planning / Design	Analysis / Planning / Design	Progress	Implementation	Implementation		
Public Welcome	4:00 pm	Analysis / Planning / Design	Meeting 3: Open Space and	Meeting 6: Retail and Mixed-			Design and Production	Design and Production	
DPZ Team Briefings	5:00 pm Use			Analysis / Planning / Design					
Project Team	6:00 pm	Opening	Analysis / Planning / Design	Analysis / Planning / Design	Analysis / Planning / Design		1		Closing
Analysis / Planning / Design	7:00 pm	Presentation 6:00 pm	Dinner Out	Dinner Out	Dinner Out	Dinner Out		Dinner Out	Presentation 6:00 pm
Project Team	8:00 pm								

Sample of Proposed Charrette Schedule (To be tailored with the City)

D. SCOPE OF WORK - (I) COMMUNITY ENGAGEMENT PLAN



Sault Ste. Marie is replacing its current downtown zoning districts with a new Form-Based Code that will provide a framework for land use through smart standards for buildings, streets and public spaces

The Form-Based Code will be the tool that will make your vision for the Soo a reality. We are excited to hear your input during the code development process, and we thank you for your support!

> The four-day charrette will take place at the Ramada Plaza Hotel Ojibway from May 8 through May 11, 2018.

> > CHARRETTE SCHEDULE



Samples of Websites and Online tools deployed by McKenna

Online Surveys

Two (2) Online Surveys - Online surveys can be effective methods of engaging large numbers of residents and stakeholders during a planning process. Additionally, many communities prefer online surveys to other online engagement methods - online fora, for example - so that the chance for inappropriate discussions in moderated comments sections or forums is effectively eliminated. The McKenna team employed in-person and online methods to engage nearly 2,000 residents and stakeholders during the 2017 Birmingham Parks and Recreation Master Plan process; the online surveys were taken by nearly 1,000 participants, proving that online engagement is effective in Birmingham. We developed the communications plan, language for posting on social media and the City's website, and a detailed approach that was convenient and straightforward for the City to administer using its communications and IT teams.

Thus, having recent proven success in gathering online survey responses and "getting the word out" effectively and efficiently to people who are engaged in social media, we propose administering two online surveys during the planning process (Provisionally proposed during Tasks 3 & 9). We will work with City staff to develop the questions, which will be focused on strategic issues that Birmingham leaders are currently wrestling with and will deploy the surveys towards the beginning and middle of the project schedule for maximum effect. Together with the Charrette, the online survey will inform the strategies and future land uses represented in the adopted Master Plan, as determined and agreed upon by the City's project team when the Community Engagement Plan is prepared and finalized.

Please note that if there is a specific desire to NOT administer online surveys as part of this planning effort we will work with the City to develop an alternative online engagement method, if desired.

Telephone Interviews

Unlimited Telephone Interviews + 10 In-Person Interviews – Our team will conduct an unlimited number of telephone interviews and up to 10 in-person interviews with key stakeholders who are not able or willing to attend the multi-day Charrette (Provisionally proposed during tasks 6 -7). This is critical to project success, as there will undoubtedly be a handful of important property owners or tenants that will not participate otherwise. Additionally, as necessary and as desired / approved by the City, we will work with local, County, regional and State stakeholders through voice and electronic communications.

D. SCOPE OF WORK - (II) DATA COLLECTION AND ANALYSIS

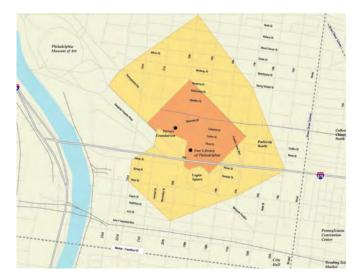
Data Collection and Analysis Understanding

The following key activities are proposed as part of the data collection and analysis work-stream to be led by Gibbs Planning Group. The information gathered will provide an important basis to determine the City of Birmingham's current demographic profile and allow informed consideration be given to the likely trends and future opportunities for commercial and residential policy.

A significant proportion of this work will be carried out as early tasks in the project time line (Tasks 2-4) with opportunities for consultation with the City and other stakeholders. The early assessment will allow a baseline of information to be available for further analysis at the beginning of the Charrette (Tasks 6 & 7). The policies and proposals developed during the Charrette will respond to an interactive analysis of the information available with input from stakeholders and the community. This intuitive process and respected techniques applied by Gibbs Planning Group will result in a relevant, authoritative and effective updated plan.

Specific activities include:

- Update Birmingham and Oakland County population data to include current demographic data, future projections and analysis of each demographic group including: families, seniors and all other population segments. This data shall be based on city, county, SEMCOG, US Census, and private research resources.
- Update Birmingham, Oakland County, and Southeast Michigan demographic and employment data to include current and projected demographic data (residential, retail, office, mix of land uses) and analysis of the region, regional and downtown development trends, and regional collaboration efforts.
- Update of City of Birmingham Residential Housing section to include neighborhood vision in residential areas, analysis of changes in residential patterns and residential areas from 1980 to now, typology and character of neighborhoods, development trends, future projections, and future direction. Future housing demand shall also estimated for the City of Birmingham.
- Prepare a retail market study for downtown Birmingham and each surrounding neighborhood and commercial district.
- Analyze the physical characteristics of Birmingham's neighborhoods and commercial districts. This analysis shall include historic attributes, landscape conditions, parks and open space, housing types, commercial characteristics and the period of construction of each land use pattern.





1/4- and 1/2-mile radii (static circles) vs. 5- and 10-minute walk zones (network shed)

D. SCOPE OF WORK - (III) PARKING AND INFRASTRUCTURE ANALYSIS

Parking and Infrastructure Analysis Understanding

Birmingham's network of walkable tree-lined streets is a key infrastructure asset of the community, helping to differentiate it from other nearby suburbs and make it one of the most desirable places to live in Metro Detroit. In recent years, Birmingham has taken steps to improve upon its transportation system by implementing many of the recommendations of DPZ's Downtown Birmingham 2016 Plan, passing a resolution of support for Complete Streets in 2011, and developing a vision for a more walkable and bikeable city in the City's 2013 Multi-Modal Transportation Plan.

Parking is also a key infrastructure asset, and ensuring that adequate and appropriate parking is available is part of a successful plan. Birmingham has evaluated parking as part of recent individual plans and the Master Plan Update will review these plans and bring them together into one cohesive parking plan for the community.

This Master Plan Update will build upon Birmingham's previously completed plans to analyze infrastructure and parking needs and develop recommendations that support the goals of the community. Stakeholder input will play a key role in the planning process, from developing goals related to transportation and parking infrastructure, to identifying existing issues and concerns, to soliciting ideas for improvements.

Identification of Goals

Through coordination with City staff, key stakeholders, and the general public, various transportation and parking goals will be identified to help guide the infrastructure recommendations (Tasks 1 & 2). Goals could be related to physical infrastructure, such as closing gaps in the sidewalk network, creating low stress bike routes to every school, or ensuring that traffic signals are equipped for a future with connected vehicles. Or the goals could be performance-based, such as reducing the number of traffic crashes, increasing transit mode share, or developing green infrastructure to reduce stormwater runoff. Parking goals could relate to the number and type of parking spaces provided, desired parking utilization, or related to requirements on how parking is to be provided as part of developments. All goals should be measurable and have an associated time frame for implementation.

Infrastructure Analysis

We will review existing data, supplemented by field data collection as necessary, to create maps of the existing transportation network, including street classifications, traffic volumes, sidewalks, bicycle facilities, and tran-

Miami 21: Sample Corridor Transformation



Existing Commercial Corridors: exposed parking lots, inappropriate building setbacks, and frequent driveway access



Street Transformation: landscape improvements, safer sidewalks, and a more pleasant public realm



Corridor transformed: pedestrian-friendly sidewalks, and mixed-use buildings appropriately addressing the street

D. SCOPE OF WORK - (III) PARKING AND INFRASTRUCTURE ANALYSIS

sit routes (Tasks 2-4). We recommend moving away from the classifications of "regional, major, and secondary thoroughfares" used in the 1980 Birmingham Plan, and towards a system that identifies roadways as boulevards, avenues, or streets based on the functional definitions in the Designing Walkable Urban Thoroughfares manual produced by the Institute of Transportation Engineers and the Congress for the New Urbanism. Additionally, "hot spots" showing the community's main concerns (e.g., congestion, speeding, safety, cutthrough traffic, difficult pedestrian crossings, etc.) will be developed through public coordination and stakeholder involvement.

Parking Analysis

The existing conditions for parking will include an inventory of existing parking spaces in the Central Business District, the Triangle District, and the Rail District. The analysis will also evaluate the parking demand for these locations and evaluate the need for or adjustments to the municipal parking systems (Tasks 2-4). Items to be evaluated would include capacity, pricing (possibly demand-related), type (i.e., handicap, electric vehicle, etc.), permitting and restrictions (residential, business), impact of other modes (i.e., walking, biking, ride sharing, transit), need for additional parking structures and future uses of parking structures, and a review of the Zoning Ordinance parking regulations.

Recommendation of Solutions

Many transportation and parking infrastructure projects have already been recommended by other plans or are currently budgeted and programmed. This Master Plan Update will supplement those projects with additional recommendations based on a combination of stake-

holder input, the community's goals, existing conditions analysis, and our understanding of best practices (Tasks 4-7). Our specialty is identifying creative engineering solutions. For example, on the Milwaukee Avenue / Logan Square design project in Chicago, we developed a range of alternatives that address the public's goals to increase open space, improve pedestrian safety, provide dedicated off-street bicycle facilities, and still maintain acceptable traffic operations. We will apply the same approach to the most pressing issues in Birmingham to recommend solutions that improve conditions for all roadway users.

It is also important to understand the supply and demand for the parking and we will provide recommendations based on the actual, not perceived, demand. For example, in our recent Downtown Kirkwood Master Plan update we found that there was adequate parking to meet the demand within the study area, which allowed the city to prioritize other needs instead of building additional parking.

Prioritization of Recommendations

Recommendations will be prioritized into short-term, medium-term, and long-term projects based on multiple factors. We applied a similar approach to a recent multi-modal plan in Chicago's northwest suburbs, where we prioritized 167 bicycle and pedestrian facility recommendations based on factors such as crash history, proximity to key destinations, connections to existing facilities or across barriers, and constructability. The constructability criteria will include a planning-level cost estimate for each recommendation. The results of the infrastructure and parking analysis will be incorporated into the draft and final plans (Tasks 6-10).

Project Understanding

Birmingham has been on an excellent trajectory since before the City-wide Master Plan was adopted in 1980, subsequent to the Plan until today, and will continue into the future. Birmingham is a world-class city whose residents and property owners enjoy strong returns on investment and excellent quality of space because of the planned, deliberate, and appropriately-scaled public investments implemented by City leaders over many decades.

The City has remained proactive in planning for future success and continued excellence of place by undertaking and adopting several sub-area plans, which now require a comprehensive synthesis and integration into the City-wide master plan. Sub Area Plans include:

- Downtown 2016 Plan (1996);
- Eton Road Corridor Plan (1999);
- Triangle District Plan (2007);
- Alleys and Passages Plan (2012); and
- Multi-modal Transportation Plan (2013);
- Parks and Recreation Master Plan (TBD)

Several further untapped opportunities were detailed during DPZ's Plan Assessment carried out in 2014 and provide good insight into the issues at hand. Much of the recent focus has been on Downtown revitalization and the City's Commercial Areas. This success needs to be institutionalized, reflected in an updated plan, and spread further with an emphasis placed on a number of key opportunity areas and the residential neighborhoods.

Tough questions will be asked and addressed during the process, such as:

- How might the Triangle and Rail Districts relate to one another and provide nodes of interest and connection to residents of surrounding neighborhoods?
- Are there neighborhoods with small lots and buildings that should remain smaller in stature and protected from infill rebuild to continue to provide entry points into the market?
- Can Birmingham's aging residents expect to remain in the community they love?
- What downtown retail environment should be molded given the current proliferation of professional service provider tenants?
- Should green infrastructure play a significant role in the way the community develops in the future?



Rural-to-Urban Transect of typical Miami conditions

Overview of Approach

To complete the above project four phases are proposed over a period of 16 months. The work begins with initiation and analysis, followed by preparation of the draft plan with subsequent refinements, and lastly through to the successful adoption of the finalized plan.

PROPOSED PHASES

One: Initiation, Assessment and Analysis

Two: Preparation of Draft Master Plan Update

Three: Refinement of Draft Master Plan Update

Four: Finalization and Adoption

The phases comprise a total of 11 distinct tasks and embed effective community and stakeholder engagement throughout the process. Our proposal also includes all the necessary work sessions with City Staff and meetings with the Planning Board and Planning Commission as set out in the RFP. The operation and timing of these meetings is crucial to making progress as scheduled, maintaining open communication channels, delivering to the scope, and the overall success of the project. Strategic meetings that relate to the key stages and presentations led by DPZ, including the project initiation tasks and the Charrette, with routine / topic specific meetings will be led by our qualified sub consultants. Meetings will be a combination of in-person meetings and, when more efficient, via conference call, particularly for short focused discussions with City staff. This approach will be refined and agreed during project initiation and/or in advance of the meeting.

This description of Services below corresponds with the proposed Project Time Frame (see Section E).

PHASE ONE - INITIATION, ASSESSMENT, AND ANALYSIS

Task 1: Project Initiation

A project start-up meeting will be conducted to establish the process and procedures of the project; the Project Schedule of work, production, meetings and presentations; the Work Plan Services and Deliverables; project governance; community engagement plan and methods of communication of proposals and progress. Regular coordination meetings are a common fixture of municipal work and will be an important component of this project. This task also includes a tour of the City

and potentially an early visioning workshop with City staff.

Deliverable: Project Initiation Document/Powerpoint

Meetings: 1 work session with City Staff and 1 meeting with Planning Board.

Task 2: Analysis of Background Materials and Existing Conditions

An analysis of background materials will be undertaken; demographic, commercial and residential data will be updated; an assessment of parking and infrastructure conditions will be undertaken; key elements of current plans and policy documents will be identified (including the City-wide Plan and the aforementioned sub area plans). Existing conditions will thus be documented and an outline of the goals and potential areas of adjustment will be developed. Includes work described in D.(II) & (III) of this section.

Deliverable: Successive Powerpoint presentations outlining 'draft assessment and analysis findings'

Meetings: Meetings with Staff and Stakeholders, as needed.

Task 3: Public Review of Analysis Findings

This task comprises a public, staff, and stakeholders review of the draft findings from the Task 2 Analysis. This includes an outline of the goals and key concerns to be addressed in the updated plan. This represents the first opportunity for the public and other stakeholders to formally input into the plan content and their ongoing engagement will be crucial from this point.

Deliverables: Powerpoint or booklet, media communication materials

Meetings: Online Consultation / Surveys / Telephone Interviews, 1 work session with City Staff, 1 work session with the Planning Board to discuss key segments of the Plan, other meetings with Staff as needed

Task 4: Finalize Analysis Findings

The finalization of the analysis incorporates all the responses to prior presentations and public review. The Finalized Analysis will provide a good foundation for the most intensive period of work to be carried out during the Charrette (Tasks 6 & 7). The finalized documentation, may also include an executive summary and other maps and graphics for public audience.

Deliverable: Powerpoint or booklet, and electronically for web documentation or other media communication. As specified, one reproducible PDF digital file and twenty hard copies of the latest version of the updated plan.

Meetings: Online Communication, as appropriate, to present the Findings and follow-up meeting with City Staff, as needed

Task 5: Phase End Progress Review (50% Project Completion)

The progress review allows for revisions to the schedule, processes and other adjustments following the work of this phase and the public response to the work, confirming or revising the work plan as needed.

Deliverables: Progress Report (representing 50% of project completion) and media communication materials, as needed

Meetings: 1 meeting with City Staff and 1 progress report meeting with the City Commission

PHASE TWO – PREPARATION OF DRAFT MASTER PLAN UPDATE

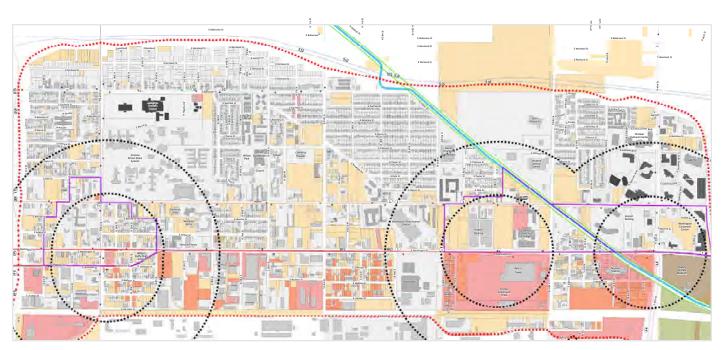
For Tasks 6 and 7, a multi-day Charrette is proposed to engage specific topics and to enable a condensed and iterative process. This represents the most intensive period of work.

Task 6: Prepare Draft Master Plan Update - Charrette

Following a tour of the City, the task begins by determining the overall organization and specific techniques of the new plan; the identification of which portions of the existing plan require changes in content, and whether any portions of the existing plan are to be retained. An outline of document sections and content will be confirmed. Following initial a visioning session(s), specific topic focused meetings will be held with key stakeholders and staff. Issues will be discussed, relevant data further analyzed, and solutions presented. Drafting of key elements of the text, plans, and graphics may also be prepared or proposed, as appropriate. An appropriate draft Equivalency Chart is initiated to track significant themes throughout the process, and to facilitate comparisons between existing and proposed as they evolve. A closing public presentation will bring together the key themes, recommendations, and next steps.

Deliverable: Outline of plan including drafts of key text, graphics and illustrative materials, Powerpoint presentation, web and media communication materials

Meetings: The Charrette will comprise of multiple topic focused meetings, visioning exercises, and interactive works sessions and presentations with staff, the public, and stakeholders, as needed. A sample Charrette schedule is included in the Community Engagement Plan Section D (I)



Sample existing conditions study completed for Reinvent Phoenix project. The diagram depicts vacant and city-owned properties, transit sheds, and building heights.



Task 7: Examine and/or Update Specific Areas of Intervention - Charrette

The examination of considers a number of master plan, urban design, and building development interventions, and/or locations identified during development of the Draft Updated Plan as potential concerns for stakeholders or staff. As suggested by the RFP these include specific consideration of residential areas, the downtown and commercial areas, and the transitional areas that connect these zones.

Deliverables: Powerpoint presentation, graphics and plans, web and media communication as needed

Meetings: Combined with Task 6 above. Includes 1 work session with the Planning Board to discuss key seaments of the Plan.

Task 8: Finalize Draft Master Plan Update - Post-Charrette (75% Project Completion)

Following the conclusion of the Charrette, the Project Team will gather all the information and findings and prepare a full draft of the updated plan. This will include a draft of the updated text, maps, and graphics as agreed during Phase One and Two and specified in the RFP. The Draft will be made available to City Staff along with a Progress Report representing 75% completion of the project.

Deliverables: One reproducible PDF digital file and twenty hard copies of the draft Plan; Progress Report

Meetings: 1 City staff working session and 1 meeting with City Commission to consider Progress Report



PHASE THREE – REFINEMENT OF DRAFT MASTER PLAN UPDATE

Task 9: Revise the Draft Master Plan Update

The Draft will be presented to City Staff for feedback, including specific Departments to review pertinent sections. The documents will also be made available for public presentation and response. This may be facilitated by working sessions with members of specific stakeholder or community groups, or through online surveys / electronic communication, to be determined in the course of prior tasks.

Deliverables: Electronic and paper of refined plan, maps and graphics, Equivalency Chart, Powerpoint presentation, web and media communication materials.

Meetings: 1 Staff working session or series of stakeholder workshops and other meetings with Staff as needed. 1 work session with the Planning Board to discuss key segments of the Plan.

PHASE FOUR - FINALIZATION AND ADOPTION

Task 10: Finalization of Updated Plan

Documents are finalized in response to the suggested refinements following the staff, public and stakeholder input.

Deliverables: One reproducible PDF digital file and twenty hard color copies of the completed plan; One reproducible PDF digital file of the final Plan for publication on the web and social media; and One page infographic outlining vision, goals and recommendations of the Plan.

Meetings: Meetings with City Staff, as needed

Task 11: Final Presentations and Adoption

On finalization of Updated Plan the City can progress into the adoption phase. The final presentations to the City include a public hearing at the Planning Board and a further public hearing at the City Commission. Technical support of Staff will be available during the Adoption Process.

Deliverables: Responses to on-going questions and comments, advice on potential adjustments.

Meetings: 1 Planning Commission meeting, Staff meetings and support as needed to respond to questions and incorporate revisions



Final Presentation Delivered by Andres Duany, DPZ CoDESIGN

E. PROPOSED TIME FRAME



CITY OF BIRMINGHAM MASTER PLAN UPDATE PROPOSED TIME FRAME

			TEAM INVOLVEMENT	LVEMENT								T	PROJECT MONTH	MONTH							
	TASKS	DPZ	Gibbs	Jacobs	McKenna	-	2	е	4	2	9		∞	, О	10	<u>'</u> =	12	13	4	15	16
Phase One	Intiation, Assessment and Analysis (Months 1 - 4)						Phase One	One													
Task 1	Task 1 Project Intiation	7	7	>	7																
Task 2	Task 2 Analysis of Background Materials and Existing Conditions	7	7	>	7																
Task 3	Task 3 Public Review of Analysis Findings	7	7	>	7																
Task 4	Task 4 Finalize Analysis Findings	7	7	>	7																
Task 5	Task 5 Phase End Progress Review (50% Project Completion)	7																			
Phase Two	Preperation of Draft Master Plan Update (Months 5- 10)											Phase Two	OW.								
Task 6	Task 6 Prepare Draft Master Plan Update	7	7		7																
Task 7	Task 7 Examine and/or update specific areas of intervention	7	7		7																
Task 8	Task 8 Finalize Draft Master Plan Update (75% Project Completion)	7	7	>	7																
Phase Three	Refinement of Draft Master Plan Update (Months 10 - 12)														ā	Phase Three	ree				
Task 9	Task 9 Revise the Draft Master Plan Update	~	>	>	7																
Phase Four	Finalization and Adoption (Months 13 - 15)																	Δ.	Phase Four	our	
Task 10	Task 10 Finalization of Updated Plan	>	7	>	7																
Task 11	Task 11 Final Presentations and Adoption	>	7		7																

The team will be available according to the proposed time frame.



F. ADDITIONAL SERVICES



F. ADDITIONAL SERVICES

No additional services beyond those already included and described in Sections D & E of this proposal are proposed in order to complete the project.



G. ATTACHMENTS

ATTACHMENT B - BIDDER'S AGREEMENT FOR MASTER PLAN UPDATE

In submitting this proposal, as herein described, the Contractor agrees that:

- 1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- 2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

SENEN ANTONIO	MAY 25, 2018	
PREPARED BY	DATE	
(Print Name)		
PARTNER	MAY 25, 2018	
TITLE	DATE	
Sin in	SENEN@DPZ.COM	
AUTHORIZED SIGNATURE	E-MAIL ADDRESS	
DPZ CODESIGN COMPANY		
1023 SW 25TH AVENUE	305-644-1023	
ADDRESS	PHONE	
N/A	N/A	
NAME OF PARENT COMPANY	PHONE	
N/A		
ADDRESS		

I FURTHER ACKNOWLEDGE RECEIPT OF ADDENDUM NO.1 OF THE CITY OF BIRMING-HAM RFP MASTER PLANNING UPDATE ISSUED ON MAY 23, 2018.

Sini-

ATTACHMENT C - COST PROPOSAL FOR MASTER PLAN UPDATE

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be itemized as follows:

 Project Elements 1. Comprehensive Community Engagement Plan 2. Updated Data Collection and Analysis 3. Infrastructure Analysis 4. Parking Analysis 5. Attendance at Meetings 6. Plan Preparation 7. Finalization and Adoption 	\$ 30,000 \$ 30,000 \$ 30,000 \$ 25,000 \$ 25,000 \$ 118,000 \$ 40,000
TOTAL AMOUNT	\$ 298,000
Additional Meeting Charge	Depending on personnel required \$1,000-4,000 per meeting
Additional Services Recommended (if any): Additional services beyond the scope of this RFP are not proposed. For the purposes of completeness please find herein DPZ's hourly rates.	Principal \$ 350

Firm Name_DPZ CODESIGN

Authorized signature_

Date MAY 25TH, 2018

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION **FORM**

FOR MASTER PLAN UPDATE

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

SENEN ANTONIO	MAY 25, 2018
PREPARED BY	DATE
(Print Name)	
PARTNER	MAY 25, 2018
TITLE	DATE
Some?	
//	SENEN@DPZ.COM
AUTHORIZED SIGNATURE	E-MAIL ADDRESS
DPZ CODESIGN	
COMPANY	
1023 SW 25TH AVENUE	305-644-1023
ADDRESS	PHONE
21/0	21/2
N/A	N/A
NAME OF PARENT COMPANY	PHONE
N/A	
ADDRESS	
20-2563570	
TAXPAYER I.D.#	





August 7, 2018

DPZ CoDesign 1023 SW 25th Avenue Miami, FL 33135

Attention: Senen M. A. Antonio

Re: City of Birmingham Master Plan Update - Consultant Selection

We confirm receipt of your firm's proposal in response to the above-captioned Request for Proposal and thank you for same. I would also like to take this opportunity to thank you for the time and effort that your firm put into preparing your proposal to conduct a comprehensive master planning effort for the City, and for your continued interest in working with the City of Birmingham.

Please be advised that the Ad Hoc Master Plan Selection Committee ("the Committee") has completed an evaluation of all of the proposals received to determine which firms the City would like to interview to complete our consultant selection process.

I am pleased to inform you that the Committee selected two (2) firms to advance to the second round of our evaluation process, and your firm was one of the two selected to proceed. As a result, we would like to invite your team to come to Birmingham for an **interview before the Committee on August 29, 2018 at 9:00am**. The Committee is comprised of members of the Planning Board, Multi-Modal Transportation Board, Ad Hoc Parking Committee, Parks and Recreation Board, Design Review Board / Historic District Commission and includes a former City Commissioner, as well as a resident at large member. You will have 20 – 30 minutes to conduct a presentation to the Committee, and another 30 – 45 minutes for a question and answer session. The Committee has asked for your team to provide additional information during the interview to clarify your approach to the following:

- The study of residential neighborhoods;
- The provision of future projections;
- Market conditions affecting the City;
- Density considerations and recommendations;
- Who will provide project leadership for your team; and
- Possibilities for tightening up of project time frame and cost reduction.

Given the time it took for us to convene the Committee to evaluate proposals during the summer vacation season, we are requesting a 45 day extension on the term of your proposal to the City to allow us to complete the selection process. Your original proposal is valid for 90 days, which ends on September 1, 2018. If you agree to this extension, please sign and date below and return the signed copy to our office to confirm the term extension to your proposal. Receipt of this letter

signed by DPZ below will confirm both the term extension and DPZ's interview time slot on August 29, 2018 at 9:00am.

Should you have any questions or comments, please do not hesitate to contact me at your convenience at 248-530-1841.

Yours very truly,

Jana L. Ecker

Director of Planning

DPZ agrees to extend the term of the proposal for the City of Birmingham – Master Plan Update dated June 1, 2018 to a total of 135 days, with such term ending on October 15, 2018.

Aug. 8, 2018

Signature Date

Matthew Lambert, Partner

Printed Name & Title



August 7, 2018

MKSK 4219 Woodward Ave, Suite 305 Detroit, MI 48201

Attention: Chris Hermann

Re: City of Birmingham Master Plan Update - Consultant Selection

We confirm receipt of your firm's proposal in response to the above-captioned Request for Proposal and thank you for same. I would also like to take this opportunity to thank you for the time and effort that your firm put into preparing your proposal to conduct a comprehensive master planning effort for the City, and for your continued interest in working with the City of Birmingham.

Please be advised that the Ad Hoc Master Plan Selection Committee ("the Committee") has completed an evaluation of all of the proposals received to determine which firms the City would like to interview to complete our consultant selection process.

I am pleased to inform you that the Committee selected two (2) firms to advance to the second round of our evaluation process, and your firm was one of the two selected to proceed. As a result, we would like to invite your team to come to Birmingham for an **interview before the Committee on August 29, 2018 at 10:30am**. The Committee is comprised of members of the Planning Board, Multi-Modal Transportation Board, Ad Hoc Parking Committee, Parks and Recreation Board, Design Review Board / Historic District Commission and includes a former City Commissioner, as well as a resident at large member. You will have 20 – 30 minutes to conduct a presentation to the Committee, and another 30 – 45 minutes for a question and answer session. The Committee has asked for your team to provide additional information during the interview to clarify your approach to the following:

- The study of residential neighborhoods;
- The provision of future projections;
- Market conditions affecting the City;
- Density considerations and recommendations;
- Who will provide project leadership for your team; and
- Possibilities for tightening up of project time frame and cost reduction.

Given the time it took for us to convene the Committee to evaluate proposals during the summer vacation season, we are requesting a 45 day extension on the term of your proposal to the City to allow us to complete the selection process. Your original proposal is valid for 90 days, which ends on September 1, 2018. If you agree to this extension, please sign and date below and return the signed copy to our office to confirm the term extension to your proposal. Receipt of this letter

signed by MKSK below will confirm both the term extension and MKSK's interview time slot on August 29, 2018 at 10:30am.

Should you have any questions or comments, please do not hesitate to contact me at your convenience at 248-530-1841.

Yours very truly,

Jana L. Ecker

Director of Planning

MKSK agrees to extend the term of the proposal for the City of Birmingham – Master Plan Update dated June 1, 2018 to a total of 135 days, with such term ending on October 15, 2018.

Signature

Date '

Chris Hermann, Principal

AGREEMENT FOR MASTER PLAN UPDATE

This AGREEMENT, made this 17th day of September, 2018, by and between CITY OF BIRMINGHAM, having its principal municipal office at 151 Martin Street, Birmingham, MI (hereinafter sometimes called "City"), and DPZ Partners, LLC, having its principal office at 1023 SW 25th Ave, Miami, FL (hereinafter called "Contractor"), provides as follows:

WITNESSETH:

WHEREAS, the City has heretofore advertised for bids for the procurement and performance of services required to complete an update to the City-wide comprehensive master plan, and in connection therewith has prepared a request for sealed proposals ("RFP"), which includes certain instructions to bidders, specifications, terms and conditions.

WHEREAS, the Contractor has professional qualifications that meet the project requirements and has made a bid in accordance with such request for cost proposals to complete an update to the City-wide comprehensive master plan.

NOW, THEREFORE, for and in consideration of the respective agreements and undertakings herein contained, the parties agree as follows:

- 1. It is mutually agreed by and between the parties that the documents consisting of the Request for Proposal to complete an update to the City-wide comprehensive master plan and the Contractor's cost proposal dated May 25, 2018 shall be incorporated herein by reference and shall become a part of this Agreement, and shall be binding upon both parties hereto. If any of the documents are in conflict with one another, this Agreement shall take precedence, then the RFP.
- 2. The City shall pay the Contractor for the performance of this Agreement in an amount not to exceed \$298,000.00, as set forth in the Contractor's May 25, 2018 cost proposal.
- 3. This Agreement shall commence upon execution by both parties, unless the City exercises its option to terminate the Agreement in accordance with the Request for Proposals.
- 4. The Contractor shall employ personnel of good moral character and fitness in performing all services under this Agreement.
- 5. The Contractor and the City agree that the Contractor is acting as an independent contractor with respect to the Contractor's role in providing services to the City pursuant to this Agreement, and as such, shall be liable for its own actions and neither the Contractor nor its employees shall be construed as employees of the

- City. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the City nor the Contractor shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The Contractor shall not be entitled or eligible to participate in any benefits or privileges given or extended by the City, or be deemed an employee of the City for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the City.
- 6. The Contractor acknowledges that in performing services pursuant to this Agreement, certain confidential and/or proprietary information (including, but not limited to, internal organization, methodology, personnel and financial information, etc.) may become involved. The Contractor recognizes that unauthorized exposure of such confidential or proprietary information could irreparably damage the City. Therefore, the Contractor agrees to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Contractor shall inform its employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Contractor further agrees to use such confidential or proprietary information only for the purpose of performing services pursuant to this Agreement. The Contractor agrees that it will require all subcontractors to sign a Non-Disclosure Agreement satisfactory to the City Attorney.
- 7. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan. The Contractor agrees to perform all services provided for in this Agreement in accordance with and in full compliance with all local, state and federal laws and regulations.
- 8. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.
- 9. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Contractor without the prior written consent of the City. Any attempt at assignment without prior written consent shall be void and of no effect.
- 10. The Contractor agrees that neither it nor its subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to

employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Contractor shall inform the City of all claims or suits asserted against it by the Contractor's employees who work pursuant to this Agreement. The Contractor shall provide the City with periodic status reports concerning all such claims or suits, at intervals established by the City.

- 11. The Contractor shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with carriers acceptable to the City of Birmingham.
- 12. The Contractor shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:
 - A. <u>Workers' Compensation Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
 - B. <u>Commercial General Liability Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
 - C. <u>Motor Vehicle Liability</u>: Contractor shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
 - D. <u>Additional Insured</u>: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following shall be *Additional Insureds*: The City of Birmingham, including all elected and appointed officials, all employee and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any other coverage that may be available to the additional insured, whether any other available coverage by primary, contributing or excess.

- E. <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance (and Professional Liability Insurance, if applicable), as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal, shall be sent to: Finance Director, City of Birmingham, PO Box 3001, 151 Martin Street, Birmingham, MI 48012-3001.
- F. <u>Proof of Insurance Coverage</u>: Contractor shall provide the City of Birmingham, at the time the Agreement is returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below.
 - 1) Two (2) copies of Certificate of Insurance for Workers' Compensation Insurance;
 - 2) Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance;
 - 3) Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
 - 4) Two (2) copies of Certificate of Insurance for Professional Liability Insurance;
 - 5) If so requested, Certified Copies of all policies mentioned above will be furnished.
- G. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this Agreement, Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least (10) days prior to the expiration date.
- H. <u>Maintaining Insurance</u>: Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the Agreement, the City of Birmingham may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the Agreement amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.
- 13. To the fullest extent permitted by law, the Contractor and any entity or person for whom the Contractor is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall

not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.

- 14. If, after the effective date of this Agreement, any official of the City, or spouse, child, parent or in-law of such official or employee shall become directly or indirectly interested in this Agreement or the affairs of the Contractor, the City shall have the right to terminate this Agreement without further liability to the Contractor if the disqualification has not been removed within thirty (30) days after the City has given the Contractor notice of the disqualifying interest. Ownership of less than one percent (1%) of the stock or other equity interest in a corporation or partnership shall not be a disqualifying interest. Employment shall be a disqualifying interest.
- 15. If Contractor fails to perform its obligations hereunder, the City may take any and all remedial actions provided by the general specifications or otherwise permitted by law.
- 16. All notices required to be sent pursuant to this Agreement shall be mailed to the following addresses:

City of Birmingham Attn: Jana L. Ecker 151 Martin Street Birmingham, MI 48009 248-530-1841 CONTRACTOR
DPZ Partners, LLC
1023 SW 25th Avenue
Miami, FL 33135
305-644-1023

- 17. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.
- 18. <u>FAIR PROCUREMENT OPPORTUNITY:</u> Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This

will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham.

IN WITNESS WHEREOF, the said parties have caused this Agreement to be

executed as of the date and year above written.

WITNESSES:	CONTRACTOR					
Si.	By:					
Senen M. A. Antonio Partner, DPZ Partners, LLC	Matthew J. Lambert Its: Partner					
	CITY OF BIRMINGHAM					
	By:					
	Andrew Harris Its: Mayor					
	Ву:					
	Cherilynn Mynsberge Its: City Clerk					
Approved:						
	_					
Jana L. Ecker, Planning Director (Approved as to substance)	Joseph A. Valentine City Manager (Approved as to substance)					
Timothy J. Currier, City Attorney (Approved as to form)	Mark Gerber, Director of Finance (Approved as to financial obligation)					

NANCY

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/9/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Acrisure, LLC d/b/a InSource 9500 South Dadeland Bouleyard	CONTACT NAME: PHONE (A/C, No, Ext): (305) 670-6111 FAX (A/C, No): (305) 670-9						
4th Floor	E-MAIL ADDRESS: email@insource-inc.com						
Miami, FL 33156-2867	INSURER(S) AFFORDING COVERAGE	NAIC#					
	INSURER A: Hartford Casualty Insurance Co	29424					
INSURED	INSURER B: Hartford Underwriters Ins. Co.	30104					
DPZ Partners, LLC	INSURER C:						
1023 SW 25 Avenue	INSURER D:						
Miami, FL 33135	INSURER E :						
	INSURER F:						

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

	EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.									
INSR	INSR I TR TYPE OF INSURANCE			SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)			
Α	Х	COMMERCIAL GENERAL LIABILITY				,, <u>.</u>	,	EACH OCCURRENCE	\$	2,000,000
		CLAIMS-MADE X OCCUR			21SBABY0640	12/18/2017	12/18/2018	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	1,000,000
								MED EXP (Any one person)	\$	10,000
								PERSONAL & ADV INJURY	\$	2,000,000
	GEN	N'L AGGRE <u>GAT</u> E LIMIT AP <u>PLIE</u> S PER:						GENERAL AGGREGATE	\$	4,000,000
		POLICY X PRO- JECT X LOC						PRODUCTS - COMP/OP AGG	\$	4,000,000
		OTHER:							\$	
В	AUT	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
	X	ANY AUTO			21UECTE1819	12/18/2017	12/18/2018	BODILY INJURY (Per person)	\$	
		OWNED SCHEDULED AUTOS ONLY						BODILY INJURY (Per accident)	\$	
	X	HIRED X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$	
									\$	
Α	X	UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	\$	4,000,000
		EXCESS LIAB CLAIMS-MADE	1		21SBABY0640	12/18/2017	12/18/2018	AGGREGATE	\$	4,000,000
		DED X RETENTION \$ 10,000							\$	
В	AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE ANY PROPRIETOR/PARTNER/EXECUTIVE							X PER OTH-ER		
			N/A		21WECAJ3690 10/01/2017 10/01/2		10/01/2018	8 E.L. EACH ACCIDENT	\$	1,000,000
	(Mandatory in NH)						E.L. DISEASE - EA EMPLOYEE	\$	1,000,000	
	If yes	s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

SPECIMEN CERTIFICATE -DOES NOT CONVEY COVERAGE -INFORMATIONAL PURPOSES ONLY - IF ACTUAL CERT NEEDED, IT WILL BE ISSUED TO A SPECIFIC ENTITY and

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE

THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CANCELLATION

Atan M. Don

ACORD 25 (2016/03)

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 09/25/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed.

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
PRODUCER					CONTAC NAME:	CT Erin	n E Collii	nsworth		
Collinsworth Ins & Risk Mgmt Services In P.O. Box 661628					PHONE (A/C, No	. Ext): (786) 930-479!	FAX (A/C. No):	(786)	930-4794
					E-MAIL ADDRES		n@collins	worthinsurance.com		
Miami Springs FL 33266						INSURER(S) AFFORDING COVERAGE				NAIC#
						RA: Beazle	y Insuranc	e Company Inc.		37540
INSU				(305) 644-1023	INSURE	RB:				
DPZ	Partners, LLC				INSURE	RC:				
102	3 S.W. 25th Ave.				INSURE	RD:				
Mia	mi FL 33135				INSURER E:					
					INSURER F:					
				NUMBER: Cert ID 19				REVISION NUMBER:		
	IIS IS TO CERTIFY THAT THE POLICIES DICATED. NOTWITHSTANDING ANY RI									
CI	ERTIFICATE MAY BE ISSUED OR MAY	PERT	AIN,	THE INSURANCE AFFORDI	ED BY	THE POLICIES	S DESCRIBE			
INSR	(CLUSIONS AND CONDITIONS OF SUCH		CIES. SUBR		BEEN R	POLICY EFF	PAID CLAIMS. POLICY EXP			
LTR	TYPE OF INSURANCE		WVD				(MM/DD/YYYY)	LIMIT	S	
	COMMERCIAL GENERAL LIABILITY							EACH OCCURRENCE DAMAGE TO RENTED	\$	
	CLAIMS-MADE OCCUR							PREMISES (Ea occurrence)	\$	
								MED EXP (Any one person)	\$	
								PERSONAL & ADV INJURY	\$	
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$	
	POLICY PRO- JECT LOC							PRODUCTS - COMP/OP AGG	\$	
	OTHER:							COMBINED SINGLE LIMIT	\$	
	ANY AUTO							(Ea accident) BODILY INJURY (Per person)	\$	
	OWNED SCHEDULED							BODILY INJURY (Per accident)	\$	
	AUTOS ONLY AUTOS NON-OWNED							PROPERTY DAMAGE	\$	
	AUTOS ONLY AUTOS ONLY							(Per accident)	\$	
	UMBRELLA LIAB OCCUR							EACH OCCURRENCE	\$	
	EXCESS LIAB CLAIMS-MADE							AGGREGATE	\$	
	DED RETENTION\$							7.00.11207.112	\$	
	WORKERS COMPENSATION							PER OTH- STATUTE ER	1	
AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE								E.L. EACH ACCIDENT	\$	
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A						E.L. DISEASE - EA EMPLOYEE	\$	
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$	
A	Professional Liability			V12F1F170601		10/12/2017	10/12/2018	Each Claim		
						-0,, -0-,	_0,, _0_0			3,000,000
				Claims-Made Basis				Policy Aggregate	\$	6,000,000
DESC	RIPTION OF OPERATIONS / LOCATIONS / VEHIC	LES (A	CORD	101, Additional Remarks Schedul	le, may be	attached if more	e space is require	ed)		
CF	RTIFICATE HOLDER				CANC	ELLATION				
<u> </u>										
								ESCRIBED POLICIES BE C		
	GTV-TV		THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.							
SPECIMEN										
						AUTHORIZED REPRESENTATIVE				
						Sin 2 Climent-				

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PROJECT LEADERSHIP

Leaders in the planning, development and placemaking field who are known for creating vibrant and livable communities.



CHRIS HERMANN, AICP

Principal

MKSK

Principal in Charge Principal Planner



JUSTIN GOODWIN, AICP

Associate

MKSK

Project Manager Urban Planner



MEGAN O'HARA LEED AP
Principal
UDA

Urban Design Community Design Charette Lead



TOM BROWN
Principal
Nelson/Nygaard

Parking



BRAD STRADER, AICP, PTP

Principal

MKSK

Transportation Planner Community Engagement



JULIE KROLL, PE, PTOE Sr. Project Manager Fleis & VandenBrink

Traffic Engineer

Who We Are:

27+ Year Practice

90 Design Professionals:

Planners | Urban Designers Landscape Architects

Primary Office: Columbus, OH

Louisville, KY | Covington, KY Indianapolis, IN | West Lafayette, IN Detroit, MI | Greenville, SC

Professional Planning Services:

Comprehensive Master Planning
Land Use Planning
Focus Area/Neighborhood Planning
Transportation Planning
Strategic Planning
'Town Center' Planning
Trail, Greenways & Park Planning/Design
Streetscape & Public Space Design
Placemaking
Zoning & Form Based Codes
Community & Stakeholder Engagement
Visualization & Graphics
Economic Development & Funding Strategies
Capital Improvement Planning



OUR TEAM

A team of national experts, and local knowledge to lead the city through this Master Plan process.



Lead Community & Development
Planning
Placemaking
Community Engagement



Urban Design Neighborhood Typologies Charette Lead

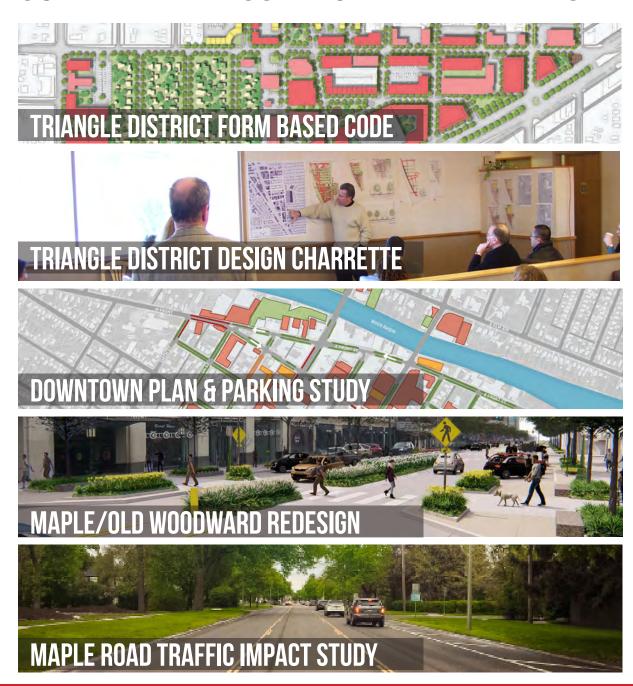


Infrastructure Analysis
Multi-Modal Transportation Engineering



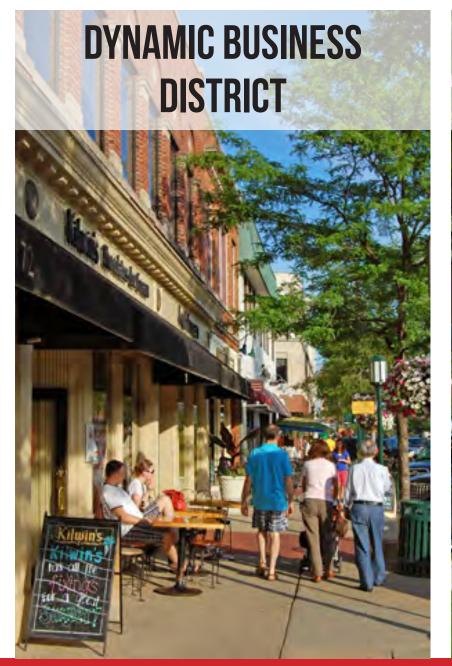
Parking
Analysis & Recommendations

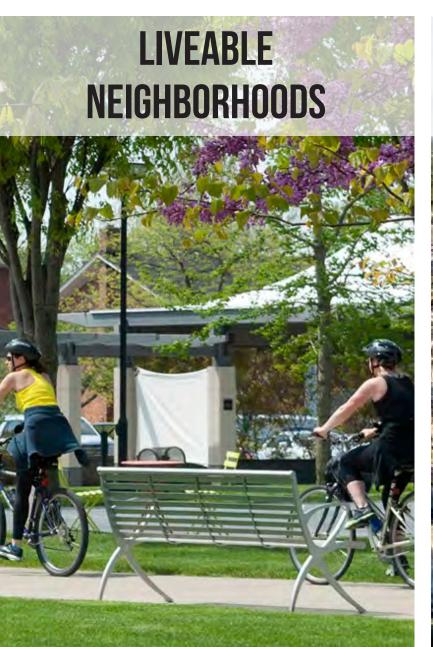
OUR TEAM BRINGS AN UNPARALLED KNOWLEDGE OF BIRMINGHAM

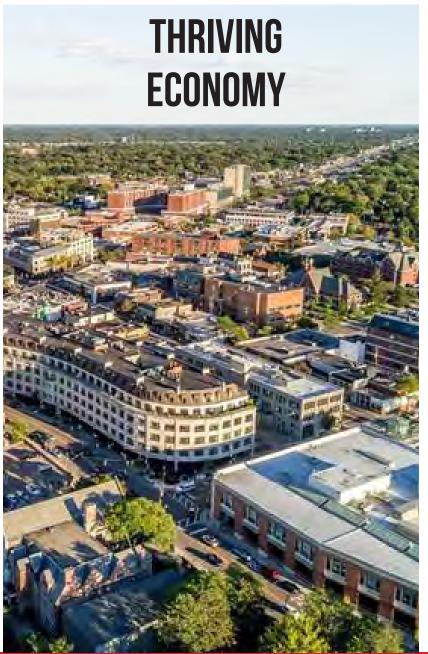


- Triangle District Form Based Code
- Southern Gateway
- Downtown Plan
- Parking Study
- Woodward Transit and Complete Streets Plans
- > Zoning Evaluations
- Maple/Old Woodward Redesign
- Many Street and Pedestrian Realm Design Projects
- Multi-Modal Board Advising

BIRMINGHAM "ONE OF THE BEST PLACES TO LIVE IN MICHIGAN"







BIRMINGHAM ISSUES + OPPORTUNITIES

- INFILL/REDEVELOPMENT | Architecture, Building Scale/Height
- RESIDENTIAL | Missing Middle, Market Demand
- PARKING | Demand, Location, Type, Disruption
- > STREETS | Widths, Streetscape, Complete Streets, Bike Lanes
- **PROJECTS** | Cost, Schedules, Public-Private Partnerships
- RETAIL | Quality, Mix, Flexibility, Resiliency, Location
- ▶ NEIGHBORHOODS + DISTRICTS | Protect Value, Grow Economy, Transitions Between, Character

















NATIONAL TRENDS + PATTERNS: THINGS ARE CHANGING RAPIDLY

- The aging of America and rise of the creative millennials
- Urban developments and e-commerce replacing shopping centers
- The retail economy is focusing on experience and "place"
- Housing types are changing & rental rates will rise
- Automation and disruption will change mobility
- Municipalities and public-private partnerships must take a stronger role in encouraging successful growth





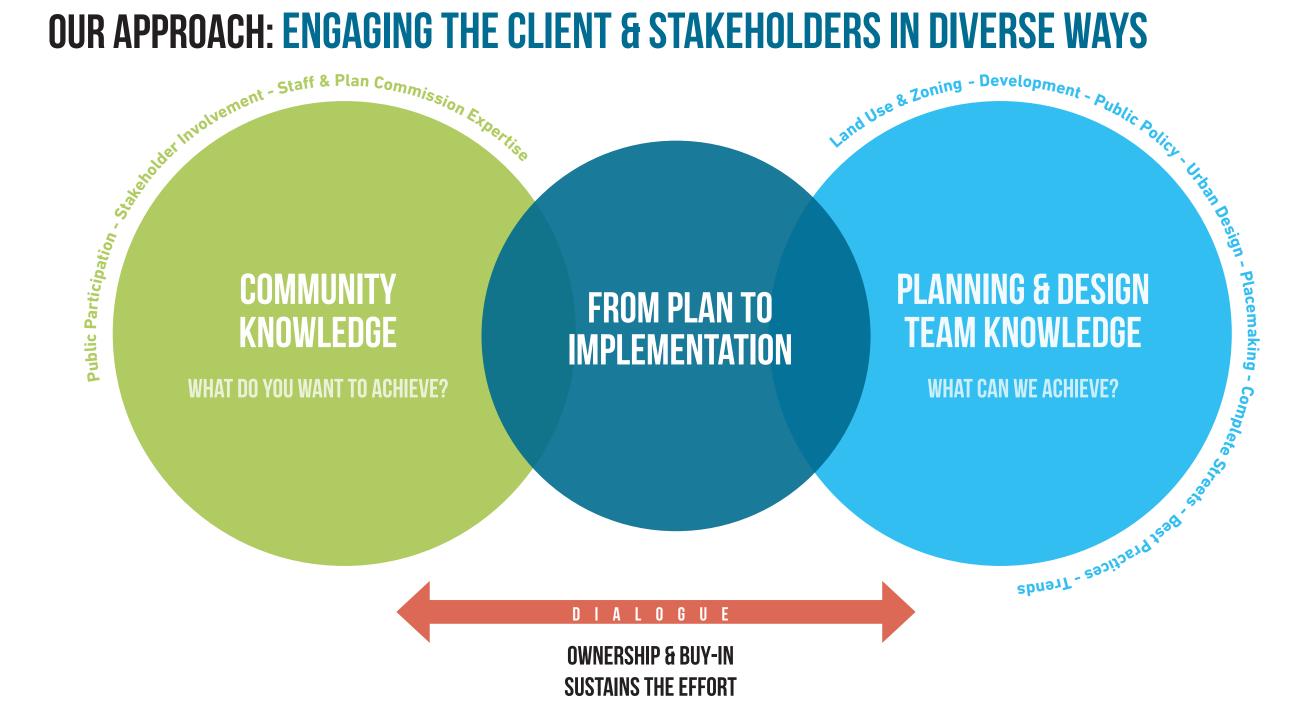








OUR APPROACH: ENGAGING THE CLIENT & STAKEHOLDERS IN DIVERSE WAYS



BRINGING PLANNING TO LIFE: QUALITY OF IDEAS & QUALITY OF COMMUNICATION









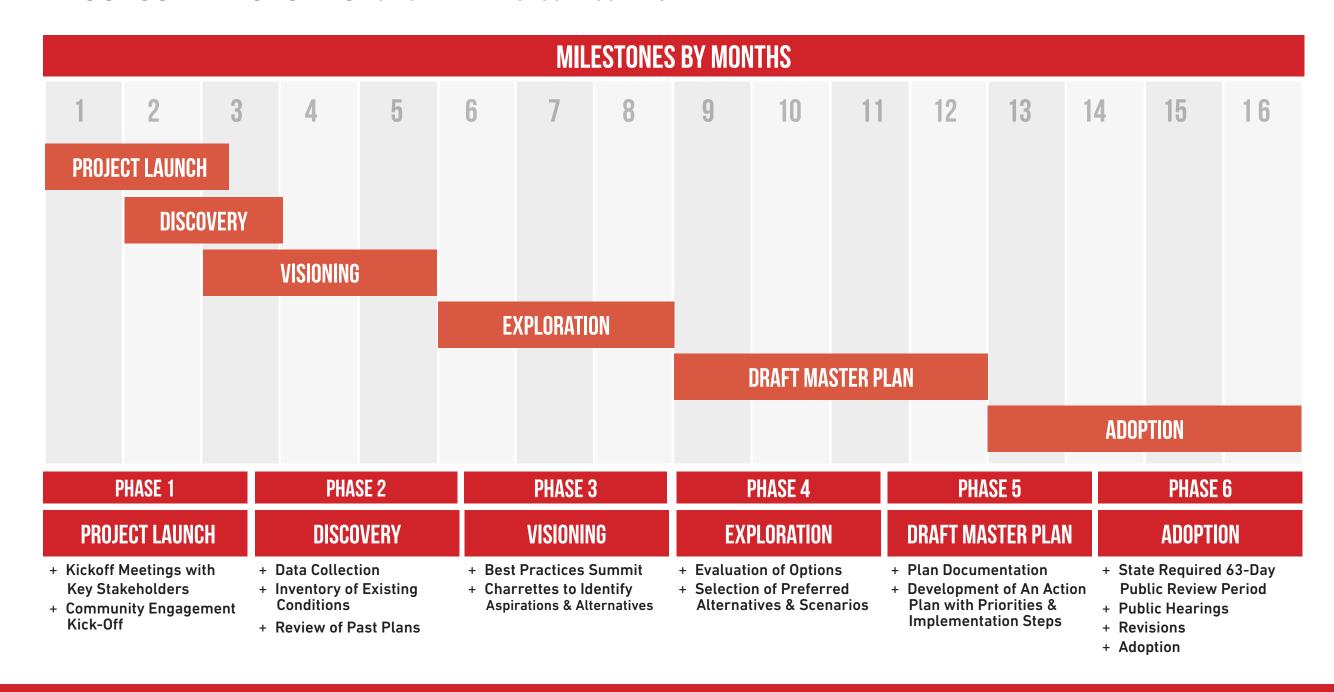




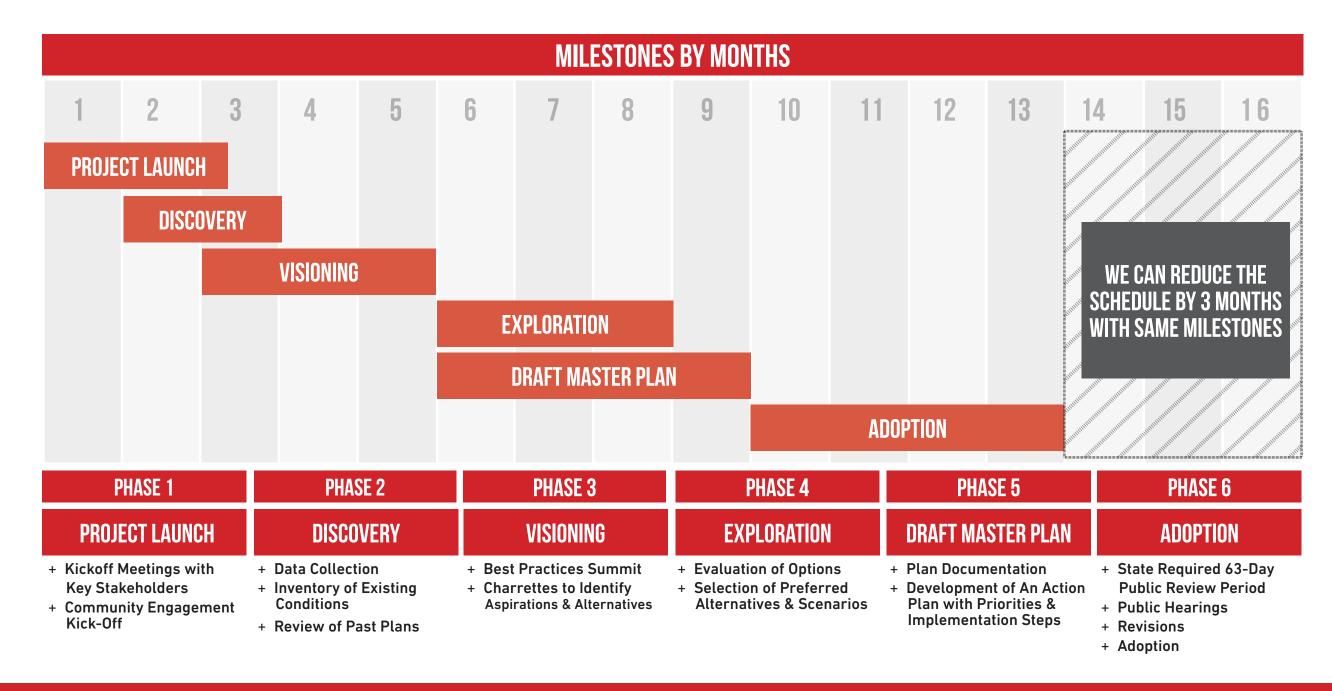
PROCESS MILESTONES

MONTHS 2-4 MONTHS 6-8 **MONTHS 9-12** MONTHS 1-2 MONTHS 3-5 **MONTHS 12-16** PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 6 PHASE 5 DRAFT MASTER PLAN **PROJECT LAUNCH DISCOVERY VISIONING EXPLORATION ADOPTION** + Kickoff Meetings with + Data Collection + Best Practices Summit + Evaluation of Options + Plan Documentation + State Required 63-Day + Inventory of Existing + Charrettes to Identify + Selection of Preferred + Development of An Action **Public Review Period** Key Stakeholders Plan with Priorities & Conditions **Alternatives & Scenarios** + Community Engagement **Aspirations & Alternatives** + Public Hearings Implementation Steps Kick-Off + Review of Past Plans + Revisions + Adoption

PROCESS MILESTONES: ORIGINALLY PROPOSED SCHEDULE



PROCESS MILESTONES: REVISED SCHEDULE



PROJECT DELIVERABLES

- An aspirational community-built consensus on direction for the city.
- > A guiding plan for the city, community, agencies, & private investors to follow
- With foundational components:

DEMOGRAPHIC & MARKET CONDITIONS



LAND USE + ZONING PLAN



MOBILITY + PARKING RECOMMENDATIONS



PARKS + OPEN SPACE



HOUSING + ECONOMIC DEV. STRATEGIES



DISTRICT PLANNING INITIATIVES

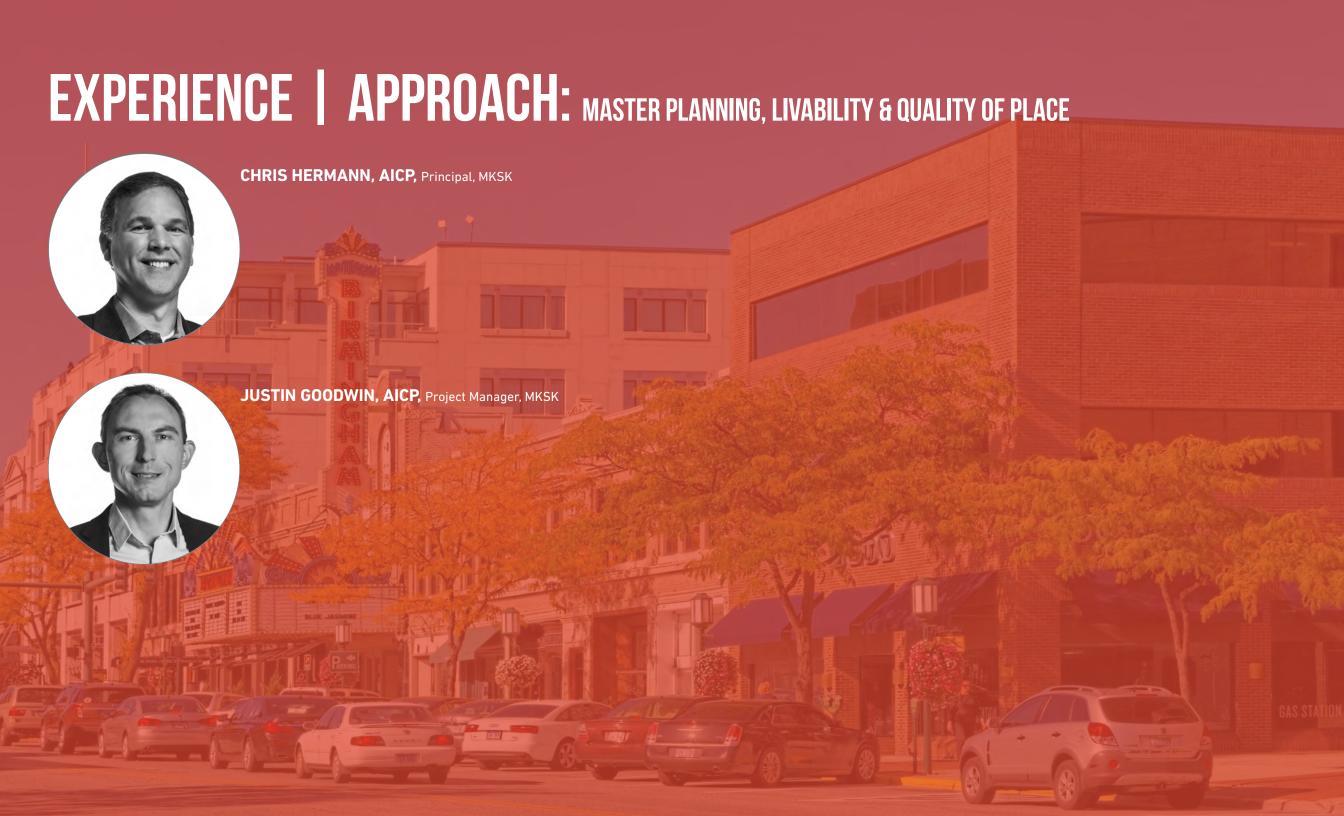


NEIGHBORHOOD DNA



IMPLEMENTATION STRATEGY







NEW ALBANY: 20 years of planning, design & development advising

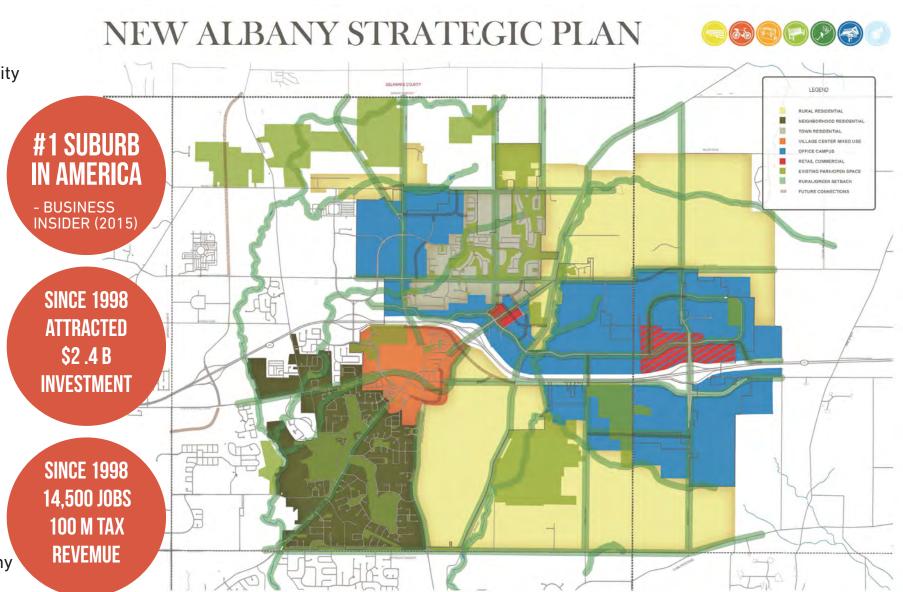
PLAN — LONG-TERM RELATIONSHIP:

Nearly two decades of planning services transformed a small village into a vibrant city

- 1998-2014: Strategic Plan & Updates
- 2006: Village Center Plan & Strategy
- 2009: Form-Based Code
- 2007: Leisure Trails Master Plan
- 2012: Health New Albany
- 2014: Bike New Albany
- 2016: Rose Run Greenway

RESULTS:

- Over 200,000 SF of mixed-use infill
- Over 300 residential infill units
- 10.3 M SF develpopment
- Connection to 27 miles of bike trails
- Library/ Post Office/ Village Hall
- International Business Park
- McCoy Community Center for the Arts
- Philip Heit Center for Healthy New Albany
- Civic greenspace
- School campus



NEW ALBANY IMPLEMENTATION: GUIDING DEVELOPMENT FROM VISION TO REALIZATION













































URBAN DESIGN ASSOCIATES (UDA)

- Formed in 1964
- Based in Pittsburgh
- We brought public process into practice.
- We learned that listening can create better outcomes & places.
- Innovation and collaboration is at our core.











PHASE 3 - VISIONING

- Two-day listening session
- Meetings with the City staff, elected officials, committees, and key stakeholders
- Documentation of neighborhood DNA
- Community engagement to listen to people's vision
- Distill what we learned through the analysis
- Develop a list of emerging themes and directions to explore for each of the city's neighborhoods and districts
- Briefing with the City Commission





PHASE 4 - EXPLORATION

4-day charrette to develop concepts for the Master Plan

MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY + Set-up Studio + Mini-Workshops + Develop ideas explored + Final production + Download/briefing + Kick-Off Meeting #2, #3, and #4 on Days 1 & 2 + Core group preview phone call or meeting + Key stakeholder meetings + Afternoon/evening + Community presentation to follow up + Mini-Workshop #1 + Workshops will focus on pin-up with core client and discussion the neighborhoods and group districts

CHARRETTE — LIVE THEATRE ROOTED IN LISTENING







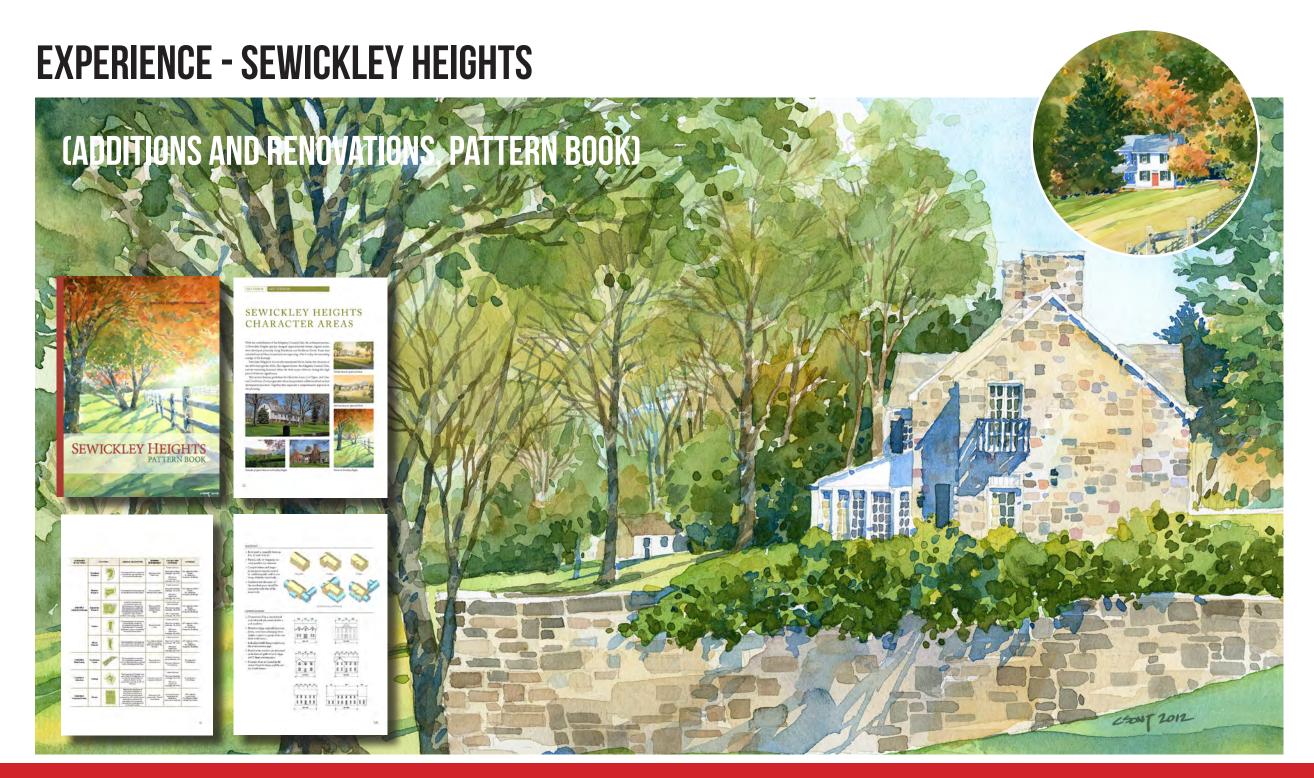


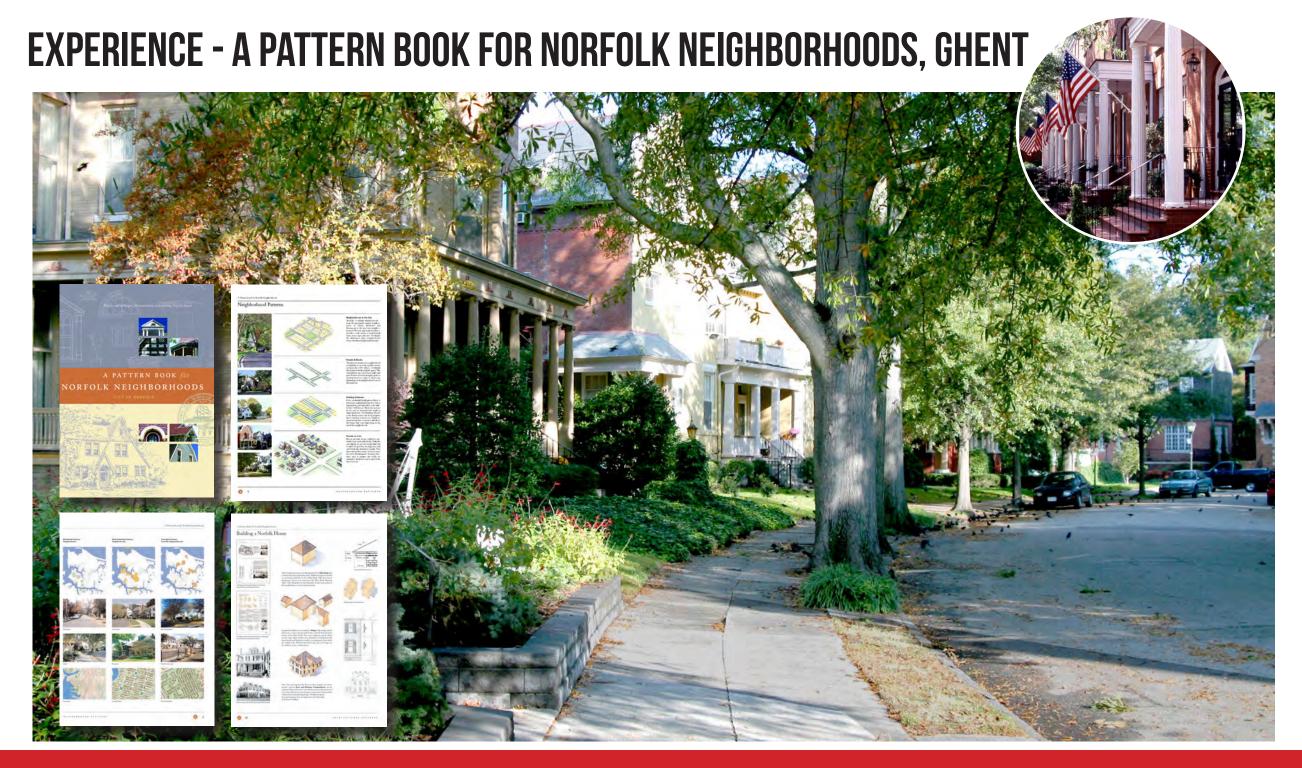












NEIGHBORHOOD DNA

Precedent Places Visited

Basildon
Noak's Bridge
Billericay
Ingatestone
Chelmsford
Writtle
Maldon
Southend-on-Sea
Leigh-on-Sea

Town Patterns

Cities
Market Towns
Resort Towns
Fishing and Working Towns
Agricultural Villages
and Hamlets
Residential Developments

Urban Spatial Patterns

High Streets
Market Squares
Retail Courts and Plazas
Neighborhood Streets
Neighborhood Parks
Regional Parks
Mews, Courts, and Alleys
Waterfronts
Edge Conditions
(Open Space and

Agricultural Land)

Building and LotTypologies

Flat Building
Mansion-Style Flats
Terrace Row
Semi-Detached Duplex
Detached Cottage
Detached Mansion

Architectural Patterns

Victorian

Arts + Crafts

Georgian

Romantic / Vernacular







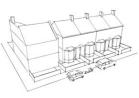












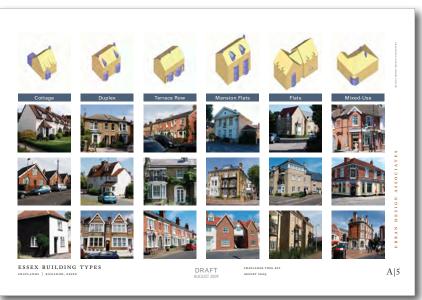


28 JULY 2009

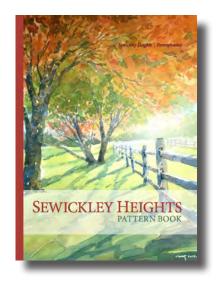


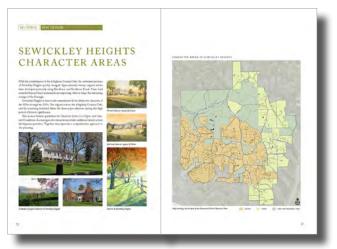
Essex Precedent Strategy
Craylands Regeneration | Basildon, Essex

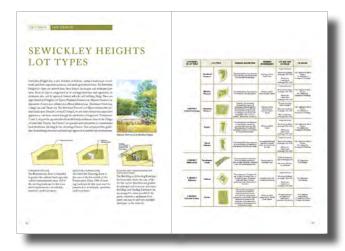




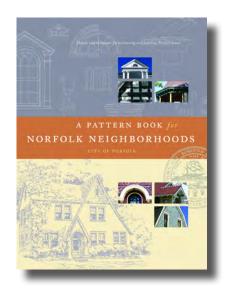
OPTIONAL ADD-ON: PATTERN BOOK













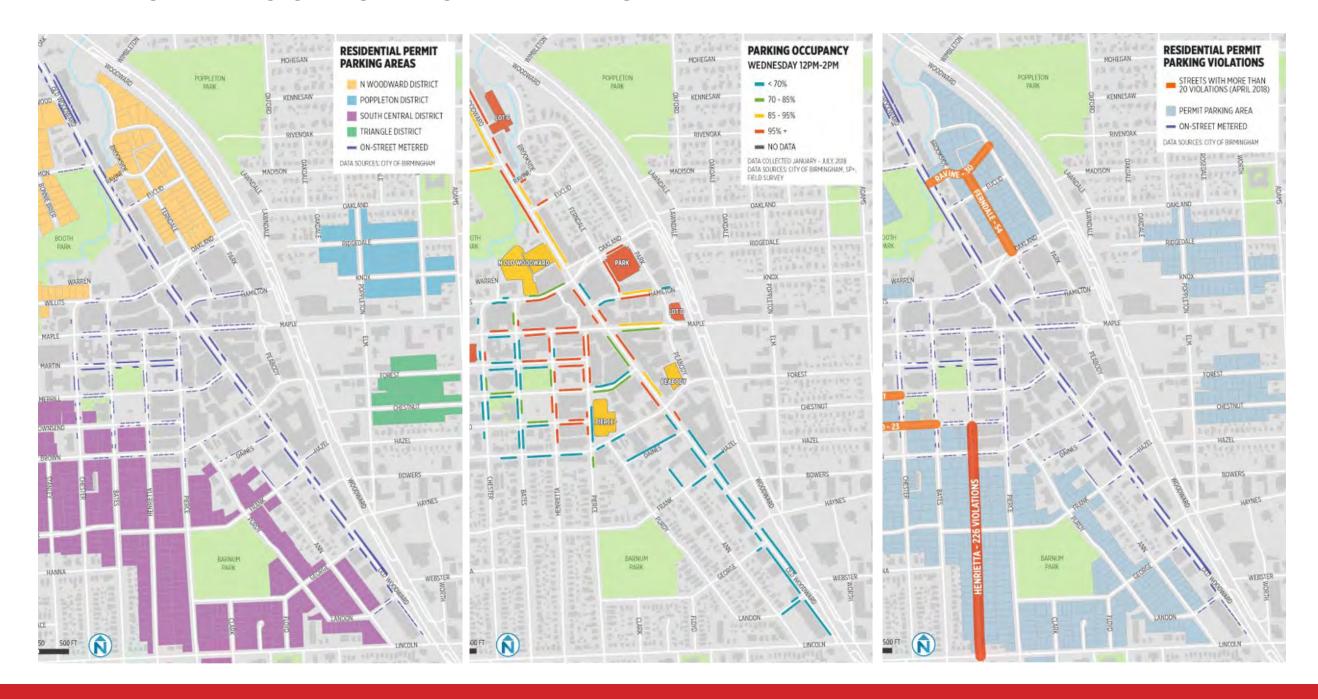






PARKING ANALYSIS - DOWNTOWN PARKING





PARKING ANALYSIS - GROWTH STRATEGIES



- How Much Growth, Where?
- How much Parking Demand, When?
- How to get the parking right?

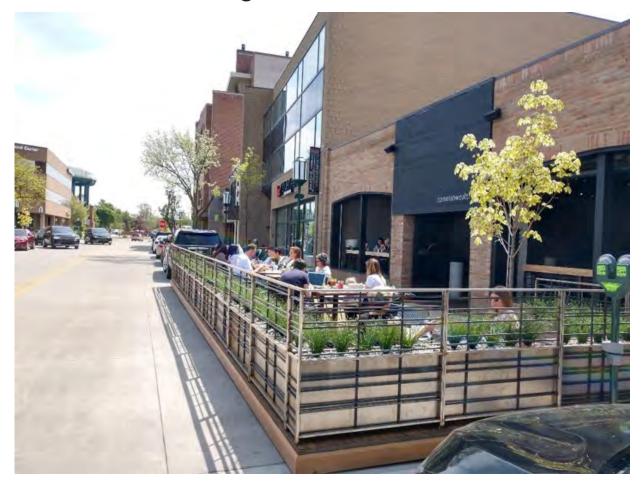




PARKING ANALYSIS - ROLE OF CITY TO ENSURE FUTURE-FORWARD APPROACH



- Get the Zoning/Parking Requirements Right
- Assessment District Options
- Curbside Management





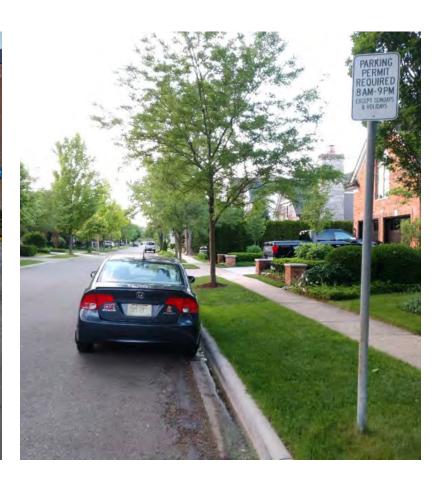
PARKING ANALYSIS - PREPARING FOR UNCERTAINTY

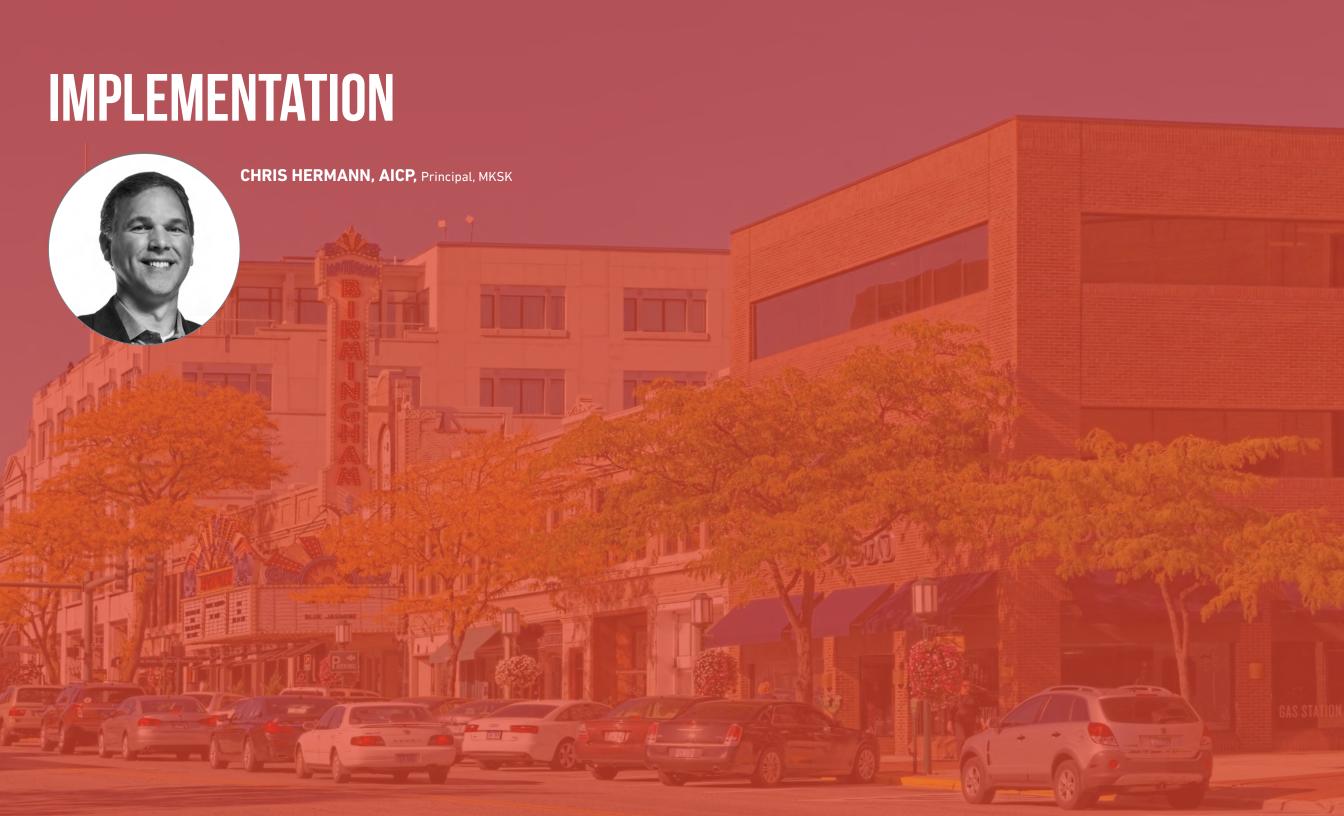


- Off-Street Parking Demand will go Down: When and by how much will vary significantly
- Curbside competition will increase dramatically, requiring smart, active management









THE ULTIMATE PRODUCT OF A MASTER PLANNING PROCESS IS NOT A DOCUMENT, IT IS A VIBRANT COMMUNITY.



















TRACK RECORD OF IMPLEMENTATION: GUIDING COMMUNITIES FROM VISION TO REALIZATION

CIVIC INFRASTRUCTURE



URBAN REDEVELOPMENT



STREETSCAPES

















THE COMBINED TALENTS OF THIS TEAM WILL PROVIDE BIRMINGHAM WITH:

- Leaders in the planning and placemaking creating VIBRANT AND LIVABLE COMMUNITIES
- **EXPERTS IN ENGAGEMENT** facilitation with diverse stakeholders and the public
- National leaders in DESIGN CHARRETTES
- National leaders in LINKING LAND USE WITH MULTI-MODAL TRANSPORTATION
- Award-winning plans: EXCELLENCE IN COMMUNICATION - Narratives and Graphics
 - Visionary action plans Roadmap to the future
 - Successful implementation
- KNOWLEDGE OF BIRMINGHAM: Three of our four firms have been entrusted with many previous projects in Birmingham



TRACK RECORD OF IMPLEMENTATION: GUIDING COMMUNITIES FROM VISION TO REALIZATION

MASTER PLANNING

Conceptual Design | Policy Guidance | Economic Analysis | Land Use Planning Infrastructure Planning | Community Engagement

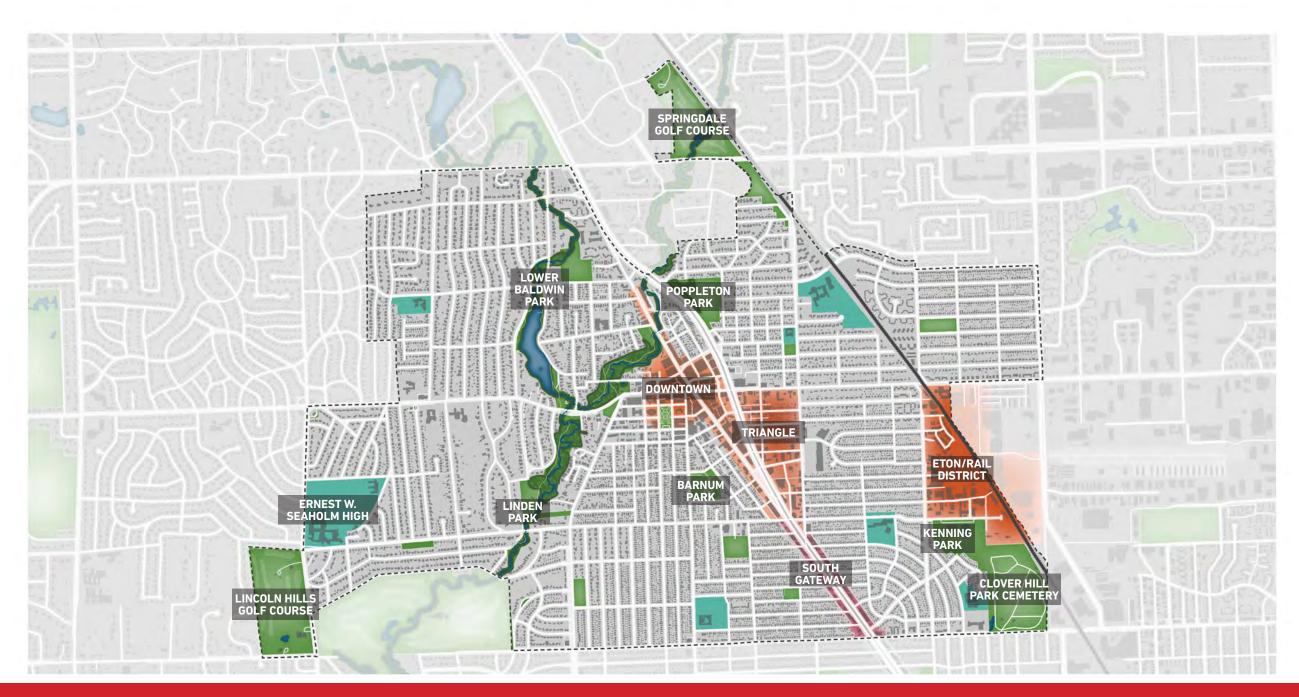


- Pro formas, development agreements, financial modeling & entitlements, tax and legal structures
- Development planning, capacity studies and site design
- Code, ordinance, policy & programs
- Funding, financing and public-private partnerships
- Regulatory compliance

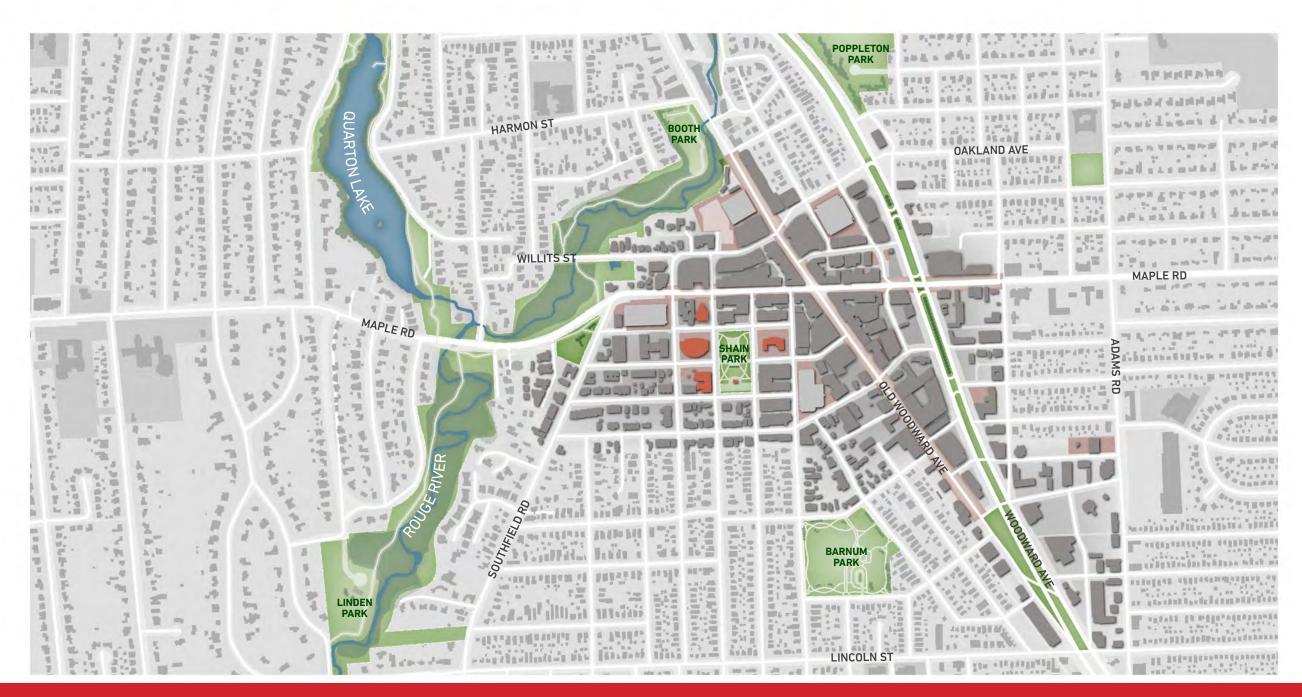
- Detailed design & Engineering
- **▶** Estimating & Constructability
- Solicitation, negotiation/bidding and procurement
- > Construction Administration
- Stewardship models, capital planning, operating cost analysis and revenue strategies
- > Data collection, survey, research and training



BIRMINGHAM



CENTRAL BIRMINGHAM











BUILT SUCCESS WITH NATIONAL AND INTERNATIONAL

DPZ CODESIGN

Planning, Urban Design, Zoning and Coding, Architecture, and Community Development



Community Engagement; Sustainability; Local Support for Planning, Zoning, and Coding



Economics, Demographics, Market Analysis, and Landscape Design



Transportation, Parking, and Infrastructure

OUR TEAM



- Built Success with National and International Renown
- Familiarity with Issues Unique to Birmingham
- Expertise with Creative Community Visioning, Neighborhood Enhancement, and Implementation
- Placemaking and Value Creation via Good Design
- Bringing the Community to the Table

WHY THE DPZ TEAM?





Andres DuanyProject Principal
and Advisor

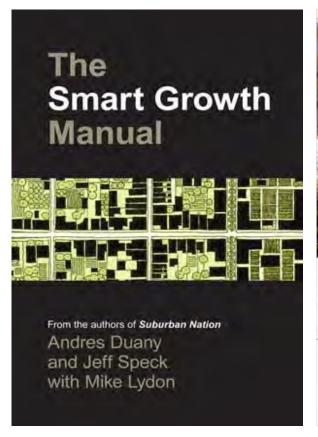


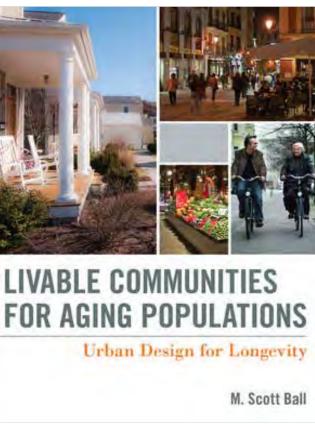
Matt LambertPartner and
Project Manager

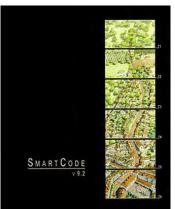
TEAM LEADERSHIP

INNOVATION AND RESEARCH

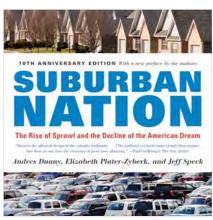














VANGUARDS OF URBANISM















City of Birmingham, MI



Kentlands, MD



Middleton Hills, WI

EXPERTS IN URBAN REVITALIZATION AND



FAMILIARITY WITH ISSUES UNIQUE TO BIRMINGHAM

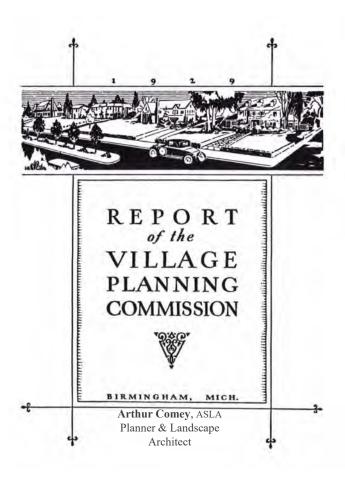
BIRMINGHAM PLAN 1929





Photograph of the United States Housing Corporation. Arthur Comey was employed by the USHC.

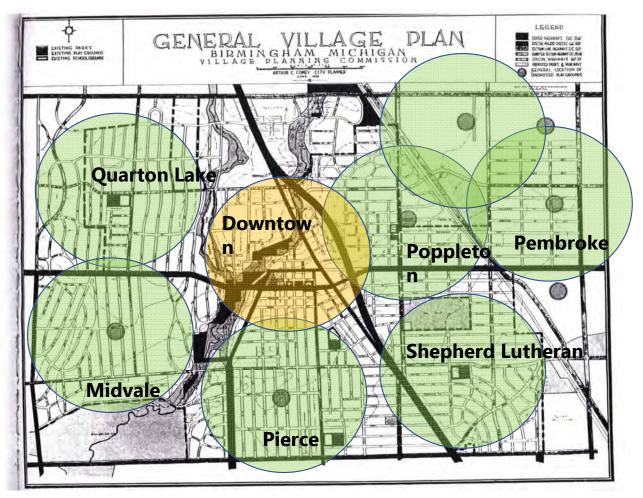
The United States Housing Corporation was created during World War I to build housing for workers near warrelated industries and shipyards. USHC employed many of the first city planners and landscape architects who later became the leading town planners throughout the country.



EARLY PLANNING SET THE RIGHT PATTERN OF

BIRMINGHAM ORIGINAL PLAN 1929

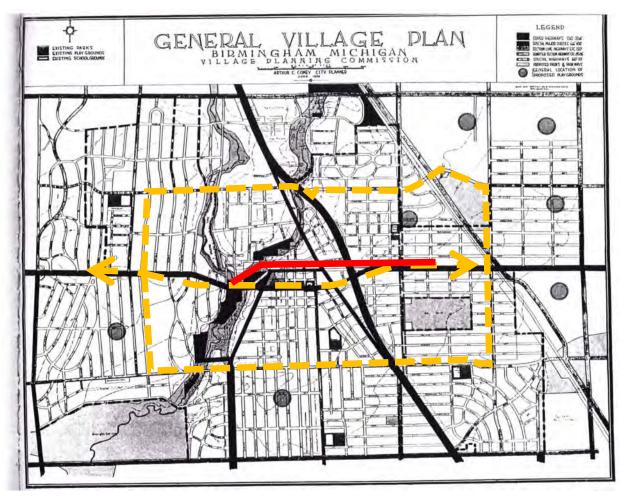




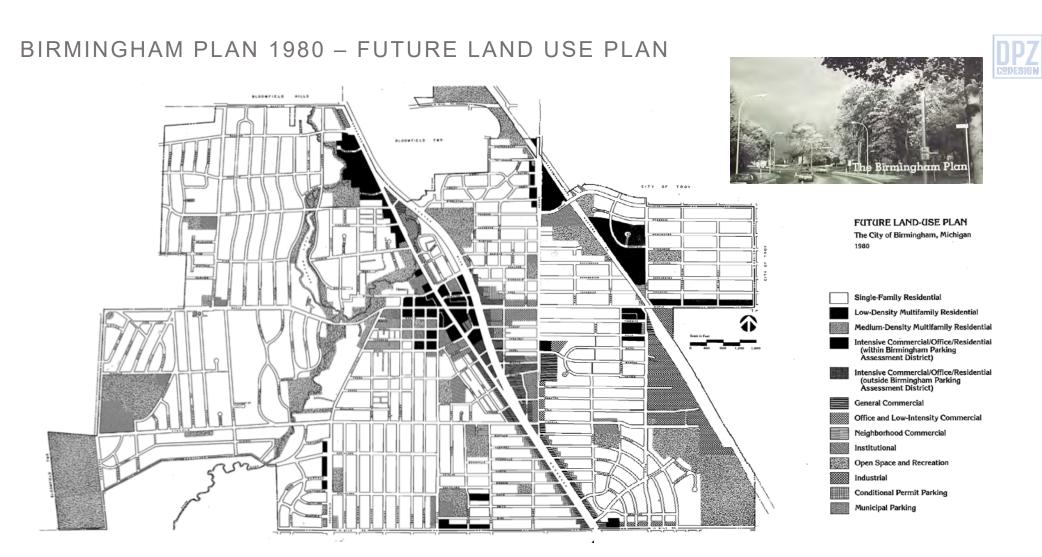
FRAMEWORK FOR NEIGHBORHOOD NODES

BIRMINGHAM ORIGINAL PLAN 1929





PLAN FOR NEW STREETS & NEIGHBORHOOD



BIRMINGHAM PLAN PROVIDES THE GENERAL

DOWNTOWN BIRMINGHAM 2016 MASTER PLAN



DOWNTOWN BIRMINGHAM 2016

A Master Plan for the City of Birmingham, Michigan

> I November, 1996 FINAL REPORT (REVISED)

RECOMMENDATIONS, APPENDICES & IMPLEMENTATION

Andres Duany and Elizabeth Plater-Zyberk
Architects and Town Planners

Gibbs Planning Group, Inc.
Town Planning. Landscape Architecture, Retail Consulting

Glatting Jackson Kercher Anlin Lopez Rinehart Community Planning and Traffic Engineering

> The Green Group, Inc. Market Research

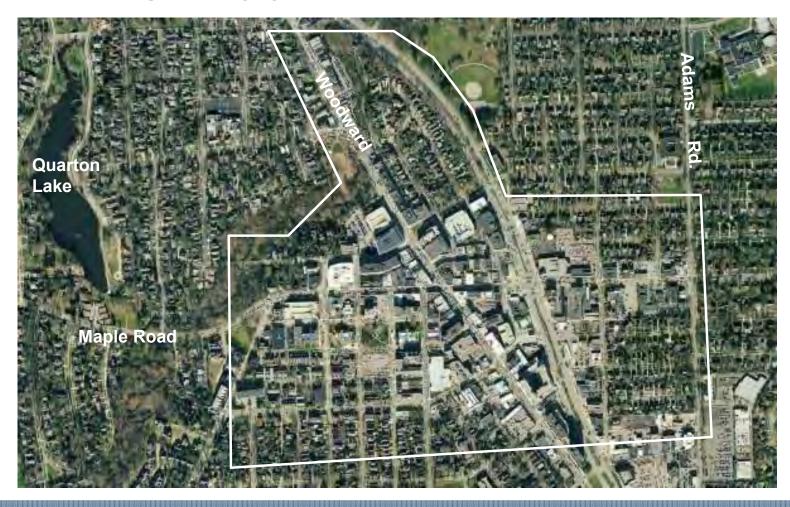
Mckenna Associates, Inc. Community Planning and Urban Design



FOCUS ON THE DOWNTOWN

DOWNTOWN BIRMINGHAM 2016 MASTER PLAN

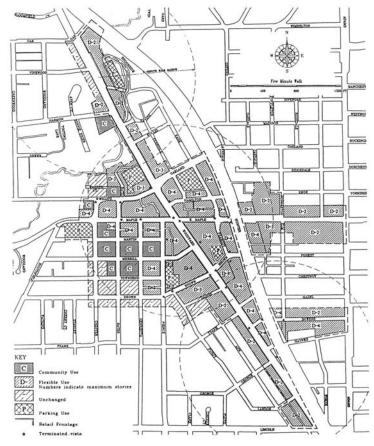




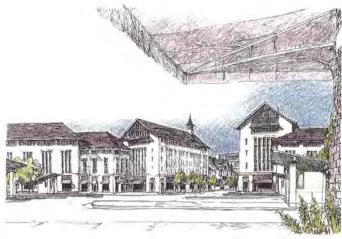
DOWNTOWN PLAN AREA OF FOCUS

DOWNTOWN BIRMINGHAM 2016 MASTER PLAN









THE ENTRANCE TO DOWNTOWN - MAPLE ST. FROM HUNTER BLVD.



HUNTER BLVD. NEAR BOWERS

REGULATING PLAN SUPPORTS THE VISION

BIRMINGHAM 2016 MASTER PLAN







BIRMINGHAM 2016 PLAN ASSESSMENT (2014)





BIRMINGHAM 2016 PLAN

ASSESSMENT OF 2014

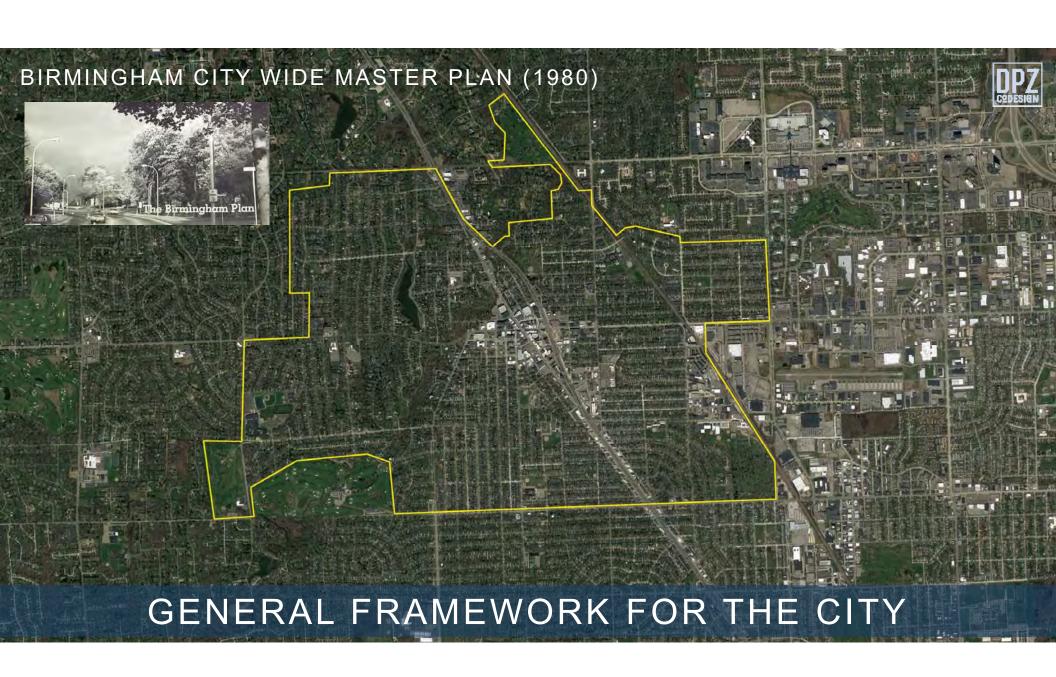
Duany Plater-Zyberk & Company



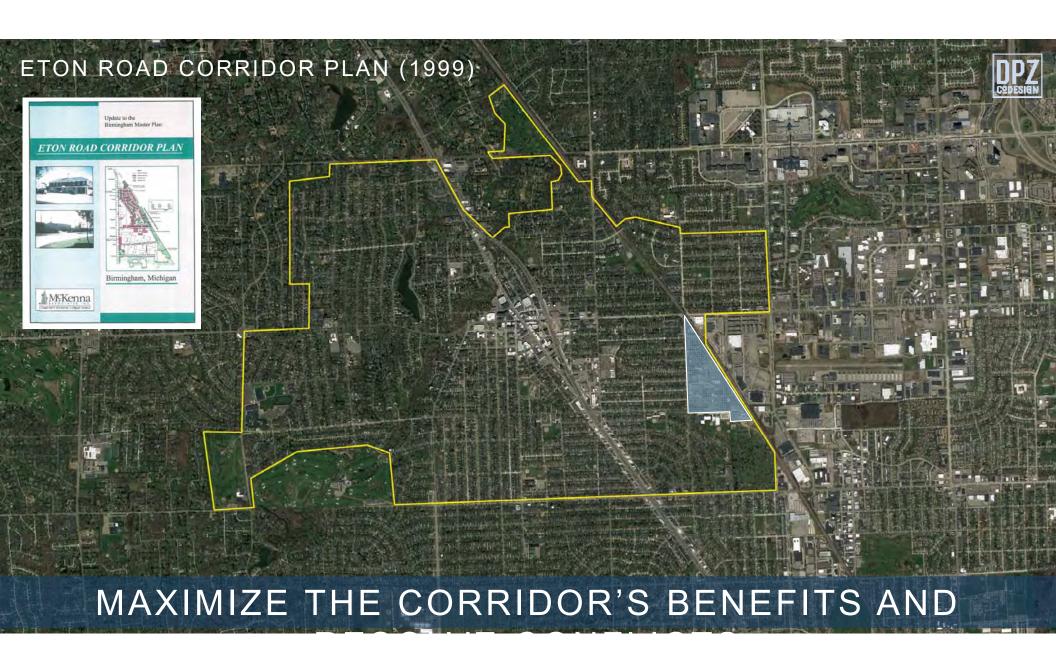


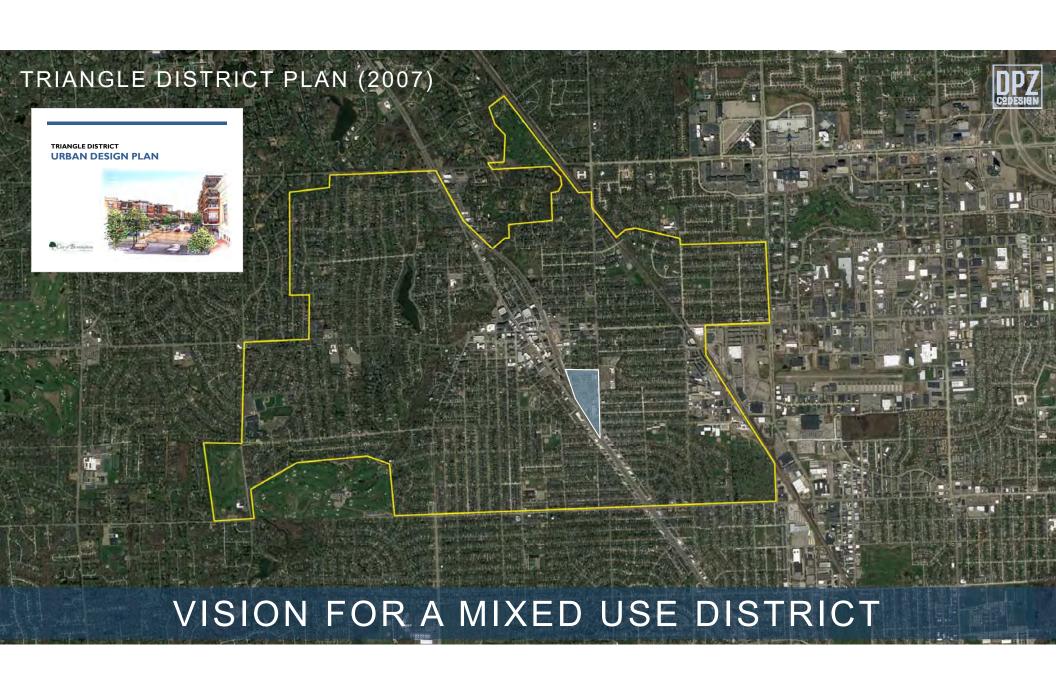


REVIEW OF PROGRESS AND THE WAY FORWARD

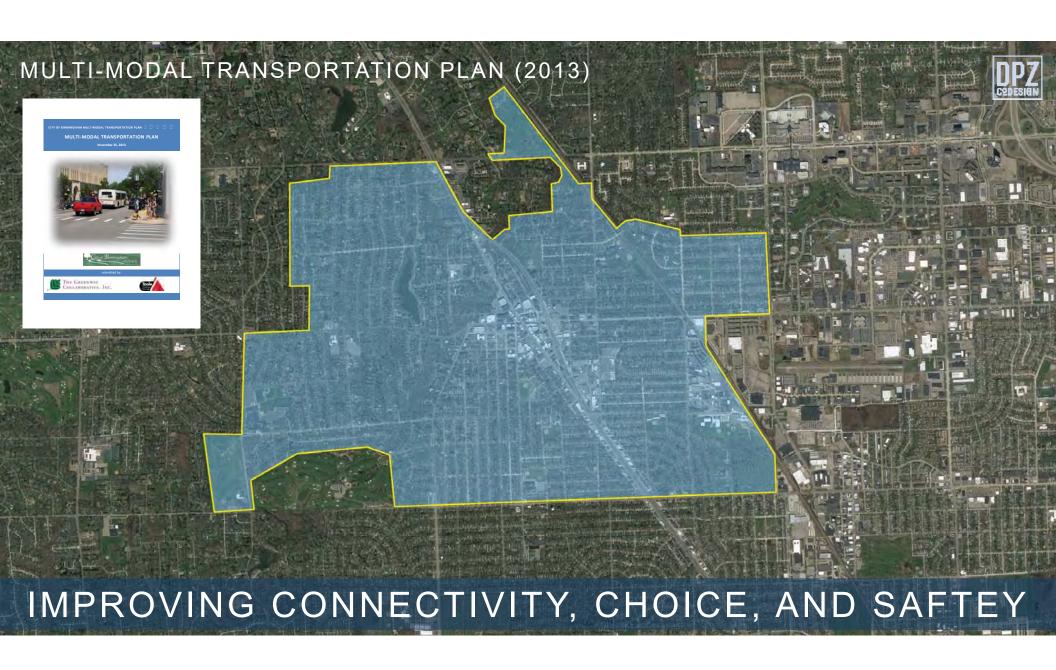


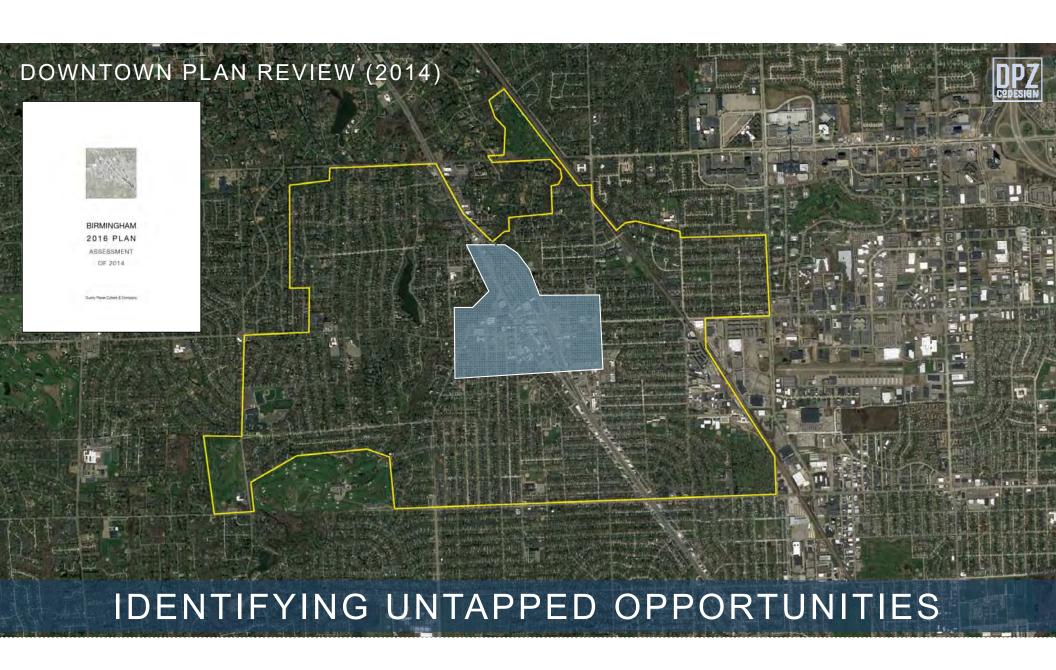


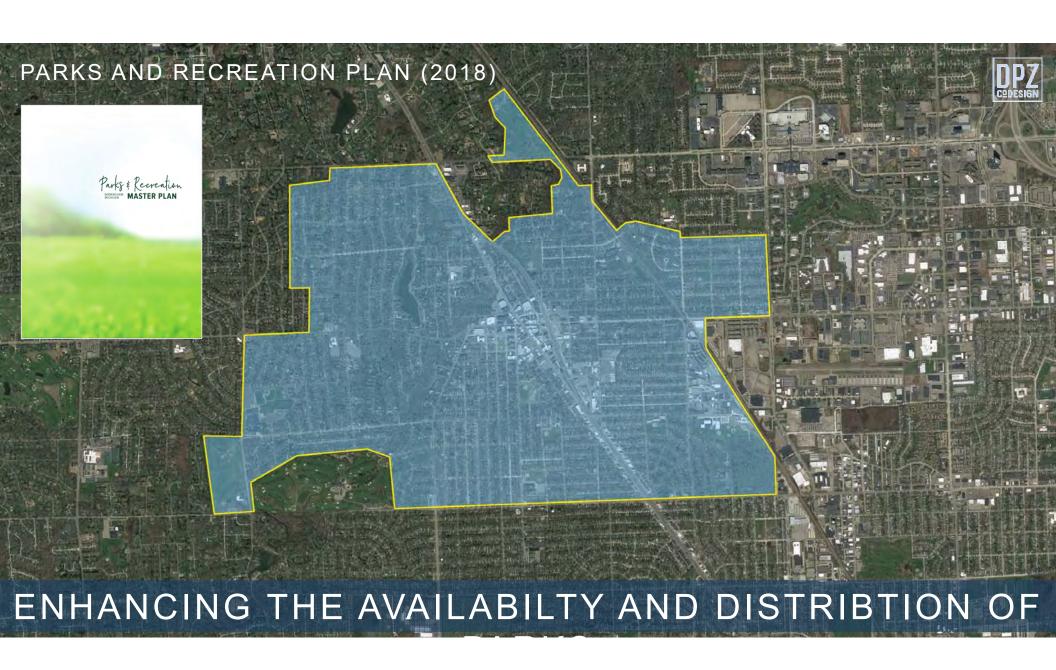


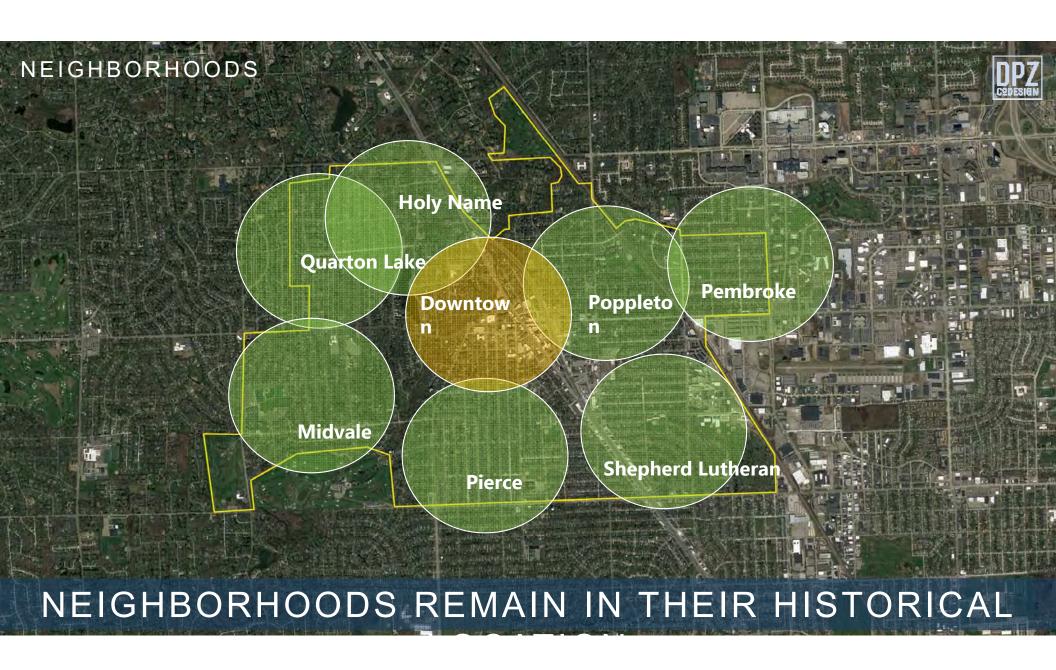












BIRMINGHAM NEIGHBORHOODS

Quarton Lake





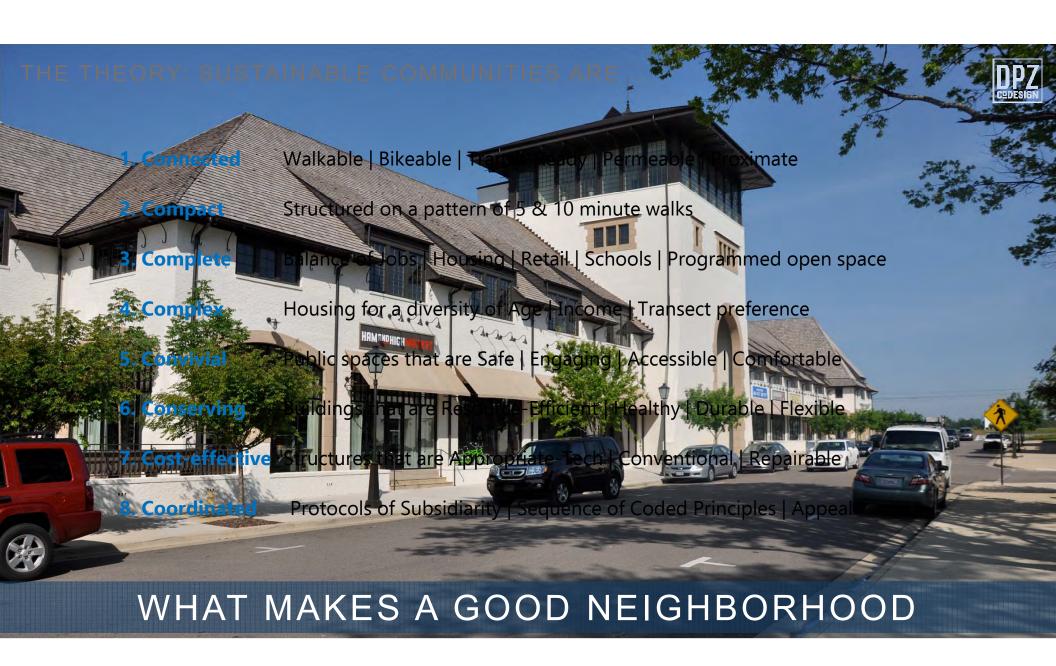








EXPERTISE WITH CREATIVE COMMUNITY VISIONING, NEIGHBORHOOD



ROSEMARY BEACH, FL

ROSEMARY BEACH, FL

NEW TOWN ST. CHARLE

KENTLANDS, MD

Neighborhood Centers



Public Spaces



Civic Buildings

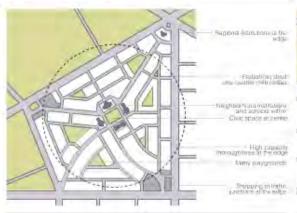
COMMUNITY AMENITIES ARE A FOCUS OF

NEIGHBORHOOD UNIT 1927

TRADITIONAL NEIGHBORHOOD DEVELOPMENT 1997

DPZ C2DESIGN

Neighborhood: the lundamental human habitat, a community substraining a full range of ordinary human needs, in its ideal form, the neighborhood lis a compact walkable urban pattern whose environment provides a balanced range of activities diveling, working, shooping, and repressional and aducational uses. There exists a variety of models some old and some of reliability recent derivation, that incorporate the attributes of the neighborhood.



Neighborhood Unit: A diagram and description from the First Regional Plan of New York (1929) which conceptualizasthe neighborhood as the fundamental stement of platning.

Size is determined by a walking dislance of five impules from pentler 10 odge, rather than by the number of residents. Density is determined by the minket. A community coalescing within a walkable area is the invaniant.

An elementary school is located at the contain within waking distance of most useful civic building, primite the most useful civic building, providing a meeting place for the adult population as well.

Local institutions are located within the meighborhood. Regional institutions are placed at the edges so that their traffic does not enter the meighborhood.

There is a diviciopen space of the center of the heighborhood, and several smaller playgrounds, one in close provintly to aviny household.

A network of small thoroughtares within the reighborhood disperses local traffic

Larger thoroughteres channel staffic at the addess.

Retail is confined to the junction having the most willie, accepting the multies of the automobile.



Traditional Neighborhood Development: A diagram that reconsiles current urbanization models with the traditional Neighborhood Linit.

Each teorogitate and Crici Open Space must constitute or be part of an immersive environment. Such environments are shaped by the buildings surrounding them, and are organized by Transact zones. The Transact zones ensure that each portion of the public restricts to consistent in itself, and the thoroughtare network ensures that they make a whole.

The echool is placed no longer at the center, but at the edge as playing fields would hinder pedestrian access to the center. At the edge, the school can be shared by several neighborhoods, mitigating the problem of the standency of neighborhoods to age in cohorts, generating large student age populations that then doo off shelph.

There are a few sites reserved for local institutions at the center and more for regional institutions at the edge. East of transportation has made meintenance in restrictions or matter of producty rather than proximity.

The drops at the busiess interrections have been modified to accommodate larger parking plazas for convenience retail and extended by an attached Main Street for description and line-wave reas. More service alleys and taries have been added to accommodate the increased parking requirements.

The minor thoroughfares are connected with those outside the neighborhood in order to increase permeability and disperse traffic. This modification, however, increases the possibility of almostraple.

The incroughture types support a transact from rectifinear streets at the utset conter to curvimear roads toward the rural edge.

The traffic along the boulavards at the edges is more unpleasant their Diarence Pany amissioned. Their mitigating strategies are proposed the provision of an end-grain of blocks at all edges, a green buffer shown along the bottom edge, and the location of resilient building types such as office buildings, shown along the bottom edge.

The Willic along the highway shown all the top is assumed to be heating and therefore buffered within a parkway.

3.1

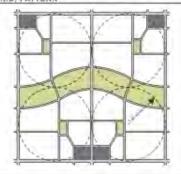
NEIGHBORHOOD STRUCTURE: NEIGHBORHOOD SCALE

The helphborhopday TND is an elemental building block of the regental plan. The neighborhopd model may be effectived by a variety of criticals, and there are social implications to each of the validatis.

There are lifeer reightfollowd recodes currently proposed. They are very similar, differing primarily in the conception of the pecestran street the location of its centroid, and its extent. These differences manifest recordary consequences regarding the density of the required model and the social quality of the center.

The alternatives can be easily compared when all are overlied on the standard mile-souther grid of the Continental Survey of the Linned States.

Amough each of the models procuses a comprehensive regional range, their optimal approacher ranes. All time should therefore be considered available for the appropriate obstantiance. T.N.D. PATTERN



in walling distance of the

rend to be efficient every

certier, bus transit will

al relatively low tiensi-

lies: Arrether advantage

is that, because the sen-

ter is not bisected by a

high dapacity thorough

fare (these remain at the

edges), its spalial quali-

IV as a social condenser

sive traffic

is not degraded by exces-

A disaplyantage of the TND

is that the commercial use

at the center may only sus-

tain neighborhood retail.

as it place not benefit from

thoroughfare. This model

tends to have only reach-

borhood institutions at the

center, with regional insti-

futions and commercial

use at the edges shared

by other neighborhoods

the traffic stradding a main

Traditional Neighborhood Development (TMD) is similar to the American Neighborhood Unit of 1927 and the European Quartier. It is a Community type structured by a Standard Redastrian Shed oriented toward a Common Destination consisting of a Mixed Use center or Condor and in the form of a mediumbezed settlement a transportation voite.

An advantage of the TND model is the high ratio of the reighborhood area that is within the pedestrian catelynent. Taking the mile square as a comparative matrix, the shed in soudes 70% of the developable area. Because a substantial proportion of the inhabitants are with-

T,O.D. PATTERN



Transit-Oriented Development (TOD) is smilar lo the raiway suburb of the 19th century. Its pedeshan shed is centered on a light the station that. If possible, coincides with a major thorough teat. This center is often all the edge of the centroid when the neighborhand area hole, he bedeshies shed of the TOD model is traditionally drawn as a semicilide, all highly there is no horisic reason with this should be so

An advantage of the TOD model is that rail is the most efficient form at transit. As It is also the most expensive this model provides for its support by a high population density within the pedestrain calchment of each station - a minimum of 14. dwelling units pet acre. Ani other advantage is that instifull crail as well as commerdal uses are concentrated around a transportation node. This is likely to create retail that is well-supported by pedestrian and automobile traffic. The regional character of this biarreit cenles, however, may wagrant

the creation of local centers internal to the meghborhood similar to the TMD model. Anomer potential problem is the spatial degradation resulting from of the traffic and pasking requirement of a transit station at the center. This is mitigal ed by the distillan of the traffic by a one-way pair of principal thorought tare all othe block's spacing.

A disadvantage of the YOU is that the density required to support transit use may not be acceptable in certain mankets. This is exacimbated by the low net ratio of area that is within a five-minute pedeetrian shed; taking the milestruare as a opmogrative motrix, such a shed included only 7% of the gross developable area. However the credible argument is made that the advantages of rail transit. (as opposed to the bus made of the other models) are sufficliently combelling that an atfective pedestrian shed can be increased to a 10 minute. hall-mile rathus. This raises the carchment to 40% of the developed area

LIVABLE NEIGHBORHOOD PATTERN



The Livable Neighborhold combines aspects from the TAD and the TAD. If was conceptualized as a correction to the Bintist Cell model, particularly as it was applied at Mitten Keynes, a community held to have failed as the cells juried to coalesce into the greater social scale of a city, despite having the population and all the necessary elements (statistically).

The Australian Liviable Meighborhood has a pedeathran shed mat appears to be eccentricially or a major adjustment of Dividual region and the regional region of the regional flag and unlike the TOD its pedeathran shed (this term isself derives from Australian usage) is conceptual read as a quanter-mise circle

Like the TND, an advertage of this model is the high ratio of the neighborhood area that is within the pudestrian catchment. Taking the miti-suguare us a comparative matrix, we a comparative matrix, we a send incursor 70% of the developable area. Because a substantial proportion of the interactionare are within walking desance of the certex at earlier by two densities, Also, the Especiary of bus francial of the TAD.

The Australian Livable Neighborhood has the disadvantage that, because the genter of the reighborhood is bisected by what is a high-capacity thoroughfare, its spatial quality as a social condenser may be degraphed. A strategy to minimge this reliable impact is the careful deligin of the thoroughlers as a boulevard. The strategy of the one-way pair proposed by the TOO may also apgly. Note in a repealed pattern of reighborhoods. with even dispersal of fratfig. not all the neighborhood centers would have the traffic intensity to werrant either of wese millioniing strategies.

NEIGHBORHOOD STRUCTURE: NEIGHBORHOOD MODELS

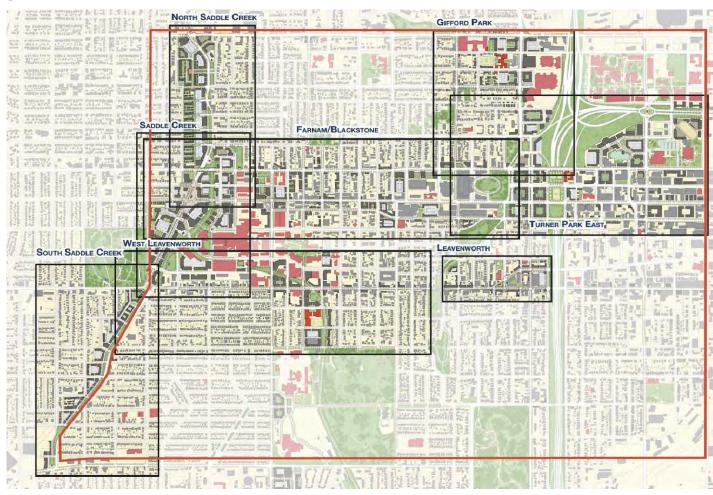
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MIDTOWN OMAHA





PLAN FOR URBAN CENTERS, NEIGHBORHOODS

MIDTOWN OMAHA

DPZ CºDESIGN

GIFFORD PARK

This opportunity area could be said to be in transition, as new development is already having an impact. The intersection of California and 33rd Streets is home to new small businesses, and with a little help it could see the type of success that has occurred at other neighborhood nodes like Dundee.

The existing Creighton Medical Center building has been sold and is proposed to be converted into a large multi-family complex. In addition, Omaha Public Schools is in the planning stages for a new elementary school.

The plan reinforces connections between these areas and integrates them into the neighborhood context.





PLAN ANNOTATIONS

- The existing neighborhood node, located at the intersection of California and 33rd Streets, is already home to several new small restaurants and businesses. The area could see even more success with the addition of much needed streetscape improvements, including wider sidewalks with shade trees.
- The former Creighton University Medical Center is being re-purposed as a multi-family complex. The residents will help support local businesses at 33rd and California, as well as new development in the vicinity.
- A new elementary school is being planned for this block by Omaha Public Schools
- New infill development can fill the gaps in the urban fabric where existing surface parkings lots occur.
- Omaha Public Schools Administration Building.
- Large parcels may be subdivided into smaller lots to promote small-scale infill development that is compatible with the neighborhood context.



RESPOND TO SPECIFIC CHARACTERISTICS OF

MIDTOWN OMAHA





KEY IMPLEMENTATION STEPS: Develop and implement a form

Develop and implement a **form-based code** as a tool to unify existing areas of development and promote walkable urbanism.

Promote the creation of a TIF or BID for the neighborhood node at 33rd and California Streeets. Use to help fund streetscape improvements to improve walkability.



The illustration above shows the intersection of 33rd and California with much needed streetscape and facade improvements. Local businesses thrive in this type of environment.

The image to the left shows the same intersection today.

ANALYZE OPPORTUNITIES TO PRESERVE AND

BETHEL FORWARD

the slow streets shown.

Existing Buildings New Buildings
TOD area Boundary
Metro North Rail Line

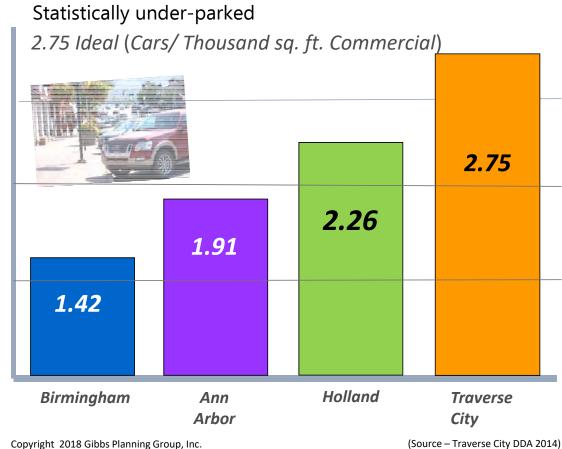




IMPROVE THE PUBLIC REALM

DOWNTOWN PARKING RATIOS

- Jobs / housing balance
- Operations
- Future demand trends and technologies
- Optimizing use of existing facilities
- Additional future facilities



ASSESS INVENTORY REQUIREMENTS















IMAGE: OPTICOS

PROVIDE THE MISSING MIDDLE

LIVE / WORKS



APARTMENT



BUNGALOW



OTHERS





Atlanta, GA



Rosemary Beach, FL



New Town St. Charles, MO



Townhouses and ADUs

OPPORTUNITIES - INNOVATIVE HOUSING



TO: City Commission

City of Birmingham

151 Martin Street

Birmingham, MI 48009

Attention: Mr. Joe Valentine, City Manager (via email and post)

CC: Ms. Jana Ecker, Planning Director (via email)

FROM: Andres Duany, DPZ CoDESIGN

Matthew Lambert, DPZ CoDESIGN

Phillip McKenna, McKenna

Robert Gibbs, Gibbs Planning Group

DATE: September 19, 2018

RE: Master Plan Update Consultant Team

Commission Evaluation

Dear Commissioners,

Thank you again for the opportunity to partner with Birmingham leaders to prepare a generationally significant comprehensive plan for your premier community. In anticipation of a full presentation by our team of our proposal to the City Commission, we consider several points to be important.

1. <u>Fairness in The Next Steps:</u> The DPZ team believes we complied with the procurement rules and the competitive egalitarian process outlined in the RFP comprising 1) Proposal; 2) Presentation; 3) Committee selection and recommendation; and 4) City Commission approval of selection.



We carefully invested our time and money, confident that if selected by the Committee, we would gain Commission approval. By those rules, our team garnered the Committee's preference by a substantial 7-to-1 margin.

At the City Commission meeting on Monday, September 13, the rules were altered, and a new process confronts us out of which we expect to once again emerge successful; however, to do so, we must be permitted at least a fair chance to succeed. We respect the Commission's desire to have MKSK appear before you for a question-and-answer session similar to that with our team earlier this week. This being said, MKSK possesses the advantage of having access to the video of the September 13 hearing and the Commission's concerns, allowing them to position their interview with the Commission anticipating said concerns. To maintain fairness in this process, we respectfully request for the opportunity of a proper (but abridged) presentation to the Commission by both DPZ and MKSK.

As part of the above, we also respectfully request that a report or presentation from and by the selection committee on their 7-to-1 conclusion be provided to, and reviewed by, the Commission, as part of providing the Commission with all pertinent information.

2. The DPZ Team's Expertise in Public Engagement: In addition to a community engagement program (website, surveys, interviews) that will run throughout the course of the master planning process, a key element tin our proposed work plan towards ensuring meaningful community engagement that feeds directly into the master plan preparation is our Charrette methodology.

In the late 1980's DPZ pioneered the Charrette methodology integrating planning/design and stakeholder consultation in an interactive, dynamic workshop format. By definition, our proposed Charrette process is an intense series of highly visible public engagements, specifically structured over multiple sequential days (typically 7 to 8 days) to elicit and impart relevant information to the community as well as to extract, process, illustrate, and test all possible ideas, options, concerns, and input of the affected stakeholder (e.g. individual residents, neighborhood groups, youth, seniors, and other interest groups; businesses,



investors, builders, and developers; local institutions; city leaders and city departments; etc.). The DPZ team would seek to have all such decision-makers participate at the Charrette have them directly influence the planning and design process as the team presents various plan alternatives and instantaneously responds to requested changes. The main refinements are actually done at the Charrette in the presence of the decision-makers through repeated feedback loops – this is how the DPZ team embeds the community's vision into the master plan; in the manner described above, by the conclusion of the Charrette, the resulting plan proposals – prepared and organized by skilled professionals – are widely understood and lead to broad support and implementation.

Our proposal allocates the public engagement budget as follows:

iii. Interviews (unlimited)

			Est. Amt.
a.	7-day Charrette public engagement and design process		\$70,000
b.	7-month non-Charrette public engagement		\$30,000
	i.	Project Website	
	ii.	Surveys (hard copy) (online)	

Finally, DPZ has committed to having Founding Partner Andres Duany available for meetings with each of the City's neighborhoods as part of his leadership role at the Charrette. This targeted approach with neighborhood stakeholder groups will yield great returns for City leaders.

3. The DPZ Team's Expertise in Planning for Neighborhoods: Since 1980, DPZ has been creating benevolent and successful human places in the form of neighborhoods, villages, towns, and cities, all of which encourage walking, diversity, and complexity. Specifically, some 20 years ago, DPZ resurrected and re-invented pre-World War II neighborhood design, along with principles now used in common planning practice, such as the 5-minute walk/pedestrian shed, the connected grid, Complete Streets, civic spaces, front porch security, attainable housing types, etc.



As we had discussed with the selection committee at our interview on August 29, we anticipate an approach to planning for the various Birmingham neighborhoods that is two-fold: (1) identifying and strengthening the unique character and core of each neighborhood, along with (2) examining the transitions and interfaces between neighborhoods (including downtown as well as considering prior/ongoing redevelopment plans) at their edges, ensuring a cohesive urban fabric, optimizing opportunities for strategic infill, and facilitating connectivity between areas and throughout the city overall.

Our team has researched the historical establishment of the City's neighborhoods, past plans related to the connections and interrelationship between neighborhoods, and has recent success engaging Birmingham residents during the Parks and Recreation Master Plan process. In short, we are intimately familiar with the neighborhoods, their centers and history, and have recently interfaced with neighborhood representatives.

We appreciate the complexities of the Commission's responsibilities, and we very much believe our team has the most demonstrably successful record of planning in the City of Birmingham, as well as in other places of various sizes, types, and priorities – signifying our capacity to align with each community's unique vision and goals. Ultimately, we do "get" Birmingham; therefore please let us know the date and time of the new presentation so we might make the necessary preparations.

Thank you for considering our perspective; we look forward to working with you again.

Sincerely,

Andres Duany

Phillip McKenna

Matthew Lambert

Robert Gibbs



September 26, 2018

Mr. Andreas Duany, Mr. Matthew Lambert, Mr. Phillip McKenna and Mr. Robert Gibbs DPZ CoDesign 1023 SW 25th Avenue Miami, FL 33135

Dear Mr. Duany, Mr. Lambert, Mr. McKenna and Mr. Gibbs,

I am in receipt of your September 19th letter to the City Commission outlining your request for how the Master Plan Selection Consultant selection should proceed. It is important to note the selection for the consultant is governed by the Request for Proposals (RFP) that was issued for this project. As such, the Terms and Conditions outlined in the RFP provide the City (thereby the City Commission as its governing body) the right to reject any or all proposals received, waive informalities, or accept any proposal, in whole or in part, it deems best. Keep in mind no decision has been made at this time as the Commission has only requested further clarification from one of the other contractors which is also provided for in the RFP. It must be made clear no rules were altered and no new processes were conducted. Rather, the City Commission is conducting their due diligence in ensuring the Scope of Work they developed will be administered as prescribed by the RFP.

Consequently, your requests to introduce additional presentations cannot be granted. However, the other contractor will be at the October 8th Commission meeting to provide clarification on their proposal and you and your team are also welcome to attend.

Sincerely,

Joseph A. Valentine

a. Valit

City Manager

cc: City Commission



MEMORANDUM

Planning Division

DATE: October 19, 2018

TO: Joseph A. Valentine, City Manager

FROM: Matthew Baka, Senior Planner

APPROVED: Jana L. Ecker, Planning Director

SUBJECT: Public Hearing for a Lot Rearrangement of 120 Hawthorne, Parcel

#1935230015, T2N, R10E, SEC 26 QUARTON LAKE ESTATES REPLAT S 35 FT OF LOT 101, ALL OF LOTS 102 & 103, ALSO N 52.5 OF LOT 104 and **125 Aspen, Parcel #1935230001**, T2N, R10E, SEC 36 BIRMINGHAM PARK

ALLOTMENT LOT 90: 934583

INTRODUCTION:

The owner of the properties known as 120 Hawthorne and 125 Aspen is seeking approval for a lot rearrangement of properties in order to increase the rear setback of the parcel at 120 Hawthorne in order to build a new addition on the house. The current proposal is to move the rear lot line of 120 Hawthorne 22.08' to the west. There are currently single family homes on each parcel. The applicant would like to construct an addition onto the home at 120 Hawthorne, which requires the additional space that would be provided by the lot rearrangement. Enclosed are copies of surveys provided by the applicant depicting existing and proposed conditions.

BACKGROUND:

The Subdivision Regulation Ordinance (Chapter 102, Section 102-53) requires that the following standards be met for approval of a lot division.

(1) All lots formed or changed shall conform to minimum Zoning Ordinance Standards.

The subject properties are zoned R1, Single Family Residential. The minimum lot size per unit in the R1 zone is 9,000 sq. ft. The altered parcels that result from the lot split would conform to minimum Zoning Ordinance standards as set out in Article 02, Section 2.06 of the Zoning Ordinance, for the R-1 Zoning District. The proposed split would create a 13,547.5 sq. ft. parcel on the parcel at 120 Hawthorne and a 10,956.4 sq. ft. parcel on the parcel at 125 Aspen. Accordingly, both of the proposed parcels would be in excess of the required 9,000 sq. ft. minimum lot size for the R-1 Single Family Residential District. **Accordingly, the proposal meets this requirement.**

(2) All residential lots formed or changed by the division shall have a lot width not less than the average lot width of all lots on the same street within 300 feet of the lots formed or changed and within the same district.

No change to the lot width of either parcel is proposed. **Accordingly, the proposal** meets this requirement.

- (3) The division will not adversely affect the interest of the public and of the abutting property owners. In making this determination, the City Commission shall consider, but not be limited to the following:
 - a. The location of proposed buildings or structures, the location and nature of vehicular ingress or egress so that the use of appropriate development of adjacent land or buildings will not be hindered, nor the value thereof impaired.
 - b. The effect of the proposed division upon any flood plain areas, wetlands or other natural features and the ability of the applicant to develop buildable sites on each resultant parcel without unreasonable disturbance of such natural features.
 - c. The location, size, density and site layout of any proposed structures or buildings as they may impact an adequate supply of light and air to adjacent properties and the capacity of essential public facilities such as police and fire protection, drainage structures, municipal sanitary sewer and water, and refuse disposal.

The applicant has indicated their intent to construct a new addition to the home at 120 Hawthorne if the requested lot rearrangement is approved. The new addition would be subject to all R-1 zone regulations as required by the Zoning Ordinance. The proposed lot rearrangement will not hinder the development of adjacent properties.

The subject property is not located within the floodplain or soil erosion limit of a recognized stream, river, lake or other water body. The site does not appear to exhibit evidence of regulated wetlands or endangered species of flora and fauna. The proposed lot rearrangement and property transfer will not affect any natural features on the site.

The proposed lot rearrangement will not negatively affect the supply of light and air to adjacent properties. It will not negatively affect the capacity of essential public facilities. City departments have no objections to the proposed lot split.

LEGAL REVIEW:

The application package has been reviewed the City Attorney. There are no concerns with this application.

FISCAL IMPACT: No fiscal impact.

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The proposed lot rearrangement meets the standards outlined in Chapter 102, Section 102-53 of the City Code.

ATTACHMENTS:

- Application
- Letter stating reasons for the request
- Certified Land survey and plans

SUGGESTED RESOLUTION:

1) To APPROVE the proposed lot rearrangement of 120 Hawthorne and 125 Aspen as requested.

or

2) To deny the lot rearrangement of 120 Hawthorne and 125 Aspen as proposed based following conditions that adversely affect the interest of the public and of the abutting p owners:	

Division of Platted Lots Application

1. Applicant	Property Owner CITY OF RIPMINGUE		
Name: Claudia Sills	Property Owner CITY OF BIRMINGHAM Name: Claudia Sills, Troskel (Halvinging): Claudia Sills (Asbert)		
Address: 120 Hawthorn's St., Birmingham MI 48009	Address: 120 Hawthorne St., Birmingham, MI 48009 T DEPARTMENT		
Phone Number: 248-840-0688	Phone Number: 248-840-0688		
Fax Number:	Fax Number:		
Email Address:	Email Address:		
2. Applicant's Attorney/Contact Person	Survey Company		
Name: Richard D. Rattner	Name: Fenn and Associates, Inc.		
Address: Williams, Williams, Rattner, and Plunkett, P.C.	Address: 14933 Commercial Dr., Shelby Township, MI 48315		
380 N. Old Woodward Ave., Ste. 300, Birmingham, MI 48009			
Phone Number: 248-642-0333	Phone Number: 586-254-9577		
Fax Number: 248-642-0856	Fax Number: 586-254-9020		
Email Address: rdr@wwrplaw.com	Email Address:		
3. Project Information			
Address/Location of Property: 120 Hawthorne St., Birmingham, MI 48009	Legal Description: Hawthorne: T2N, R10E, Sec 36 Birmingham Park Allotment Lot 91		
and 125 Aspen Rd., Birmingham, MI 48009	Aspen: T2N, R10E, Sec 36 Birmingham Park Allotment Lot 90		
Sidwell #: Hawthorne: 1935230015; Aspen: 1935230001			
Current Zoning: Both properties are zoned R1 Single-Family Residential.			
	· [- 1 - 1 		

4. Attachments

- · Proof of ownership
- Written statement of reasons for request
- A letter of authority or power of attorney in the event the application is made by a person other than the property owner
- Other data having a direct bearing on the request
- Sketches of proposed development (optional)
- · One digital copy of plans

- Two (2) copies of a registered land survey showing:
 - all existing and proposed platted lot lines
 - legal descriptions of proposed lots
 - locations of existing/ surrounding structures and setbacks
 - footprints of proposed development

(I), (We), the undersigned, do hereby request to divide lots of record in the City of Birmingham, Oakland County, Michigan. (I), (We), do hereby swear that all of the statements, signatures, and descriptions appearing on and with this request are in all respects true and accurate to the best of (my), (our), knowledge.

Signature of Property Owner:	Date: 8/21/18
Print Name: Claudia Sills	
Signature of Applicant:	Date: 8/21/18
Print Name: Claudia Sills	

Fee: \$200.00 per lot affected, minimum fee \$400

Ref 00152552 Receipt 448448 Amount \$100.00

152552

OF BIRWINGHAM
09/24/2018 12:10:06



Notice Signs - Rental Application Community Development

1. Applicant	Property Owner
Name: Claudia Sills	Name: Claudia Sills
Address: 120 Hawthorne St., Birmingham, MI 48009	Address: 120 Hawthorne St., Birmingham MI 48009
Phone Number: 248-840-0688	Phone Number: 248-840-0688
Fax Number:	Fax Number:
2. Project Information	
Address/Location of Property: 120 Hawthorne St., Birmingham MI, 48009	Name of Historic District site is in, if any: N/A
	Current Use: Residential
Name of Development: 120 Hawthorne St.; 125 Aspen St.	
Area in Acres: Hawthorne: 0.27 acres; Aspen: 0.29 acres	Current Zoning: R1
3. Date of Board Review	
Board of Building Trades Appeals:	Board of Zoning Appeals:
City Commission: September 6, 2018	Design Review Board:
Historic District Commission:	Housing Board of Appeals:
Planning Board:	
pay a rental fee and security deposit for the Notice immediately following the date of the hearing at will be refunded when the Notice Sign(s) are returned.	ory posting period. The undersigned further agrees to ce Sign(s), and to remove all such signs on the day which the project was reviewed. The security deposit urned undamaged to the Community Development and/or damage to the Notice Sign(s) will result in
Signature of Applicant:	Date: 8/21/18
Offi	ice Use Only
Application #: Date Received:	Fee:
Application # Date Received	100.

174067

LIBER 19987 PAGE 420
97.00 DEED - COMBINED
92.00 REMAINEMENTATION
9.00 TRANSFER TX COMBINED
05/18/1999 08:50:07 A.M. RECEIPTE 33067
PAID RECORDED - DARLAND CLIMITY
6. WILLIAM CARDELL, CLERK/REGISTER OF DEEDS
ONIT CLAIM DEED

CLAUDIA SILLS,	a single woman				
120 Hawthorne,	Birmingham, MI	48009			
CLAUDIA SILLS, CLAUDIA SILLS I 1998	or her Succe Revocable Living	ssor, as Trustee Trust dated Novem	of the ber 16,		
120 Hawthorne,	Birmingham, MI	48009			
the following described premises situated in the City of Birmingham, County of Oakland, State of Michigan:					
N.E. 1/4 of Sect n 36, T2N., R. mingbam, (now Corded in Liber 2	ion 35, and the 10E., Bloomfie ity of Birmingh 3 of Plats, Page	West 1/2 of the N. ld Township and t am), Oakland Count	W. he Y,		
t to easements.	building and use	e restrictions, and	nd MCLA zoning		
day of Jan	uary	, 199 9 .	١		
m. Sius	Clause	die mille			
		O.K	KE		
S	4	,			
JUDITH L. TODINO RY PUBLIC, Wayne County, M Acting in Oakland County	non Notary Pul	th A. To-cleni	C- ugan		
a ISAACS ation Guite 2700 an 48075 a bills to:	Grantee cording Fee	When recorded rotal Preparer Transfer Tax	irn to:		
	CLAUDIA SILLS, CLAUDIA SILLS, CLAUDIA SILLS, CLAUDIA SILLS F 1998 120 Hawthorne, 1bed premises sif Michigan: NGHAM PARK ALLON, R. 1/4 of Section 36, T2N., R. mingham, (now Corded in Liber 2: NE (\$1.00) DOLL to easements, day of Jan MICHIGAN PARK ALLON, M. Corded in Liber 2: NE (\$1.00) DOLL to easements, Aday of Jan SILLS ALLON, R. County, M. County, M. County of Market 100 No. RYPUBLIC, Wayne County, M. Acting in Ozikland County ommission Expires Nov 26.26 Esq. Stanacs cation Suite 2700 and 48075 of bills to:	CLAUDIA SILLS, or her Succes CLAUDIA SILLS Revocable Living 1998 120 Hawthorne, Birmingham, MI 1bed premises situated in the Off Michigan: NGHAM PARK ALLOTMENT", a subdiv N.B. 1/4 of Section 35, and the on 36, T2N., R.10E., Bloomfield in John 1998 NE (\$1.00) DOLLAR Exempt of the easements, building and use The easements of t	CLAUDIA SILLS, or her Successor, as Trustee CLAUDIA SILLS Revocable Living Trust dated Novem 1998 120 Hawthorne, Birmingham, MI 48009 1bed premises situated in the City of Birmingham, f Michigan: NGHAM PARK ALLOTMENT", a subdivision of part of the N. 106 of Tan., R. 105, and the West 1/2 of the N. 107 of Tan., R. 105, Bloomfield Township and the mingham, (now City of Birmingham), Oakland Count orded in Liber 23 of Plats, Page 25 of Oakland Count orded in Liber 23 of Plats, Page 25 of Oakland Count to easements, building and use restrictions, and to easements, building and use restrictions, and day of Tanuary, 1999. The county of Birmingham, Oakland County, 1999. CLAUDIA SILLS CLAUDIA SILLS CLAUDIA SILLS When recorded rotted to the preparer of the bills to: Grantee		

e-recorded

R 50679 PAGE 898

e-recorded
OAKLAND COUNTY TREASURERS CERTIFICATE
I HEREBY CERTIFY that there are no TAX LIENS or TITLES
held by the state or any individual against the within descripti
and all TAXES on same are paid for five years previous to the
date of this instrument as appears by the records in the office except as stated. Reviewed By: RL

May 18, 2017

5.00 E-FILE

0097492

LIBER 50679 PAGE 898 \$21.00 DEED - COMBINED \$4.00 REMONUMENTATION \$5.00 AUTOMATION \$5,800.70 TRANSFER TX COMBINED 05/18/2017 04:40:14 PM RECEIPT# 57826 PAID RECORDED – Oakland County, MI Lisa Brown, Clerk/Register of Deeds

STATE OF

\$5,058.75 ST 001108661

WARRANTY DEED

The Grantor(s): Raymond F. Massa and Nancy E. Massa, Husband and Wife

whose address is 480 Thetford, Bloomfield Hills, MI 48304

Convey and Warrant to: Claudia Sills

whose address is 120 Hawthorne Street, Birmingham, MI 48009

the following described premises situated in the City of Birmingham, County of Oakland and State of Michigan, to-wit:

Lot 90, Birmingham Park Allotment Subdivision, as recorded in Liber 23, Page 25 of Plats, Oakland County Records.

Commonly known as:

125 Aspen Road, Birmingham, MI 48009

Tax parcel number(s):

19-35-230-001

For the sum of: Six Hundred Seventy Four Thousand One Hundred Fifty and 00/100 Dollars (\$674,150.00)

Subject to: the existing building and use restrictions, easements, and zoning ordinances, if any.

Dated: May 12, 2017

Seller(s):

Nancy E. Massa

Nancy E. Massa

(Attached to and becoming a part of the Warranty Deed dated May 12, 2017, File Number 397603-55)

STATE OF MICHIGAN

Acknowledged by Raymond F. Massa and Nancy E. Massa, before me on the 12th day of May, 2017.

SUSAN M. SHEPARD
Notary Public, State of Michigan
County of Oakland
My Commissive Expires Oct. 6, 201
Acting in the County of

Notary Public County,

Michigan County

My commission expires:

Drafted by: Raymond F. Massa, 480 Thetford, Bloomfield Hills, MI 48304

When recorded return to: Claudia Sills, 125 Aspen Road, Birmingham MI 48009



Williams Williams Rattner & Plunkett, P.C. Attorneys and Counselors

380 North Old Woodward Avenue Suite 300 Birmingham, Michigan 48009

Tel: (248) 642-0333 Fax: (248) 642-0856

September 21, 2018

Richard D. Rattner rdr@wwrplaw.com

City of Birmingham
City Commission
151 Martin St.
Birmingham, MI 48009
Attn: Joseph A. Valentine, City Manager

1

RE: Application for Division of Platted Lots for 120 Hawthorne St., Birmingham, MI 48009 ("Hawthorne") and 125 Aspen Rd., Birmingham, MI 48009 ("Aspen") ("Application").

Dear Members of the City of Birmingham City Commission,

Please accept this letter in support of the above referenced Application of Ms. Claudia Sills ("Applicant").

The Applicant is the owner of both Hawthorne and Aspen, and uses Hawthorne as her primary residence. Both Hawthorne and Aspen are zoned R-1 single family residential and each is a single platted lot. Hawthorne's lot area is 11,734 square feet and Aspen's lot area is 12,770 square feet. There is a single-family home on each lot (See site plan attached as Exhibit A showing existing conditions).

Applicant proposes to move the rear lot line of Hawthorne 22.15 feet to the west to increase Hawthorne's rear open space and to allow for renovation of the existing house (See site plan attached as Exhibit B showing proposed land division and architectural plans showing renovated residence). This modification will provide for a substantial improvement to Hawthorne and will have little to no impact on the Aspen lot or on the surrounding neighboring lots to the south (both lots are bordered by Maple Road to the north). The resulting lots, if this rear lot line adjustment is granted, will continue to meet all requirements of the Birmingham Zoning Ordinance and the existing structures on Hawthorne and Aspen also will comply with all Ordinances. This request will not cause any nonconformities.

In order to obtain approval of an application for division of platted lots, the Applicant must meet the requirements of §102-53 of the City of Birmingham Ordinances. Based on the above and the materials that have been submitted in conformance with the City's lot split procedure, Applicant contends that the criteria at §102-53 of the Ordinance have been met, to wit:

1. 102-53(1) "All lots formed or changed by the division shall conform to the minimum requirements of chapter 126 of this Code for the zone

City of Birmingham City Commission September 20, 2018 Page 2



district in which the property is located." The proposed lot change conforms to the R-1 Zoning District Development Standards. The minimum lot size in the R1 Zone is 9,000 square feet. If this request is granted, Hawthorne's lot size will be increased to 13,547.5 square feet, and Aspen's lot will be decreased to 10,956.4 square feet, well within the 9,000 square feet minimum for lots in R-1. Further, the proposed change comports with R-1 Standards for open space, lot coverage, set-backs, floor area, and building height, as well as the applicable additional development standards.

The Aspen house currently presents an existing non-conformity, as the house encroaches slightly on the side setbacks. This non-conformity has likely existed since the house was constructed in 1936. The proposed lot division will not alter or enlarge this existing non-conformity.

- 2. 102-53(2) "All residential lots formed or changed by the division shall have a lot width, as defined in chapter 126, of not less than the average lot width of all lots on the same street within 300 feet of the lots formed or changed and within the same zone district." The proposed lot division will not alter the lot width of either Hawthorne or Aspen, which have existed for decades.
- 3. 102-53(3) "The division will not adversely affect the interest of the public and of the abutting property owners. In making this determination, the city commission shall consider, but not be limited to the following":
 - a. 102-53(a) "The location of proposed buildings or structures, the location and nature of vehicular ingress or egress so that the use or appropriate development of adjacent land or buildings will not be hindered, nor the value thereof impaired." The Application does not propose any new buildings or structures, but only proposes an addition to the Hawthorne house that is in compliance with Birmingham City Ordinances. No variances will be required and there will be no adverse impact on any surrounding property.

The Applicant proposes to move the Hawthorne property's driveway 23 feet to the west in order to accommodate the addition to the Hawthorne house. This proposed shift in the location of the driveway will not adversely affect vehicular ingress or egress, and will not cause any hindrance to development of adjacent land or buildings. This proposed relocation actually creates a safer ingress and egress from Maple Road in that the entrance will allow a greater site distance for ingress and egress

City of Birmingham City Commission September 20, 2018 Page 3



than currently exists. Further, the relocation will not affect ingress or egress to or from either Hawthorne or Aspen streets. The proposed shift will not affect proper development of the adjacent land or buildings, nor affect the value thereof, but rather permit the Applicant to increase the value of Hawthorne while not affecting the Aspen lot, which will remain practically unchanged.

- b. 102-53(b) "The effect of the proposed division upon any floodplain areas, wetlands and other natural features and the ability of the applicant to develop buildable sites on each resulting parcel without unreasonable disturbance of such natural features." The proposed lot change will not adversely affect any floodplain areas, wetlands or other natural features because these properties are not in any floodplain areas or wetlands, nor do they have other natural features.
- c. 102-53(c) The location, size, density and site layout of any proposed structures or buildings as they may impact an adequate supply of light and air to adjacent properties and the capacity of essential public facilities such as police and fire protection, drainage structures, municipal sanitary sewer and water, and refuse disposal: Because this application affects only the movement of a rear lot line, the proposed lot change will not adversely impact the adequate supply of light and air to adjacent properties, nor will it affect the ability of the City to provide essential public facilities such as police and fire protection, drainage, municipal sanitary and sewer and water and refuge disposal. The movement of this rear lot line does not affect the side yards of Aspen or Hawthorne. The City will be able to provide essential public facilities in the same manner as before the proposed lot line adjustment.

Adjusting the property lines for 120 Hawthorne and 125 Aspen will not disrupt the harmony and character of the streetscape. The lot at the southern end of Aspen and Hawthorne streets at 567 Aspen was several lots that have been combined into one lot. The movement of the rear lot line of Hawthorne does not disturb the front yard symmetry of this attractive residential area. This is a lot split that is not seen from the street and only concerns the rear yards of the two lots bordering on Maple Road. One would be able to drive down Aspen or Hawthorne after the relocation of the lot line and not notice any change in the symmetry, character or continuity of this neighborhood.

For the above reasons, Applicant respectfully requests that the Birmingham City Commission grant this Application as proposed.

City of Birmingham City Commission September 20, 2018 Page 4



Should you have any further questions or comments please contact me at your convenience. Thank you for your consideration of this matter.

Very truly yours,

WILLIAMS, WILLIAMS, RATTNER & PLUNKETT, P.C.

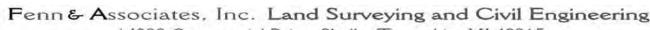
Richard D. Rattner

Richard S. Rattner/MCP

RDR/cmc

Enclosure

EXHIBIT A EXISTING PARCELS HAWTHORNE ROAD (60' WIDE) Ľ 75.65 PROPERTY DESCRIPTION PID: 19-35-230-001 30' FRONT SETBACK (DEED RESTRICTIONS) Lot 90 of Birmingham Park Allotment, as recorded in Liber 23 of Plots, Page 25 Oakland County PROPERTY DESCRIPTION (DEED RESTRICTIONS) PID: 19-35-230-015 HOUSE Lot 91 of Birmingham Park 19,2 Allotment, as recorded in Liber 23 of Plots, Page 25 Oakland County SETBACK (DEED RESTRICTIONS) Records. SETBACK WEST MAPLE ROAD (VARIABLE WIDTH) ç 8 SIDE 150.1 GARAGE 5 LOT 91 30' REAR SETBACK 43.6 120 HAWTHORNE ROAD 8. K. PID: 19-35-230-015 81.65 30' REAR SETBACK 8 LOT 89 19-35-230-002 6 125 ASPEN ROAD 63. PID: 19-35-230-001 12.64' SIDE SETBACK 9.7 150.10 RESTRICTIONS) GARAGE 11.9 (DEED HOUSE SIDE SETBACK **LEGEND** SET IRON/NAIL 30' FRONT SETBACK (DEED RESTRICTIONS) FOUND IRON/ PIPE/MON/NAIL 84.



14933 Commercial Drive, Shelby Township, MI 48315 Phone: 586-254-9577 Fax: 586-254-9020 www.fennsurveying.com

PID: 19-35-230-001 LOT: 90 125 ASPEN ROAD CITY OF BIRMINGHAM

FΡ

PID: 19-35-230-015 LOT: 91 120 HAWTHORNE ROAD CITY OF BIRMINGHAM

90.55

ASPEN ROAD (60' WIDE)

CLIENT: CLAUDIA SILLS
DATE 08/23/2018

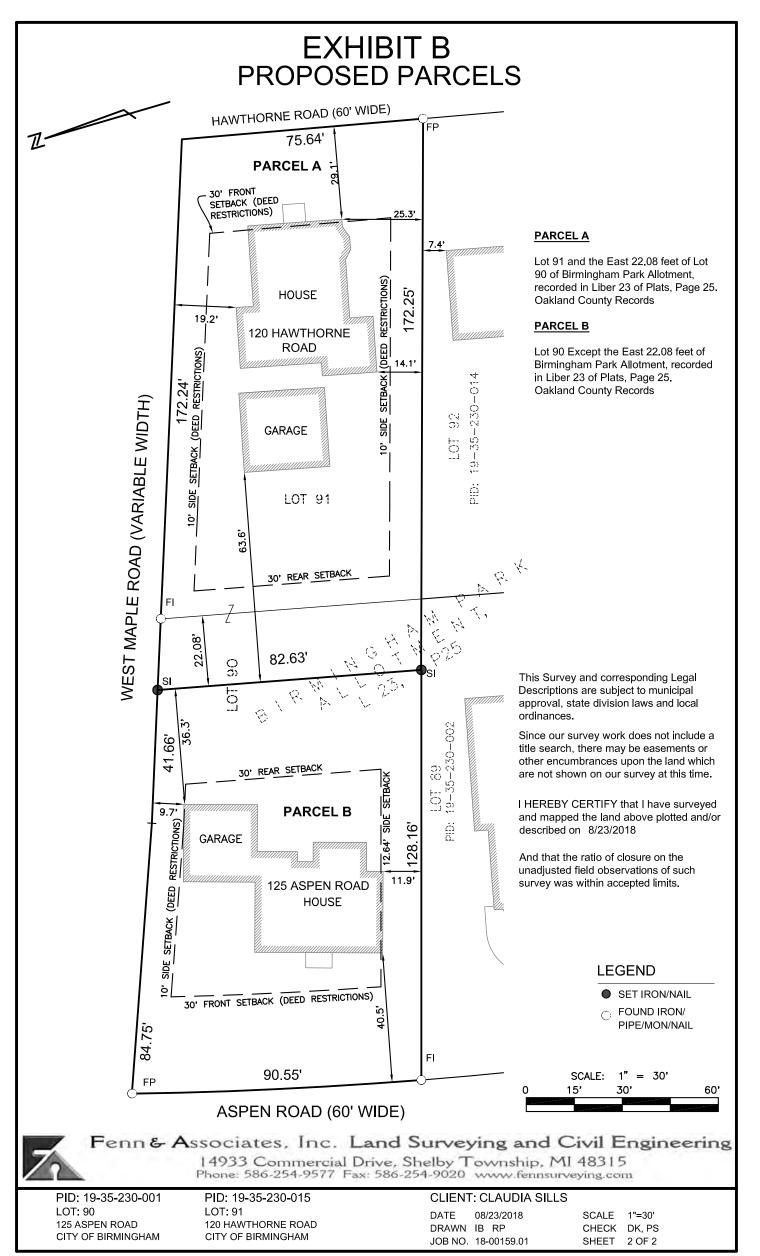
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 08/23/2018
 SCALE
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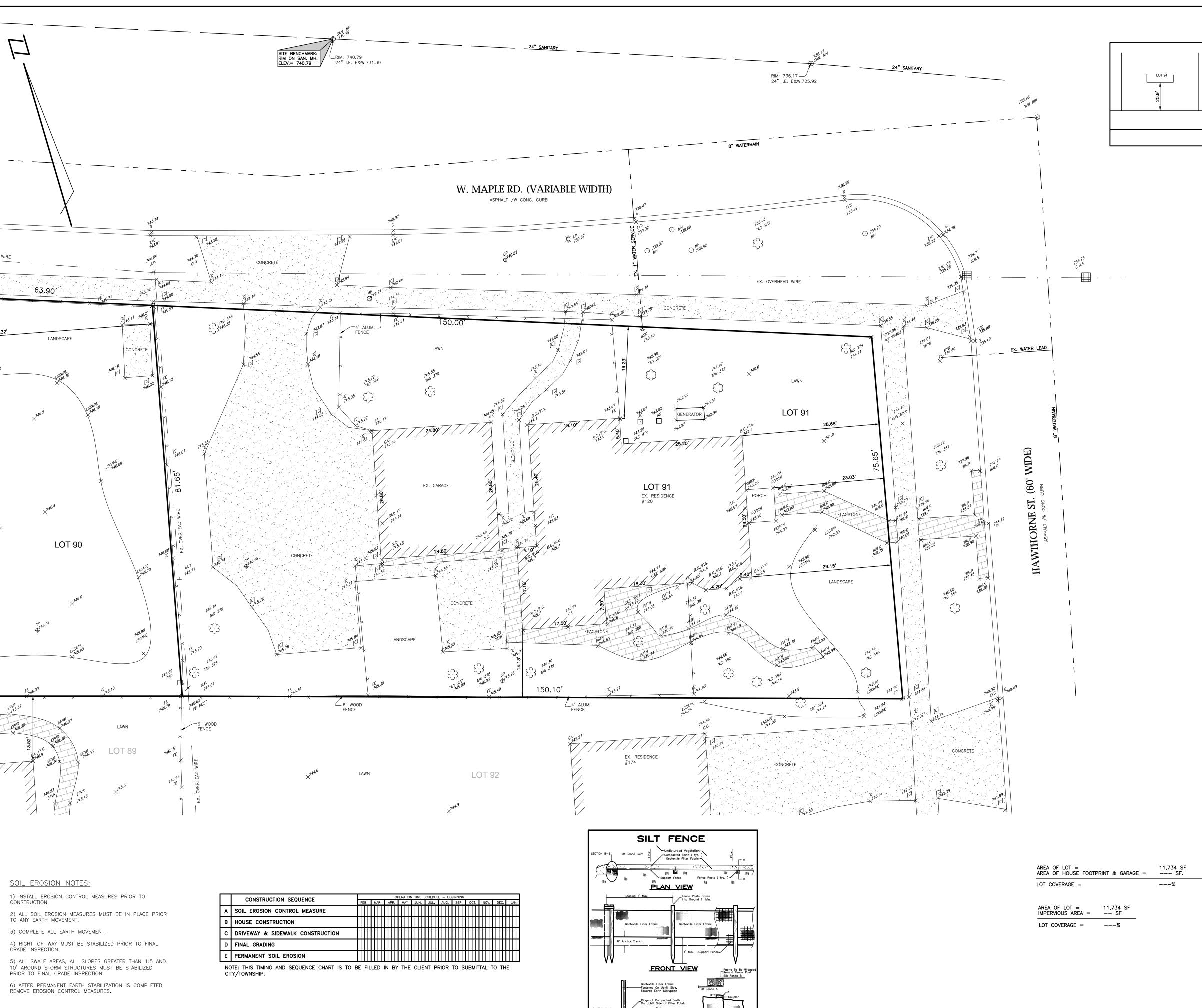
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 DK, PS

 JOB NO.
 18-00159.01
 SHEET
 1 OF 2

SCALE:

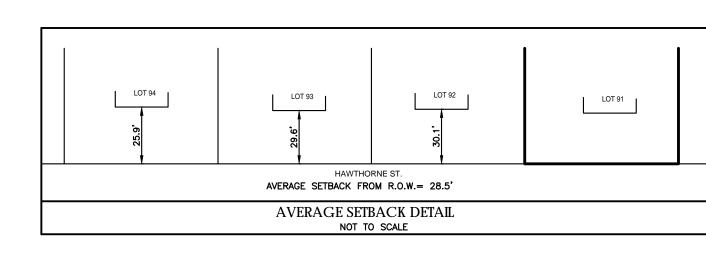
60'

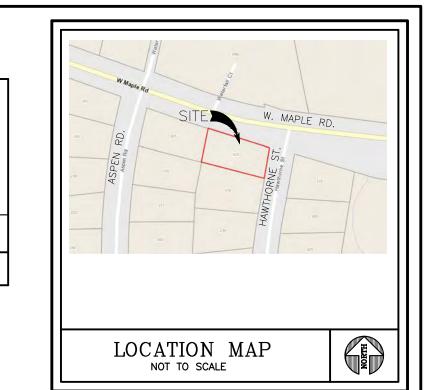




SECTION B-

TYPICAL SILT FENCE DETAILS





TREE SURVEY

TAG #	DIA. (IN.)	SPECIES	SPREAD (FT.)	
364	9	MAPLE	25	
365	9	MAPLE	25	
366	7	MAPLE	20	
367	17	MAPLE	35	
368	32	MAPLE	50	
369	17	SPRUCE	25	
370	10	SPRUCE	20	
371	26	SPRUCE	35	
372	5	CRABAPPLE	20	
373	14	MAPLE	30	
374	18	MAPLE	35	
375	36	MAPLE	45	
376	6	PEAR	20	
377	16	CEDAR	30	
378	18	CEDAR	30	
379	22	CEDAR	30	
380	28	MAPLE	50	
381	4	SPRUCE	15	
382	4	SPRUCE	15	
383	4	SPRUCE	15	
384	4	SPRUCE	15	
385	8	PEAR	25	
386	5	MAGNOLIA	20	
387	7	MAPLE	20	

NOTE: ALL INTERIOR GRADES (ARCHITECTURAL) SUCH AS FINISH FLOOR, BASEMENT FLOOR, FOOTING GRADES WALL SECTIONS SHALL BE VERIFIED BY THE BUILDER AND/OR ARCHITECT PRIOR TO CONSTRUCTION. ALL TRADES MUST USE THE ARCHITECTURAL PLANS OF RECORD TO CONSTRUCT ANYTHING OTHER THAN EXTERIOR GRADES AS SHOWN ON THIS PLOT

NOTE: SETBACKS AS SHOWN ON THIS PLOT PLAN WERE OBTAINED FROM THE MUNICIPALITY. IT IS THE RESPONSIBILITY OF THE CLIENT TO INSURE THAT THIS INFORMATION IS CORRECT. SINCE DEED RESTRICTIONS ARE NOT SUPPLIED BY THE MUNICIPALITY, THE CLIENT MUST INFORM THIS OFFICE OF ANY SPECIAL RESTRICTIONS WHICH MAY AFFECT THIS PLOT

NOTE: FENN AND ASSOCIATES ASSUMES NO RESPONSIBILITY FOR GIVEN HOUSE DIMENSIONS. CLIENT MUST VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

NOTE: THIS PLOT PLAN WAS PREPARED IN THE OFFICE. FIELD
WORK WAS PERFORMED. APPROVAL OF THIS PLOT PLAN DOES
NOT RELIEVE THE OWNER/BUILDER OF COMPLIANCE WITH ALL
APPLICABLE CODES AND/OR ORDINANCES.

NOTE: THIS DRAWING IS NOT INTENDED OR REPRESENTED TO BE A

LAND OR PROPERTY LINE SURVEY. THIS DRAWING IS NOT TO BE USED FOR THE ESTABLISHMENT OF ANY PROPERTY LINES OR OTHER IMPROVEMENTS.

NOTE: ACTUAL AS—BUILT LEAD LOCATIONS MUST BE OBTAINED FROM THE CITY/TOWNSHIP.

NOTE: PROPOSED HOUSE HAS PROPOSED DROP BRICK LEDGE.

SETBACK INFORMATION
ZONING = R1
FRONT = -- (AVG.)
SIDE = --'(MIN.), --'(TOTAL)
REAR = -BUILDING TO BUILDING MIN. = --'

NOTE: AREA OF PROPOSED EARTH CHANGE - --- SQ. FT.

NOTE SOIL EROSION CONTROL MEASURES WILL BE MAINTAINED ON A WEEKLY BASIS AND AFTER EACH STORM EVENT BY THE BUILDER.

NOTE: THE NEAREST WATER COURSE IS ROUGE RIVER. APPROX. ---' \pm TO THE WEST.

SOIL TYPE PER OAKLAND COUNTY SOIL MAP: URBAN LAND-MARLETTE COMPLEX

NOTE: PROPOSED HOUSE ELEVATIONS ARE BASED ON A 8'10"
POURED WALL WITH A VARIABLE BRICKLEDGE. VERIFY WITH BUILDER
PRIOR TO EXCAVATION.

PROPERTY DESCRIPTION: (PER COUNTY RECORDS) T2N, R10E, SEC 35 BIRMINGHAM PARK ALLOTMENT LOT 91

= FOUND IRON, MON., NAIL = SET IRON = RECORDED = MEASURED = CALCULATED EXISTING DESCRIPTION U.P. = UTILITY POLE E/W = EDGE OF WOODS B/B = BOTTOM OF BERM T/B = TOP OF BERM = EDGE OF ASPHALT = EDGE OF CONCRETE = CORRUGATED METAL PIPE INVERT T WALL = TOP OF WALL B WALL = BOTTOM OF WALL E/W = EDGE OF WATERB.C./F.G = BUILDING CORNER/FINISHED GRADE

MKR = MARKER

WSO = WATER SHUT OFF

CL = CENTERLINE SAN. MH = SANITARY MANHOLE
C.B.B. = CATCH BASIN BEEHIVE
C.B.B. = WATER SHUT OFF VALVE PR. 000.00 = PROPOSED GRADE $_{00}0.0^{00}$ = existing grade PR. 000.00 = PLAN PROPOSED GRADE NO LONGER APPLICABLE = C.B. FILTER = DOWNSPOUT = TREE = TREE (REMOVE)

LEGEND

= SECTION CORNER

SUN, BEFO CA 1-800

PARCEL I.D. #19-35-230-015

3 WORKING DAYS
(EXCLUDING SAT,
SUN, AND HOLIDAYS)

BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171
(TOLL FREE)

1–800–482–7'
(TOLL FREE)

ADDRESS: 120 HAWTHORNE RD

CITY BENCHMARK #22: BRASS DISC LOCATED AT THE NW CORNER OF LAKEPARK AND MAPLE, ELEV.: 753.760

SITE BENCHMARK: RIM ON SANITARY MANHOLE LOCATED ON THE NORTH SIDE OF W MAPLE RD ACROSS LOT 91, ELEV.: 740.79

REVISIONS

Fenn& Associates. Inc.

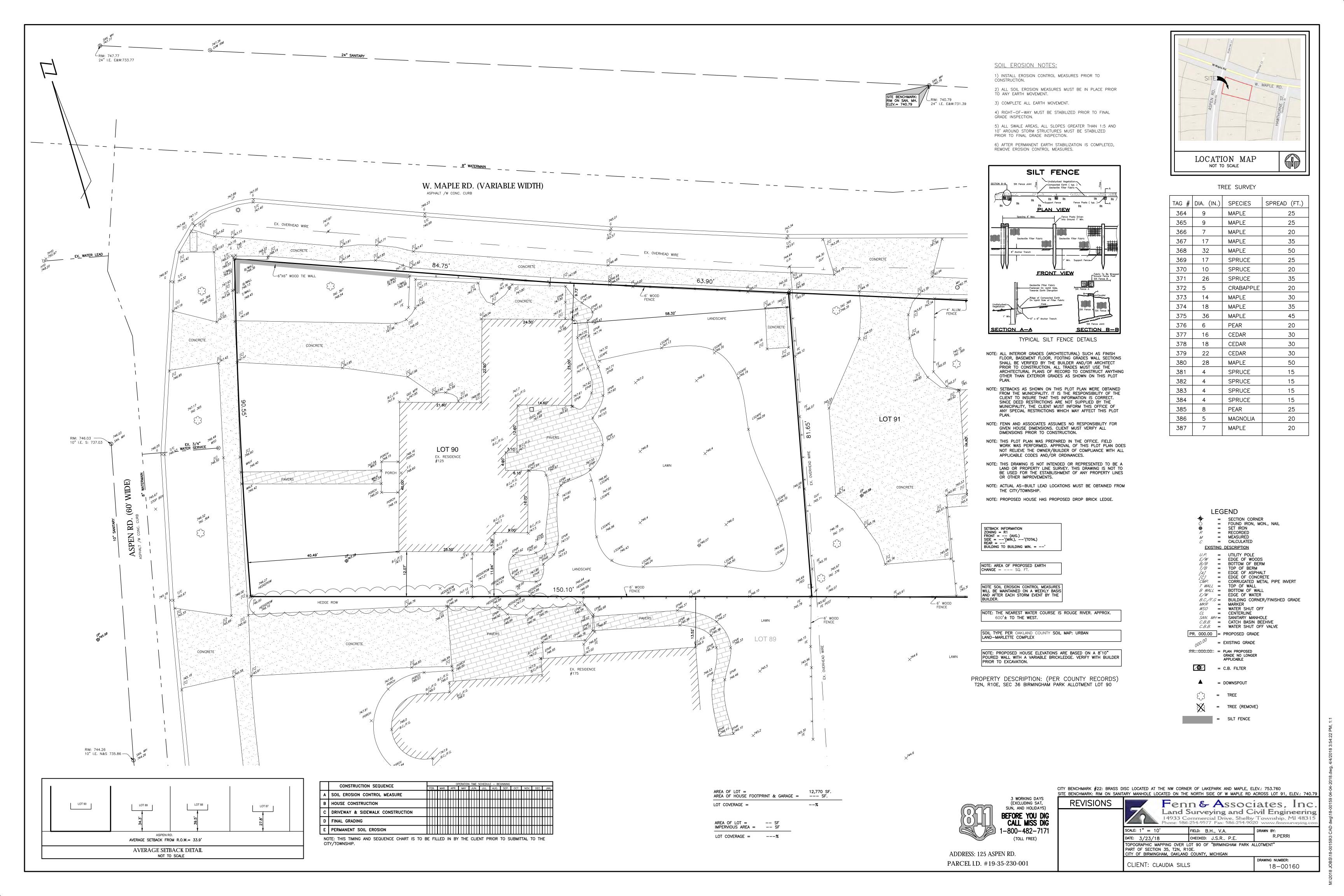
Land S 14933 Co	Ourveying and Commercial Drive, Shelby 254-9577 Fax: 586-254-902	ivil Engineering Township, MI 48315					
SCALE: 1" = 10'	FIELD: B.H., V.A.	DRAWN BY:					
DATE: 3/23/18 CHECKED: J.S.R., P.E. R.PERRI							
TOPOGRAPHIC MAPPING OVER LOT 91 OF "BIRMINGHAM PARK ALLOTMENT"							

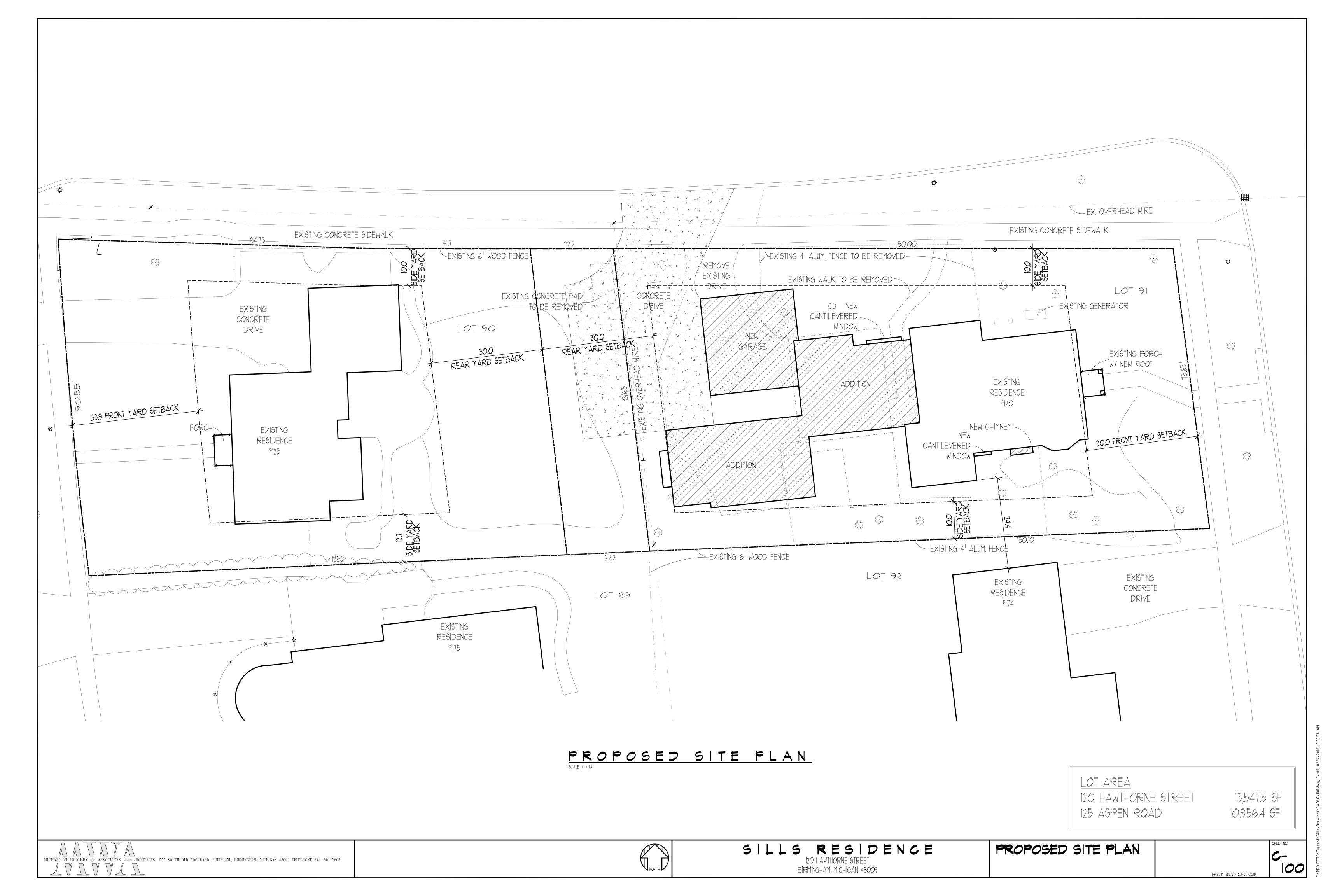
PART OF SECTION 35, T2N, R10E.
CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

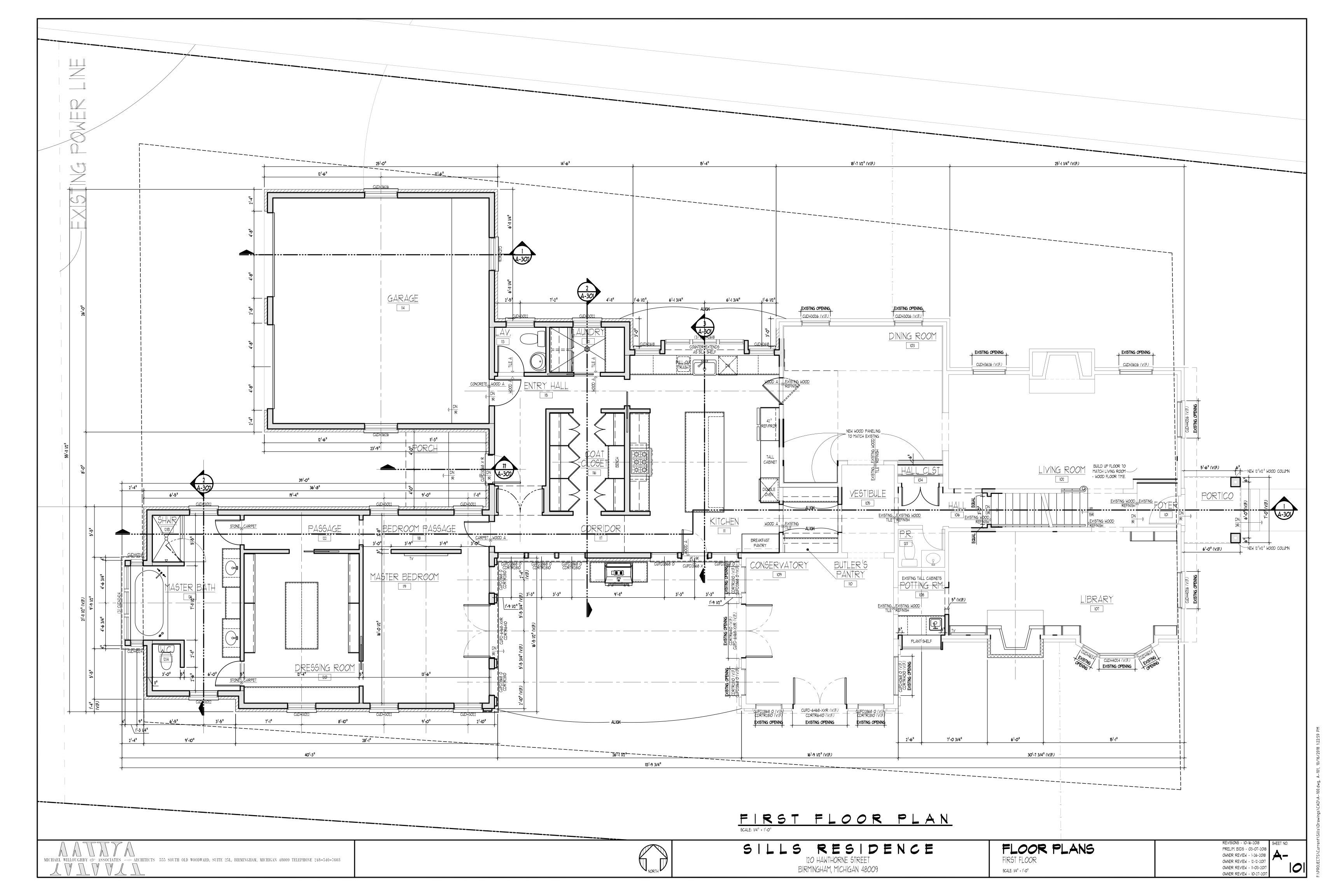
CLIENT: CLAUDIA SILLS

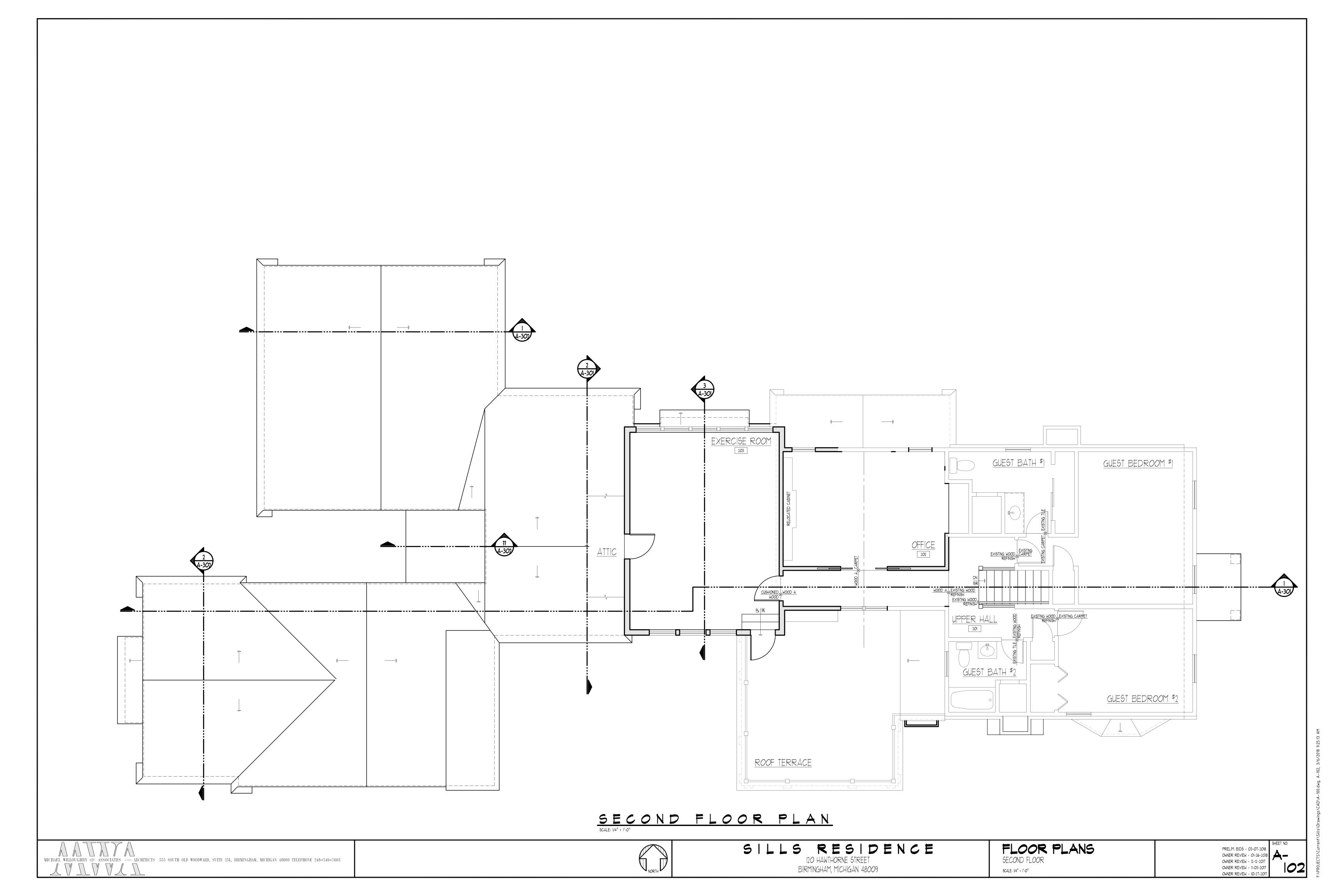
DRAWING NUMBER:
18-00159

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MICHAEL WILLOUGHBY & ASSOCIATES ARCHITECTS 555 SOUTH OLD WOODWARD, SUITE 25L, BIRMINGHAM, MICHIGAN 48009 TELEPHONE 248-540-7603

SILLS RESIDENCE

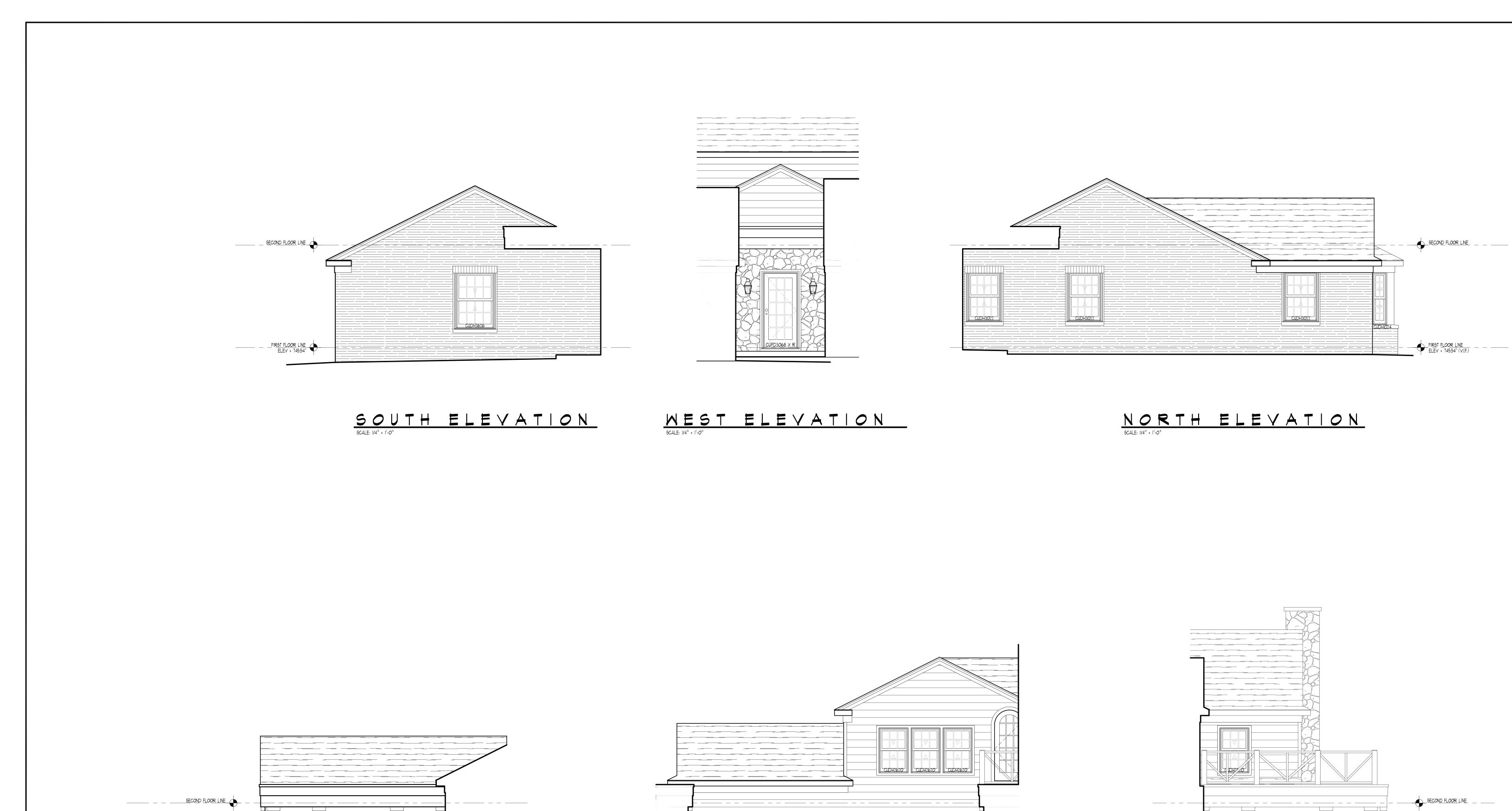
120 HAWTHORNE STREET

BIRMINGHAM, MICHIGAN 48009

EXTERIOR ELEVATIONS

SCALE: 1/4" = 1'-0"

PRELIM. BIDS - 03-07-2018 OWNER REVIEW - 01-26-2018









SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



WEST ELEVATION

SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"



MEMORANDUM

Birmingham Shopping District

DATE: October 29, 2018

TO: Joseph A. Valentine, City Manager

FROM: Ingrid Tighe, Executive Director, Birmingham Shopping District

SUBJECT: Resolution declaring Necessity for Principal Shopping District

INTRODUCTION:

The special assessment for the Birmingham Shopping District is in its final year and will require renewal for continuation of the district.

BACKGROUND:

Attached is a resolution declaring necessity for the Birmingham Principal Shopping District for the next four years 2018-19, 2019-20, 2020-21, and 2021-2022. The BSD Board has requested an assessment rate for a four-year period based on a thorough budget analysis performed by the BSD Executive Committee. The Executive Committee examined the BSD's funding obligations and upcoming construction projects on Maple Road and South Old Woodward over the next four years. Based on the analysis, the BSD recommends an increase in assessment rates for second floors and above in districts 1 and 1A as defined in the outlined resolution. The hearing notice has been sent to all commercial, non-residential properties within the district, including vacant commercial parcels. In the event that vacant parcels become improved during the term of this special assessment district, additional public hearings of confirmation to amend the roll may be held, and affected property owners shall be notified that they will be assessed as all other like properties in the district. At the hearing, I will give a brief presentation outlining the BSD's request, their accomplishments and goals for the future. The BSD continues to recruit soft goods retailers that will serve as anchor stores to our existing boutiques. Additionally, the BSD oversees improvements in the area of maintenance and beautification, special event promotion, and new marketing initiatives designed to bring customers downtown. The BSD played a key role in assisting businesses before, during and after the Old Woodward reconstruction project. Taking the success of the first reconstruction project into account, the BSD Board plans on using similar construction initiatives during the upcoming road construction projects that are scheduled for 2020 and 2022 in the central business district. By approving a four-year assessment, the City Commission will allow the BSD to appropriately budget for these priorities on an ongoing basis.

LEGAL REVIEW:

Legal counsel provided guidance to the BSD board during its evaluation of the assessment rate proposal.

FISCAL IMPACT:

The BSD assessment is the BSD's funding source.

SUMMARY

The BSD is requesting that the City Commission establish the Birmingham Principal Shopping District for 2018-19, 2019-20, 2020-21, and 2021-2022.

ATTACHMENTS:

- Suggested resolution declaring necessity for special assessment districts to provide funding for a Principal Shopping District for 2018-19, 2019-20, 2020-21, and 2021-2022.
- BSD District Map
- Presentation

SUGGESTED RESOLUTION:

To declare necessity to establish assessment for the Birmingham Principal Shopping District for 2018-19, 2019-20, 2020-21, and 2021-2022.

RESOLUTION DECLARING NECESSITY FOR SPECIAL ASSESSMENT DISTRICTS TO PROVIDE FUNDING FOR A PRINCIPAL SHOPPING DISTRICT FOR 2018-19, 2019-20, 2020-21, and 2021-2022.

WHEREAS, the Birmingham City Commission by Resolution No: ______, in accordance with the provisions of the Birmingham City Code, provided for a public hearing today, October 29, 2018, to meet and consider any objections to the public improvements contemplated for the Principal Shopping District, and any objections to defraying the cost thereof by special assessment; and

WHEREAS, notice of the public hearing was given pursuant to Chapter 94 of the Birmingham City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, at said hearing, all those owners or parties-in-interest or their representatives have been given an opportunity to be heard and to state their objections, if any; and

WHEREAS, the Birmingham City Commission is of the opinion that making the contemplated public improvements and defraying the cost thereof by special assessment is necessary, expedient and advisable; and

WHEREAS, the Birmingham City Commission has decided that it is in the best interest of the City to establish continuing financing for the public improvements for a period of four fiscal years; and

WHEREAS, the Principal Shopping District Board has recommended for properties identified in Downtown Birmingham PSD Assessment Area map (Exhibit A) that the City Commission establish an assessment for all properties included in District 1 and District 1A; and

WHEREAS, City Code and State Law require that the rate for the maximum capped properties be tied to the Inflation Rate Multiplier (formerly known as the Consumer Price Index), as reported October 31 of the prior year; and

WHEREAS the Principal Shopping District Board has requested the following rates:

	District 1		District 1A		
YEAR	1 st Story	2 nd Story	1 st Story	2 nd Story	
2018-19	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	
2019-20	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	
2020-21	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	
2021-22	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	

* Subsequent increases to the max/property will be tied to the Detroit Consumer Price Index (MCL125.985(4)).

NOW, THEREFORE BE IT RESOLVED that the Birmingham City Commission determines there is a necessity to make public improvements including the financing of marketing, advertising, promotions, economic development, maintenance, and operation of the Principal Shopping District; and

IT IS FURTHER RESOLVED that the Birmingham City Commission determine a special assessment district shall be established for the purpose of making the public improvements and defraying the entire cost thereof. The special assessment district includes the properties in the existing Principal Shopping District assessment rolls within the Downtown Birmingham PSD Assessment Area map (Exhibit A), subject to further modification by the City Assessor as presented at the hearing of confirmation.

IT IS FURTHER RESOLVED that the assessment shall be established for 2018-19, 2019-20, 2020-21, and 2021-2022 at:

	District 1		District 1A		
YEAR	1 st Story	2 nd Story	1 st Story	2 nd Story	
2018-19	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	
2019-20	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	
2020-21	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	
2021-22	\$.494	\$.346	\$.247	\$.173	
	(49.4 cents/sq. ft)	(34.6 cents/sq. ft.)	(24.7 cents/sq. ft.)	(17.3 cents/sq. ft.)	

IT IS FURTHER RESOLVED that the city manager or designee is directed to prepare special assessment rolls each year beginning with 2018-19, which shall describe all parcels of land to be specifically assessed, adjust for physical improvements to the structure, and reflect the names of the owners thereof, if known, and the total amount to be assessed against each parcel of land included in District 1 and District 1A for one year at a time. However, the square foot area of all privately owned parking decks located in any district where the properties are subject to this special assessment shall not be assessed. Property owners except as provided hereafter, who are exempt from ad valorem taxes shall pay forty percent (40%) of the appropriate rate from their district. Property owners who are religious organizations and federal, state and local government entities, whose properties are exempt from ad valorem taxes, shall be exempt from this special assessment.

IT IS FURTHER RESOLVED that all vacant land parcels have been included in this public hearing of necessity. In the event that vacant parcels become improved during the term of this special assessment district, additional public hearings of confirmation to amend the roll shall be held, and affected property owners shall be notified that they will be assessed as all other like properties in the district.

IT IS FURTHER RESOLVED that in the event that improved parcels in the Principal Shopping District change their building area during the term of this special assessment district, additional public hearings of confirmation to amend the roll shall be held and affected property owners shall be notified of the increase or decrease in the assessment amount resulting from the change in building area.

IT IS FURTHER RESOLVED that the city manager or designee shall sign and certify said assessment roll in accordance with the requirements of Chapter 94 of the Birmingham City Code.

IT IS FURTHER RESOLVED that when the city manager or designee completes the special assessment roll, it shall be filed with the City Clerk for presentation to the Birmingham City Commission for review in a public hearing of confirmation.





BIRMINGHAM SHOPPING DISTRICT ASSESSMENT RENEWAL

2

BUSINESS SHOPPING DISTRICT OVERVIEW

- Public Act 146 was passed by the State Legislature in July 1992 creating a Principal Shopping District.
- Ad Hoc Citizens Committee formed to study feasibility of a Principal Shopping District.
- Birmingham City
 Commission approved
 formation of PSD in
 September 1992.

- PSD District was created, encompassing the downtown area.
- First meeting held in January
 1993.
- Funded by special assessments on commercial properties only within the district boundaries.
- Assessment hearings held in 1993, 1994, 1997, 2000, 2003, 2004, 2006, 2009 and 2012, 2015.

BIRMINGHAM SHOPPING DISTRICT MISSION

clean, safe and pedestrian-oriented, and ensure that the entire We strive to provide leadership in the marketing, advertising, district continues to serve as a center for business, service, actively work to promote a district that is active, attractive, and promotion of the Birmingham Shopping District. We social, cultural and community activities.

BIRMINGHAM SHOPPING DISTRICT **COMMITTEE** OVERVIEW

Business Development

- Retail occupancy 96%
- Retail consultant
- Website, marketing materials aimed at prospective retailers
- Commercial real estate listings sent to 214 real estate professionals

Maintenance/Capital Improvements

- 195 hanging flower baskets
- 31 Flower Planters
- BSD and City fund holiday lighting throughout downtown
- Snow removal of 10 miles of sidewalks
- Sidewalk power washing

BIRMINGHAM SHOPPING DISTRICT **COMMITTEE** OVERVIEW

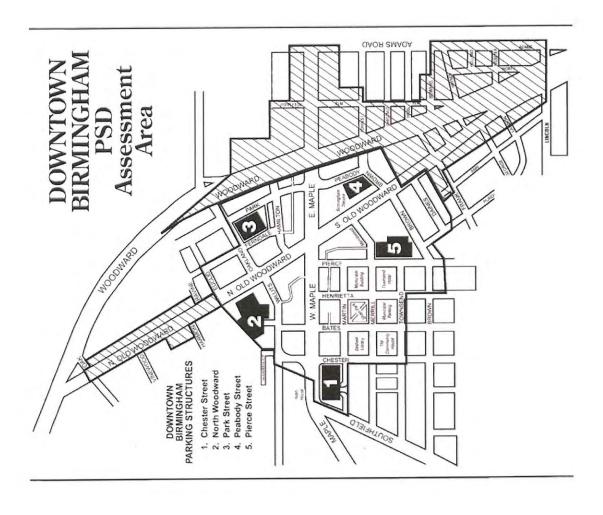
Marketing

- Produce Birmingham Magazine for 50,000 readers
- Promotes BSD and events via marketing campaigns using television, radio, social media, website, newspaper, magazines, billboards, posters, etc.

Events

- Day on the Town sidewalk sale
- Restaurant Week
- Small Business Saturday, Santa House, holiday shopping season
- Winter Markt and holiday tree lighting with 16,000 visitors
- Birmingham Cruise
- Birmingham Farmers Market averaging 2000 visitors per week
- Movie night series in Booth Park

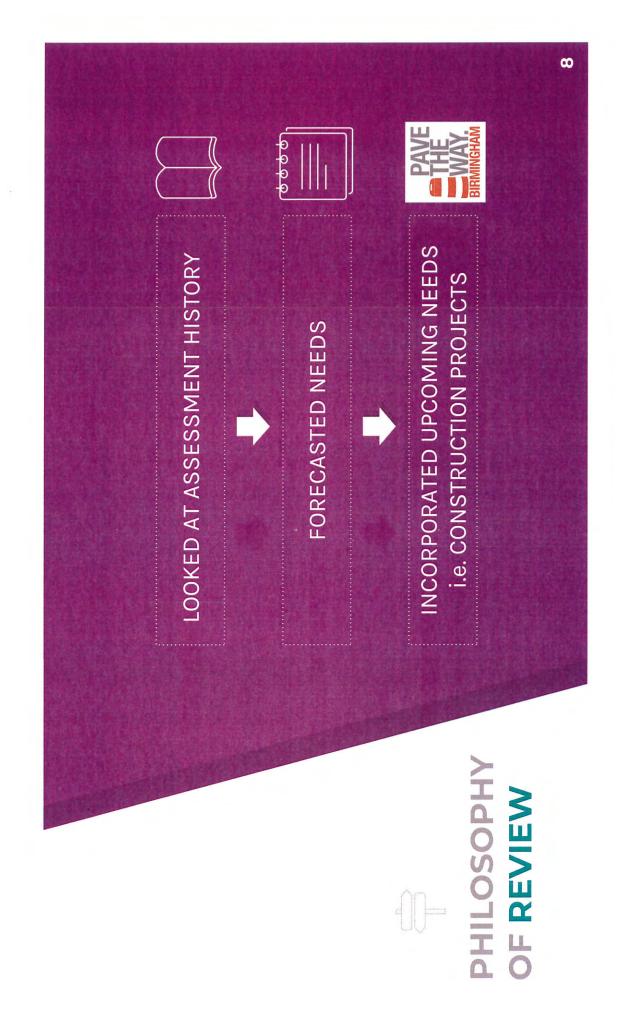






BSD ASSESSMENT RATES 2008 - 2018

Max. / Property		/ \$15,194.50	/ \$15,362.00	\$15,517.00 *approximately 15 properties at this maximum
District 1A	2 nd Story	\$.096 (9.6 cents/ sq. ft.)	\$.096 (9.6 cents/ sq. ft.)	\$.096 (9.6 cents/ sq. ft.)
Dis	1st Story	\$.247 (24.7 cents/ sq. ft.)	\$.247 (24.7 cents/ sq. ft.)	\$.247 (24.7 cents/ sq. ft.)
District 1	2 nd Story	\$.196 (19.6 cents/ sq. ft.)	\$.196 (19.6 cents/ sq. ft.)	\$.196 (19.6 cents/ sq. ft.)
Dis	1st Story	\$.494 (49.4 cents/ sq. ft.)	\$.494 (49.4 cents/ sq. ft.)	\$.494 (49.4 cents/ sq. ft.)
	YEAR	2015-16	2016-17	2017-18



BUDGET PRE-PLANNING

Old Woodward

Construction





South Old Woodward Construction





\$1,047,691 spent

To redeem \$50,000 Birmingham Bonus Bucks

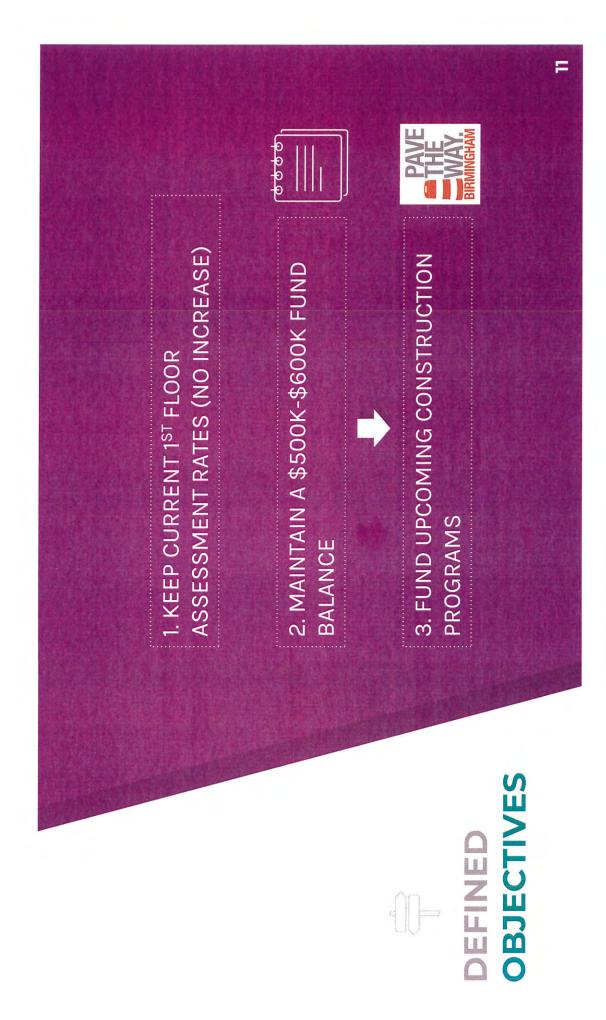
Valet users

That's a lot of users

%000

Total success!





EVALUATED/INCORPORATED BOARD SUGGESTIONS

- 1. Implemented operational cost reduction
- 2. Reduced desired fund balance from \$600,000 to \$500,000
- 3. Maintained funding for contruction programming
- Evaluated ability to assess residential property ... state law prohibits



BUDGET ANALYSIS

BODGEI ANALYSIS		ALYSIN	THE STATE OF THE S		PAVE
	2017-2018	2018-2019	Вівмінснам 2019-2020	2020-2021	BIRMINGHAW 2021-2022
SPECIAL ASSESSMENTS	0	1,040,000	1,040,000	1,040,000	1,040,000
SUBTOTAL REVENUE	1,265,855	1,279,240	1,272,770	1,262,820	1,262,820
SUBTOTAL APPROPRIATIONS	1,207,200	1,234,990	1,361,441	1,240,007	1,413,980
NET OF REVENUES	58,655	44,250	(88,671)	22,813	(151,160)
BEGINNING FUND BALANCE	649,334	707,989	752,239	663,568	686,381
ENDING FUND BALANCE	707,989	752,239	663,568	686,381	535,221



BSD PROPOSED ASSESSMENT RATES

ct 1A	2nd Story	\$.173 (17.3 cents/sq. ft.)	\$. 173 (17.3 cents/sq. ft.)	\$. 173 (17.3 cents/sq. ft.)	\$. 173 (17.3 cents/sq. ft.)
District 1A	1st Story	\$.247 (24.7 cents/sq. ft.)	\$.247 (24.7 cents/sq. ft.)	\$.247 (24.7 cents/sq. ft.)	\$.247 (24.7 cents/sq. ft.)
District 1	2nd Story	\$.346 (34.6 cents/sq. ft.)	\$. 346 (34.6 cents/sq. ft.)	\$. 346 (34.6 cents/sq. ft.)	\$. 346 (34.6 cents/sq. ft.)
Dist	1st Story	\$.494 (49.4 cents/sq. ft)	\$.494 (49.4 cents/sq. ft)	\$.494 (49.4 cents/sq. ft)	\$.494 (49.4 cents/sq. ft)
	YEAR	2018-19	2019-20	2020-21	2021-22

ASSESSMENT IMPACT

	District 1	District 1	District 1A	District 1A
	1 st Floor	2 nd /3 rd Floor	1 st Floor	2 nd /3 rd Floor
2000 SF Office	\$0.00 increase	\$25.00/month increase	\$0.00 increase	\$12.83/month increase





THANKS



MEMORANDUM

Planning Division

DATE: October 10th, 2018

TO: Joseph A. Valentine, City Manager

FROM: Nicholas J. Dupuis, Planning Intern

APPROVED: Jana Ecker, Planning Director

SUBJECT: RFP for Downtown Retail Review

INTRODUCTION:

After the City Commission adopted a new definition for personal services in relation to retail use on November 13, 2017, the City Manager directed the Planning Board to continue studying the larger issue of retail use in Downtown Birmingham. The City issued an RFP for Downtown retail review on August 30th, 2018 with a deadline for submission of October 2nd, 2018. One firm, Gibbs Planning Group, submitted a proposal in response to the RFP.

BACKGROUND:

On June 18, 2018, The Planning Board and City Commission held a joint meeting where the Board expressed a desire to have a private consultant review Birmingham's Retail Frontage Line and make recommendations related to the directives of the City Manager. There was a general consensus from the City Commission that a consultant would be beneficial to the process.

On July 11, 2018 the Planning Department presented the first draft of a Request for Proposals "RFP" for a retail consultant. The Planning Board expressed that they would like to see more public engagement activities from the consultant. New public engagement requirements were added to the scope of work, as well as additional meetings with the City Commission.

On July 25, 2018, the Planning Board reviewed a revised draft of an RFP for retail review. Board members were pleased with the changes made to the prior version. The Planning Board requested that the title of the RFP be changed to "Downtown Retail Review", and requested minor wording changes to the public engagement section to encourage different types of public engagement activities. The Planning Board voted unanimously to recommend approval of the draft RFP to the City Commission.

On August 13, 2018, the City Commission reviewed the draft RFP for retail consulting services. The City Commission was concerned that the RFP as drafted needed to be refined to state the desire to strengthen retail within the redline retail boundaries, instead of considering the modification of the boundaries of the district as previously directed. The City Commission stated that the RFP should be very clear the goal of the study is to determine how best to organize the existing redline retail district in order to continue developing a pedestrian-oriented experience in Downtown Birmingham.

On August 27th, 2018, the City Commission approved the final version of the RFP for retail consulting services. The RFP was issued on August 30th, 2018.

On September 28th, 2018, one proposal was received by the Planning Department for consideration. The proposal outlines each facet of the retail study, and includes all of the following submission requirements:

- 1. Cover Letter;
- 2. Outline of qualifications of the Contractor and of the key employees that will be involved in the project;
- 3. Outline of Contractor(s) experience with the preparation of retail analyses, public engagement activities, and zoning policy recommendations, including references from at least two relevant communities where such plans have been completed;
- 4. Outline presenting a description of the scope of work to be completed, broken down into separate components;
- 5. Proposed time frame for completion of each component of the scope of work;
- 6. A statement of any additional services recommended, if any. Define hourly rates for additional services by discipline;
- 7. Bidders Agreement (Attachment B);
- 8. Cost Proposal (Attachment C); and
- 9. Iran Sanctions Act Vendor Certification (Attachment D).

The cost proposal is as follows:

COST PR	OPOSAL
ITEM	BID AMOUNT
TOTAL BID AMOUNT	\$50,000
ADDITIONA	L BID ITEMS
Additional meetings with City Staff and boards	\$0
Other –	\$0
Other –	N/A
GRAND TOTAL AMOUNT	\$50,000

LEGAL REVIEW:

The City Attorney has reviewed the contract and proposal and indicated all RFP requirements have been met. The City Attorney has also noted that although the proposal received by Gibbs Planning Group states that they are submitting their proposal with additional conditions of their own, these conditions are not included in the contract nor the original RFP that was issued, and thus will not be considered. Gibbs Planning Group has signed the original contract that was a part of the RFP, and also signed a second document indicating that they agree to abide by the terms of the RFP as issued. **The City Attorney has advised that the terms of the contract and the RFP govern**, and Gibbs Planning Group has been advised of this.

FISCAL IMPACT:

The RFP for Downtown retail review was not included in the approved Fiscal Year 2018-2019 budget, and a budget transfer will be required if the lone proposal is to be accepted.

SUMMARY:

The City Commission should discuss whether or not to accept Gibbs Planning Group's proposal submitted in response to the Downtown Retail Review RFP as this study was not budgeted and

there are no competing proposals to determine whether the price quoted is a fair and reasonable price for the study. Thus, City staff recommends that the retail study RFP be reissued and promoted to attract additional proposals to assist the City in determining a fair and reasonable price for the work.

ATTACHMENTS:

- Downtown Retail Review Submission Gibbs Planning Group
- RFP for Downtown Retail Review
- Relevant City Commission and Planning Board meeting minutes

SUGGESTED RESOLUTION:

To award the Downtown Retail Review to Gibbs Planning Group, in the amount of \$50,000, to be funded from account 101-721.000-811.0000 and further; to approve the appropriation and amendment to the 2018-2019 General Fund Budget as follows:

General Fund

Revenues:

Draw from Fund Balance

101-000.000-400.0000 \$50,000 Total Revenue \$50,000

Expenditures:

Planning – Other Contractual Services

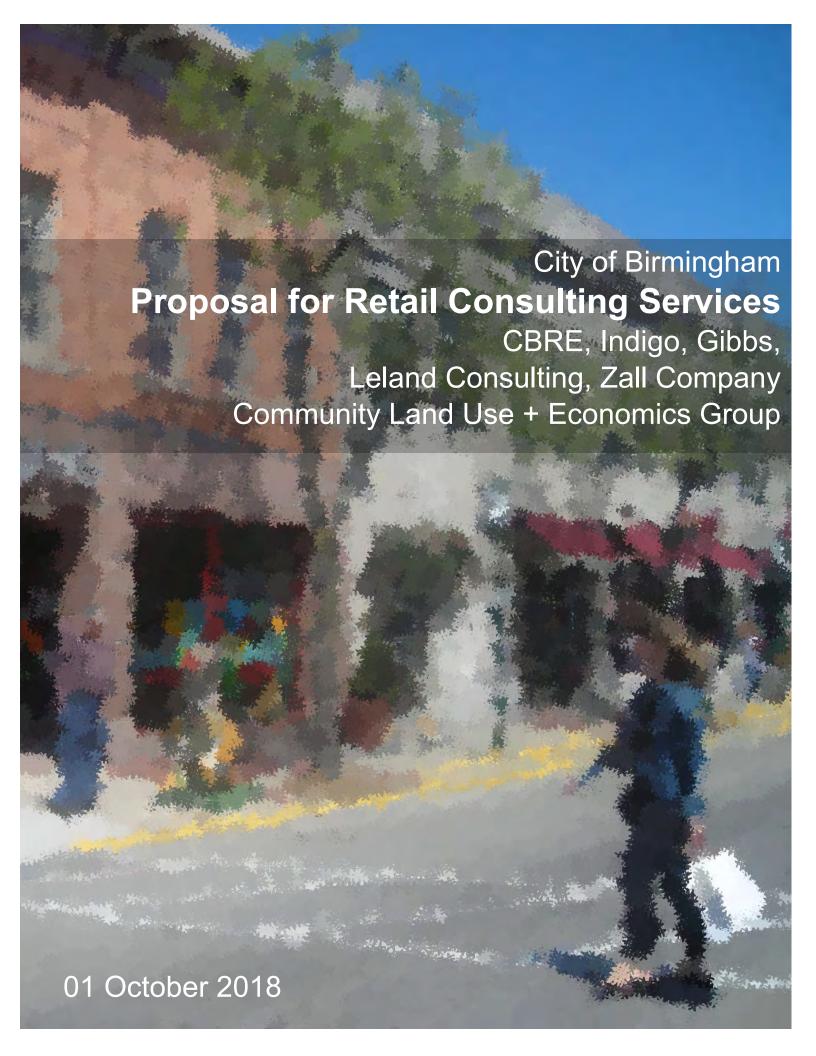
101-721.000-811.0000 <u>\$50,000</u>
Total Expenditures <u>\$50,000</u>

AND

To direct the Mayor to execute a contract with Gibbs Planning Group in the amount of \$50,000.

OR

To rebid the RFP seeking additional responses.





28 September 2018

Jana L. Ecker Planning Director 151 Martin Street P.O. Box 3001 Birmingham, Michigan 48012-3001

Dear Ms. Ecker:

On behalf of Gibbs Planning Group, CBRE, Indigo Property Group, Leland Consulting Group, Community Land Use + Economics Group and Zall Company (collectively "GPG"), I am pleased to submit our proposal for retail consulting services for downtown Birmingham. Our team members are some of the most respected retail consultants in the country and have extensive experience with cities, downtown development authorities, institutions, resorts, shopping center developers and leading retailers. Our combined experience will provide Birmingham with comprehensive and accurate advisory services.

Our team will conduct two independent market studies, extensive peer reviews, one-on-one interviews with fifty downtown Birmingham businesses and fifteen focus groups. The resulting studies will be comprehensive retail analyses that will include an accurate and realistic understanding of the study area's retail market potential, as well as recommendations for tenant mix, vehicular circulation and parking, storefront design and signage, building types and complementary land uses. We are dedicated to providing practical, actionable results, which reflect economic development realities and not just theoretical research.

We appreciate the opportunity to provide you with our team's qualifications. For your reference, included in this proposal are excerpts from two samples of GPG's market research. These projects illustrate GPG's expertise in helping develop healthy retail in urban areas, and we would look forward to presenting more background during the interview process.

Sincerely,

Robert J. Gibbs, AICP, ASLA, CNU

President

Gibbs Planning Group Inc. 240 Martin Street, Suite 200 Birmingham, Michigan 48009 rgibbs@gibbsplanning.com

Not. J. Cie

(248) 642-4800



28 September 2018

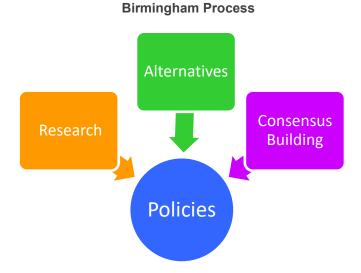
Jana L. Ecker Planning Director 151 Martin Street P.O. Box 3001 Birmingham, Michigan 48012-3001

Dear Ms. Ecker:

On behalf of Gibbs Planning Group, CBRE, Indigo Property Group, Leland Consulting Group, Community Land Use + Economics Group and Zall Company (collectively "GPG"), I am pleased to respond to your request to provide retail consulting services for downtown Birmingham.

Project Understanding

The City of Birmingham is seeking a retail consultant to provide a comprehensive review of its Retail Frontage Line policy and provide recommendations for modifications to existing policy to continue to enhance the downtown's thriving retail district.



Please find below our proposed scope and fees based upon my understanding of the city's objectives:

Task 1: Downtown Overlay District's Retail Frontage Line Boundary and City Manager's Directives In conducting a thorough review of the downtown overlay district's retail frontage line boundary requirements and the city manager's research directives to the planning board, GPG shall do the following:

- (a) Evaluate the current geographic boundary of the Retail District to determine if modification is needed, and consider whether a priority level hierarchy consisting of the downtown core and other areas within the current Redline Retail Boundary is advisable:
- (b) Evaluate current properties in the Redline Retail Boundary that were not built to support first floor retail uses and provide recommendations to address that issue;
- (c) Recommend ordinance language to address the prohibition of desks, workstations and office related amenities placed within the first 20 feet of depth of window frontage within the Retail District.

Task 2: Current Research By City Staff & Consultants

GPG will review and analyze current research done by city staff and consultants. This research includes, but is not limited to:

- (a) An inventory of all businesses in the Redline Retail District;
- (b) Asking rent data and occupancy rate data:
- (c) Data related to quarter mile and half mile walking radius, proximity to metered parking, and the expansion of retail since the adoption of the Redline Retail District in 1996;
- (d) An inventory of existing buildings not suitable for retail:
- (e) Prior market studies completed for the Birmingham Shopping District in 2012, 2013 and 2016

Task 3: Existing Conditions Report

GPG will compose two independent retail market studies. Each of these studies will include an existing conditions report which shall:

- (a) Evaluate the distribution of first floor uses, asking rents, vacancies and the size of leasable retail spaces;
- (b) Compare second and third floor office rents to first floor retail rents;
- (c) Analyze Birmingham's retail strengths and weaknesses in the Redline Retail District compared to similar downtowns;
- (d) Identify possible policy options to enhance the retail experience in Downtown Birmingham

Task 4: Future Trends in Retail and Projections for Retail Demand in Similar Communities

Both retail market studies will include information on future retail trends for cities similar to Birmingham (such as New Canaan, Connecticut, Greenwich, Connecticut and Southampton, New York), as well as make projections for the amounts and types of retail that will be supportable in the study area over the next five to ten years. The studies will also include projections related to shopper and retailer preferences for main street shopping districts such as Birmingham's, as well as projections of how demand for main street retail may change in relation to current trends in regards to malls, big box stores and online shopping.

Task 5: Current Retail Frontage Line

GPG shall evaluate the current retail frontage line and consider the creation of a priority level hierarchy that permits different pedestrian-oriented uses and/or varying retail requirements and regulations within the current Redline Retail Boundary.

Task 6: Public Engagement

GPG shall conduct fifteen focus groups and other public engagement activities to get feedback from building owners, retailers and citizens. These activities will be coordinated with the Birmingham Shopping District. Additionally, GPG shall conduct fifty one-on-one interviews with downtown Birmingham businesses.

Task 7: Final Analyses

Both retail market studies will provide a final analysis that includes potential options for retail tiers and pedestrian-oriented uses within each tier. The final analyses will include:

- (a) Recommendations for strengthening and enhancing Downtown Birmingham's retail environment;
- (b) An analysis of whether there should be a priority level hierarchy with multiple tiers of permissible 1st floor uses, and if so, where the potential boundaries of these tiers should be;
- (c) Recommendations for what should be done with current properties in the Redline Retail Boundary that were not built to support first floor retail uses;
- (d) Suggested ordinance language to prohibit desks and other office furniture within the first 20 feet of depth of window frontage on the first floor

Task 8: Meetings

GPG shall attend a minimum of five meetings with the City Commission and other boards. GPG shall also be available for additional meetings with the City at no extra charge.

GPG Research Process



Schedule

GPG will complete the above services within 90 calendar days of receipt of your authorization and retainer. Tasks 1 – 3 will be completed during the initial 30 days, tasks 4 and 5 over the following 30 days, and tasks 6 – 8 within the 90-day project deadline.

Professional Fees:

GPG's proposed fee for the above consulting services is a lump sum fee of \$50,000, including all expenses.

Additional Services

GPG will be available to provide additional services an hourly or per diem basis as authorized by the client and as outlined below:

Principal: \$250/hr \$2,500 per diem Associate: \$100/hr \$1,000 per diem Clerical \$50/hr N/A

Limits of Scope of Services:

The services described in this agreement are for qualitative retail and planning analysis only and should not be used as the sole basis of development, financing or leasing. Actual site, building, parking, utility, environmental, grading, civil engineering and architectural plans, cost projects, real estate leasing, brokerage services and construction documents are not included within the scope of work of this proposal and are to be completed by others.

Conditions of Agreement:

- a. The services described in this proposal shall begin upon receipt of a non-refundable retainer as outlined below. This retainer will be deducted from the final invoice for services completed by this proposal.
- b. GPG will invoice the client at the completion of each step.
- c. All invoices will be paid by the client within 30 days receipt.
- d. Invoices shall be charged a 1.5% fee when paid over 30 days.
- e. This proposal will be valid for 30 days from today's date.
- f. This agreement will not be enforced by either party until each party has in its possession a copy of this agreement signed by the other.
- g. In the event of termination or suspension due to the fault of others than GPG, GPG will be paid compensation for all completed work, plus other fees which may have been authorized by the client for expenses resulting from such termination or suspension.
- h. GPG does not warrant that the findings of this research will include any minimal amounts or types of commercial development at the subject sites.
- GPG shall retain exclusive ownership of all documents and plans produced under the scope of this agreement.
- . GPG's responsibilities for any damages or losses resulting from the services completed pursuant to this agreement shall be limited to One Thousand Dollars (\$1,000). All additional claims, disputes and other matters in question arising out of, or relating to, this agreement or the breach thereof, will be decided by an arbitrator; said arbitrator will be appointed by the American Arbitration Association.
- k. If you agree with the terms, fees and conditions of this proposal, please sign below. Services will begin upon the receipt of a **\$10,000** retainer check made out to GIBBS PLANNING GROUP, INC.

Thank you for the opportunity to submit this proposal and we are looking forward to working with you in the near future.

Sincerely,

GIBBS PLANNING GROUP, INC.

Robert J. Gibbs, AICP, ASLA, CNU

President

rgibbs@gibbsplanning.com

The above terms accepted by:

Signature Date

Title Representing

- END OF AGREEMENT -

ATTACHMENT A - AGREEMENT FOR DOWNTOWN RETAIL REVIEW

This AGREEMENT, made this 20th day of September, 2018, by and between CITY OF BIRMINGHAM, having its principal municipal office at 151 Martin Street, Birmingham, MI (hereinafter sometimes called "City"), and Gibbs Planning Group, Inc., having its principal office at 240 Martin Street, Birmingham, MI (hereinafter called "Contractor"), provides as follows:

WITNESSETH:

WHEREAS, the City of Birmingham has heretofore advertised for bids for the procurement and performance of services required to perform retail consulting services to provide a comprehensive review and analysis of existing retail conditions and policy in the City's Central Business District and to provide recommendations for improvement, including future retail strategy, policy and implementation, and in connection therewith has prepared a request for sealed proposals ("RFP"), which includes certain instructions to bidders, specifications, terms and conditions.

WHEREAS, the Contractor has professional qualifications that meet the project requirements and has made a bid in accordance with such request for cost proposals to perform retail consulting services to evaluate current and future retail strategies and practices in the City's Central Business District and provide recommendations for improvement.

NOW, THEREFORE, for and in consideration of the respective agreements and undertakings herein contained, the parties agree as follows:

- 1. It is mutually agreed by and between the parties that the documents consisting of the Request for Proposal to perform retail consulting services to evaluate current and future retail strategies and practices in the City's Central Business District and provide recommendations for improvement and the Contractor's cost proposal dated September 20, 2018 shall be incorporated herein by reference and shall become a part of this Agreement, and shall be binding upon both parties hereto. If any of the documents are in conflict with one another, this Agreement shall take precedence, then the RFP.
- 2. The City shall pay the Contractor for the performance of this Agreement in an amount not to exceed \$40,000, as set forth in the Contractor's September 20, 2018 cost proposal.
- This Agreement shall commence upon execution by both parties, unless the City exercises its option to terminate the Agreement in accordance with the Request for Proposals.
- The Contractor shall employ personnel of good moral character and fitness in performing all services under this Agreement.
- 5. The Contractor and the City agree that the Contractor is acting as an independent Contractor with respect to the Contractor 's role in providing services to the City pursuant to this Agreement, and as such, shall be liable for its own actions and neither the Contractor nor its employees shall be construed as employees of the City. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the City nor

the Contractor shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The Contractor shall not be entitled or eligible to participate in any benefits or privileges given or extended by the City, or be deemed an employee of the City for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the City.

- 6. The Contractor acknowledges that in performing services pursuant to this Agreement, certain confidential and/or proprietary information (including, but not limited to, internal organization, methodology, personnel and financial information, etc.) may become involved. The Contractor recognizes that unauthorized exposure of such confidential or proprietary information could irreparably damage the City. Therefore, the Contractor agrees to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Contractor shall inform its employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Contractor further agrees to use such confidential or proprietary information only for the purpose of performing services pursuant to this Agreement.
- 7. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan. The Contractor agrees to perform all services provided for in this Agreement in accordance with and in full compliance with all local, state and federal laws and regulations.
- 8. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.
- 9. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Contractor without the prior written consent of the City. Any attempt at assignment without prior written consent shall be void and of no effect.
- 10. The Contractor agrees that neither it nor its subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Contractor shall inform the City of all claims or suits asserted against it by the Contractor's employees who work pursuant to this Agreement. The Contractor shall provide the City with periodic status reports concerning all such claims or suits, at intervals established by the City.
- 11. The Contractor shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with carriers acceptable to the City of Birmingham.
- 12. The Contractor shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:

- A. Workers' Compensation Insurance: Contractor shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- B. Commercial General Liability Insurance: Contractor shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
- C. Motor Vehicle Liability: Contractor shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- D. <u>Additional Insured</u>: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following shall be <u>Additional Insureds</u>: The City of Birmingham, including all elected and appointed officials, all employee and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any other coverage that may be available to the additional insured, whether any other available coverage by primary, contributing or excess.
- E. <u>Professional Liability</u>: Professional liability insurance with limits of not less than \$1,000,000 per claim if Contractor will provide service that are customarily subject to this type of coverage.
- F. <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance (and Professional Liability Insurance, if applicable), as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal, shall be sent to: Finance Director, City of Birmingham, PO Box 3001, 151 Martin Street, Birmingham, MI 48012-3001.
- G. <u>Proof of Insurance Coverage</u>: Contractor shall provide the City of Birmingham at the time the Agreement is returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below.
 - Two (2) copies of Certificate of Insurance for Workers' Compensation Insurance;
 - Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance;
 - Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
 - 4) Two (2) copies of Certificate of Insurance for Professional Liability Insurance;

- If so requested, Certified Copies of all policies mentioned above will be furnished.
- H. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this Agreement, Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least (10) days prior to the expiration date.
- Maintaining Insurance: Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the Agreement, the City of Birmingham may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the Agreement amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.
- 13. To the fullest extent permitted by law, the Contractor and any entity or person for whom the Contractor is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.
- 14. If, after the effective date of this Agreement, any official of the City, or spouse, child, parent or in-law of such official or employee shall become directly or indirectly interested in this Agreement or the affairs of the Contractor, the City shall have the right to terminate this Agreement without further liability to the Contractor if the disqualification has not been removed within thirty (30) days after the City has given the Contractor notice of the disqualifying interest. Ownership of less than one percent (1%) of the stock or other equity interest in a corporation or partnership shall not be a disqualifying interest. Employment shall be a disqualifying interest.
- 15. If Contractor fails to perform its obligations hereunder, the City may take any and all remedial actions provided by the general specifications or otherwise permitted by law.
- 16. All notices required to be sent pursuant to this Agreement shall be mailed to the following addresses:

City of Birmingham Attn: Jana L. Ecker 151 Martin Street Birmingham, MI 48009 248.530.1841

Robert J. Gibbs 240 Martin Street Birmingham, MI 48009 248.642.4800

17. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it

shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.

18. <u>FAIR PROCUREMENT OPPORTUNITY:</u> Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham.

IN WITNESS WHEREOF, the said parties have caused this Agreement to be executed as of the date and year above written.

WITNESSES:	CONTRACTOR
ANDREW DOWN	By: Robert J. Gibbs Its: President CITY OF BIRMINGHAM
	Ву:
	Andrew Harris Its: Mayor
	By:Cherilynn Mynsberge Its: City Clerk
Approved:	Mille dice
Jana L. Ecker, Planning Director (Approved as to substance)	Mark Gerber, Director of Finance (Approved as to financial obligation)
Town Man	Sout a Valit
Timothy J. Currier, City Attorney (Approved as to form)	Joseph A. Valentine., City Manager (Approved as to substance)

ATTACHMENT B - BIDDER'S AGREEMENT FOR DOWNTOWN RETAIL REVIEW

In submitting this proposal, as herein described, the Contractor agrees that:

- They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

Robert J. Gibbs	September 20, 2018
PREPARED BY (Print Name)	DATE
Russolin	
AUTHORIZED SIGNATURE	
President	rgibbs@gibbsplanning.com
Title	E-MAIL ADDRESS
Gibbs Planning Group, Inc.	
COMPANY	
240 Martin Street, Birmingham, MI	(248) 6424800
ADDRESS	PHONE
N/A	N/A
NAME OF PARENT COMPANY	PHONE
N/A	
ADDRESS	

ATTACHMENT C - COST PROPOSAL FOR DOWNTOWN RETAL REVIEW

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be a lump sum, as follows:

Attach technical specifications for all proposed materials as outlined in the Contractor's Responsibilities section of the RFP (p. 6)

COST PROPO	SAL	
ITEM	BID AMOUNT	
TOTAL BID AMOUNT	\$ \$50,000	
ADDITIONAL BID	ITEMS	
Additional meetings with City staff and boards	\$ 0	
Other -	\$ 0	
Other -	N/A	
GRANDTOTAL AMOUNT	\$ 50,000	

Firm Name_Gibbs Plann	ing Group, Inc.		
Authorized signature	Prif O. Cair	Date_ 9/28/2018	

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM FOR DOWNTOWN RETAL REVIEW

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

Robert J. Gibbs	September 20, 2018
PREPARED BY (Print Name)	DATE
1201/16	rgibbs@gibbsplanning.com
AUTHORIZED SIGNATURE	E-MAIL ADDRESS
President	
TITLE	
Gibbs Planning Group, Inc.	
COMPANY	
240 Martin Street, Birmingham, MI	(248) 642-4800
ADDRESS	PHONE
N/A	N/A
NAME OF PARENT COMPANY	PHONE
N/A	
ADDRESS	
382838903	
TAXPAYER I.D.#	

Client Reference List

Delray Beach, Florida DDA

85 SE 4th Ave., #108 Delray Beach, Florida 33483 Contact: Peter Arts, DDA President

Tel: (561) 395-1435 Email: parts@plastridge.com

Village of Southampton, New York

23 Main Street Southampton, New York 11968 Contact: Mark Epley, Mayor Tel: (631) 283-0247 x 222 Email: mepley4569@aol.com

City of Cuyahoga Falls, Ohio

2310 Second Street Cuyahoga Falls, Ohio 44221 Contact: Fred Guerra, Planning Director Tel: (330) 971-8136

Email: guerrafr@cityofcf.com

City of Troy, Michigan

500 West Big Beaver Road Troy, Michigan 48084 Contact: Mark Miller, City Manager

Tel: (248) 524-3330

Email: mark.miller@troymi.gov

Urban intelligence



Representative Clients

Alexandria, Virginia Atlanta, Georgia Carlisle, Pennsylvania Charleston, South Carolina Chicago, Illinois Dearborn, Michigan Denver, Colorado Fresno, California Grand Rapids, Michigan Houston, Texas Marquette, Michigan Memphis, Tennessee Naples, Florida Norwalk, Connecticut Palm Beach, Florida Portland, Oregon Santa Cruz. California Sarasota, Florida Seattle, Washington Southampton, New York S. Fort Wayne, Indiana State of Florida State of Oregon Kentlands, Maryland The Glen, Illinois Rosemary Beach, Florida Seaside. Florida **Brown University** Johns Hopkins University University of Michigan Ohio State University University of Pennsylvania AECOM Duany Plater-Zyberk & Co. Fantasy Springs Resort & Casino General Motors Company Moule & Polyzoides Rock Ventures, Inc. Simon Property Group Taubman Centers, Inc. The Walt Disney Company

Robert J. Gibbs, AICP, ASLA, CNU-A President, Gibbs Planning Group, Inc.

Email: rgibbs@gibbsplanning.com

Robert Gibbs serves as GPG's president and managing director. Gibbs is considered one of the foremost urban retail planners in America. For more than two decades, his expertise has been sought by some of the most respected mayors, renowned architects, and successful real-estate developers in the country. Profiled in *The New York Times*, *The Wall Street Journal*, and *Urban Land*, Gibbs has, writes *The Atlantic Monthly*, "a commercial sensibility unlike anything possessed by the urban planners who usually design downtown-renewal efforts." He is also a recognized leader in the New Urbanism, having pioneered the implementation of its environmentally sustainable principles of Traditional Town Planning and Smart Growth.

For the past 30 years, Gibbs has been active in developing innovative yet practical methods for applying modern trends in commercial development to more than 400 town centers and historic cities here and abroad. He also planned Michigan's first ten New Urban communities and Form Based Codes. A speaker at the First Congress of the New Urbanism in 1992 and twenty subsequent CNUs, Gibbs lectures frequently throughout the country. He is the author of *Principles of Urban Retail Planning and Development* and the Retail Module of the SmartCode and has contributed articles to numerous books and publications. For the past 22 years, he has taught "Urban Retail Planning" in the Executive Education Program at the Harvard Graduate School of Design. In 2012, Gibbs was honored by the Clinton Presidential Library for his life's contributions to urban planning and development, and by the City of Auckland, New Zealand for his planning innovations.

Before Gibbs founded GPG in 1988, he gained invaluable expertise in retail planning by advising shopping center developers on the psychology of commerce—the practical science of analyzing and adjusting all elements known to affect a shopper's mood in the marketplace. From this experience, Gibbs distilled the fundamental retail and merchandising principles for reviving retail in moribund downtowns and for instilling successful commerce in new ones.

Education

University of Michigan - Ann Arbor Master of Landscape Architecture Oakland University, Auburn Hills, Michigan Bachelor of Arts in History

Professional Associations

American Institute of Certified Planners
American Planning Association
American Society of Landscape Architects
Congress for the New Urbanism, Charter Member
Former Form Based Code Institute, Board Member
Urban Land Institute

Relevant Training

NCI Charrette System
Form-Based Code Institute
MI Place Initiative,
Train the Trainers

Prior Experience
JJR/SmithGroup
Taubman Centers



KENNEDY SMITH

Kennedy is one of the nation's foremost experts on commercial district revitalization, downtown economics, and independent business development. Her work focuses particular attention on cultivating locally owned businesses, creating effective business and property development incentives, finding new uses for key historic buildings, creating dynamic retail development plans, and strengthening the organizational infrastructure needed to create vibrant town centers.

Before co-founding the Community Land Use + Economics Group (CLUE Group) in 2004, Kennedy served on the staff of the National Trust for Historic Preservation's National Main Street Center for 19 years, the last 14 of them as the Center's director. During her tenure the Main Street program was recognized as one of the most successful economic development programs in the US, generating more than \$18 billion in new investment and stimulating development of 226,000 net new jobs and 56,000 new businesses and expanding to a nationwide network of 2,000 towns and cities.

Kennedy's work has been featured in news media ranging from the *New York Times, Business Week, Forbes, Governing,* and *NPR* to "CBS Sunday Morning," and Public Radio International's "Marketplace." She has written numerous articles on the economic dynamics of traditional business districts and is a popular international speaker on downtown and community economic development issues. Kennedy has been honored by Planetizen as one of the "100 Most Influential Urbanists of All Time" (2017) and one of the "100 Top Urban Thinkers" (2009). *Fast Company* magazine named her to its first list of "Fast 50 Champions of Innovation," recognizing "creative thinkers whose sense of style and power of persuasion change what our world looks like and how our products perform." In May 2004, the National Trust for Historic Preservation recognized her achievements with its President's Award, for her "leadership and vision ... in creating one of the most admired and successful preservation programs in the country."

Kennedy received her B.A. in the Growth and Structure of Cities from Bryn Mawr College, then attended graduate school at the University of Virginia's School of Architecture. She was a Loeb Fellow at Harvard University's Graduate School of Design from 2005-2006. In addition to her work with the CLUE Group, Kennedy also teaches a class in historic preservation economics for Goucher College's graduate program in historic preservation.

LELAND CONSULTING GROUP





Chris Zahas, AICP Managing Principal

Chris is a real estate strategist and project manager with an emphasis on urban corridors, downtown revitalization, employment districts, transit-oriented development, and public-private partnerships. His project approach is to assist public and private sector clients in turning broad visions into prioritized and achievable action plans by combining market and economic research with strategic advice that is tied to the fundamental principles of real estate development. In all cases, Chris keeps the focus of projects on implementation, always anticipating next steps and never hesitating to advise a client to change directions when that is the best course. In over 17 years at Leland Consulting Group, he has managed more than 25 downtown and corridor implementation strategies and played a strategic advisor role in dozens more. In the economic development realm, he brings a deep understanding of economic and demographic trends, ensuring that long-term strategies reflect the evolving drivers of how businesses choose to locate and where people choose to live. Prior to joining Leland Consulting Group, Chris coordinated economic development projects for the Portland Development Commission, Portland's redevelopment agency.

Education

Portland State University: Master of Urban & Regional Planning Lewis and Clark College: Bachelor of Arts, International Affairs

Publications and Public Speaking Experience

- Guest lecturer: Portland State University, University of Oregon
- Rail~Volution
- Western Planners Conference
- Urbanism Next
- Nevada Chapter of the American Planning Association
- Utah Chapter of the American Planning Association
- Washington Association of Realtors
- Contributing Author: Sustainable and Resilient Communities: A Comprehensive Action Plan for Towns, Cities, and Regions, 2011

Professional Memberships

- Urban Land Institute
- American Planning Association
- American Institute of Certified Planners (#019464)
- City Club of Portland
- Hyperloop Advanced Research Partnership, Treasurer

Representative **Project Experience**

- Waterfront Master Plan and Development Strategy, Port of Vancouver, Washington
- Downtown Retail Strategy, Portland, Oregon
- Kaka'ako TOD District Development Strategy, Honolulu, Hawaii
- Wine Industry Strategy, Douglas County, Oregon
- Marmalade Block Redevelopment Public-Private Partnership, Salt Lake City, Utah
- Downtown Housing and Revitalization Initiative, Boise,
- Riverfront Master Plan and Preliminary Development Strategy, Eugene, Oregon
- Millenia Mixed-Use Development Project, Chula Vista, California
- Professional Business and Medical District Master Plan, Redmond, Oregon
- City Center Vision, Vancouver, Washington
- Downtown Civic Core Subarea Plan, Renton, Washington
- OMSI District Plan, Portland, Oregon
- Colfax Connections Corridor Alternatives Analysis, Denver, Colorado
- Central Area Plan, Bend, Oregon
- State of Oregon Statewide and Site-Specific Property and **Facilities Evaluations**



The art of spacial intelligence.



66

My greatest strength is to connect with decision makers on a personal level so we are not just making a deal but making a friend as well.

77

STUART ZALL | President | szall@zallcompany.com

Stuart founded The Zall Company, LLC, in 2000. He has more than 25 years of retail-leasing expertise to bring to his role as company president. As part of a joint project, he also serves as vice president of leasing at Pacific Realty Services (PRS), expanding both companies' presence domestically and in China. Stuart is a founding member of Retail Intelligence Advisors, a real estate advisory firm that provides hands-on retail and shopping center analysis and due diligence.

Under his guidance, The Zall Company has established itself as a premier retail brokerage firm serving retailers, landlords and developers from offices in Denver, Dallas and Boca Raton. Client projects cover everything from high-street retail to outlet malls to upscale shopping centers. Through his efforts, major retailers Forever 21 and international retail giants H&M, Sephora and Uniqlo were established in the Denver Pavilions and Under Armour established in Vail, Colorado—"firsts" for the Colorado market. Stuart also has engaged with PRS in leasing efforts with a "Western format" outlet mall in Xi'an, China.

Prior to founding The Zall Company, Stuart served as vice president and director of Lord Associates. When Lord was acquired by The Taubman Company, a publicly traded multibillion-dollar real estate trust (TCO), he continued as director of value retail leasing.

RELATIONSHIPS

LANDLORDS/DEVELOPERS

The Taubman Company; Lord Associates; Realty Management Group; Vornado Realty Trust; Forest City Enterprises; Great Mall of the Bay Area, Milpitas, CA; Great Lakes Crossings, Auburn Hills, MI; Beverly Center, Los Angeles, CA; SuperMall of the Great Northwest, Auburn, WA; Cherry Creek Mall, Denver, CO; and The Streets of Brentwood, Brentwood, CA

TENANTS

H&M; Iniqlo; Sephora; Under Armour; DKNY; Charlotte Russe; Vans; Perry Ellis; Pacific Sunwear; Bebe; Chico's; Fresh Choice; Johnny Rockets; BCBG; Guess Jeans; St. John Knits; The Limited; Hot Topic; Forever 21; Sur La Table; West Elm; Coach; Calvin Klein; Lululemon Athletica; and Jonathan Adler

HISTORY

2000-present The Zall Company, Denver, CO

2011-present Pacific Realty Services (PRS), Dallas, TX

1993-2000 Lord Associates, San Francisco, CA, and Denver, CO

1989-1993 The Taubman Company, San Francisco, CA

EDUCATION

BS in Accounting, University of Denver

LICENSES

Real Estate Broker: California, Colorado, Florida, Ohio, Texas Certified Public Accountant, Colorado

AFFILIATIONS

International Council of Shopping Centers (ICSC)
University of Denver Advisors Board
University of Denver Alumni Association



Jeffrey W. Higgins, CLS President

Indigo Retail Advisors

Jeffrey W. Higgins is a highly accomplished retail real estate professional with nearly 20 years of experience. His diverse background includes leasing, site selection, consulting, acquisitions, investment and development on all types retail property from small neighborhood strip centers to super-regional malls.

Higgins is an expert merchandiser of shopping centers and he has created merchandise plans that have transformed shopping centers. He is a retailer with direct experience as a store operator, which combined with his vast real estate knowledge gives him a unique perspective to offer invaluable counsel and strategic guidance to his clients.

Indigo Retail Advisors has designed a partner-approach platform for its business. Indigo views each and every client as a trusted partner and in doing so Indigo takes on a much greater role than a traditional broker or consultant. Indigo operates as a complete "in-house" real estate department on an "out-of-house" basis. The partner-approach of Indigo enables Higgins to spend more time with his clients so he can consistently develop and execute each of his client's strategic goals.

Indigo Retail Advisors partners with developers and owners of malls and lifestyle centers to maximize the value of their retail properties. As an owner's representative, Indigo leads and directs every facet of leasing including market analysis, financial analysis, project design, merchandising and tenant mix analysis and Higgins believes all of these aspects need to be fully analyzed so the leasing opportunity may be realized. There is one goal in leasing: to maximize the rent. Whether it is a new center or a remerchandising / re-leasing assignment, Higgins transforms the value of shopping centers with his leasing ability.

A cornerstone of Indigo's business is retail recruiting and Higgins is dedicated to helping communities maximize their retail potential. Indigo Retail Advisors brings a mall leasing perspective and keen strategy to enable communities to realize their retail development goals. Higgins represents cities and towns and recruits retailers on their behalf and his proactive relentless approach produces results. The retail recruiting programs of Indigo help cities increase the number and quality of retailers in their communities leading to an improve tax base and an overall better quality of life.

Prior to forming Indigo Retail Advisors, Inc. Higgins was a top-ranking leasing executive for The Taubman Company. Higgins was a deal-driven leasing professional producing lease transactions with a total value over \$185,000,000. He led and directed the leasing program for over 75 key retail and restaurant accounts, including Coach, Gap, The Cheesecake Factory, lululemon and Polo Ralph Lauren.

Early in his career Higgins served as President of Higgins Realty Group, Inc., a boutique retail real estate firm that specialized in the open-air center world. He expanded the company by securing new contracts with developers and retailers. Higgins was hired by Starbucks Coffee to manage the market expansion in Michigan. Higgins created a comprehensive 5-year market plan, which identified and prioritized potential trade areas. He led the site selection process for **Starbucks** consistently exceeding annual new store-opening goals.

Higgins earned a Bachelor's Degree in Business Administration from the University of Michigan and is a member of the International Council of Shopping Centers and a candidate for Certified Shopping Center Manager (CSM. He is also an active member of the Michigan Downtown Association (MDA) and the Congress for the New Urbanism.

Email: jwh@indigoretailadvisors.com

Urban intelligence



Representative Market Analysis Experience

Bangor Township, MI Clemson, SC Conyers, GA Detroit Fairgrounds, MI Downtown Jackson, MI Fresno, CA Hanahan, SC Hilton Head, SC Lafayette, LA Las Cruces, NM Leander, TX Milledgeville, GA Montclair, CA Mt. Pleasant, MI Muskegon, MI New Port Richey, FL Prospect, KY Pittsboro, NC Santa Cruz, CA Savannah, GA Souderton, PA Troy, MI West Lafayette, IN Westland, MI Wilsonville, OR

Andrew L. Littman, J.D., CNU-A

Director of Research

Email: andrew@gibbsplanning.com

Andrew Littman serves as Director of Research at GPG where he oversees its hotel, office, residential and retail market research for cities and new town centers across the country. Prior to joining GPG in 2016, Andrew practiced law (initially in private practice and later as a staff attorney at the Wayne County Circuit Court) and then worked as a broker at Marcus & Millichap.

Andrew is a graduate of Skidmore College, the Moritz College of Law at The Ohio State University and obtained a graduate certificate in real estate development from the University of Michigan. He is a member of the State Bar of Michigan and the Congress for the New Urbanism, as well as being a licensed real estate salesperson.

Gibbs Planning Group

May 2016 - Present

Relevant Training

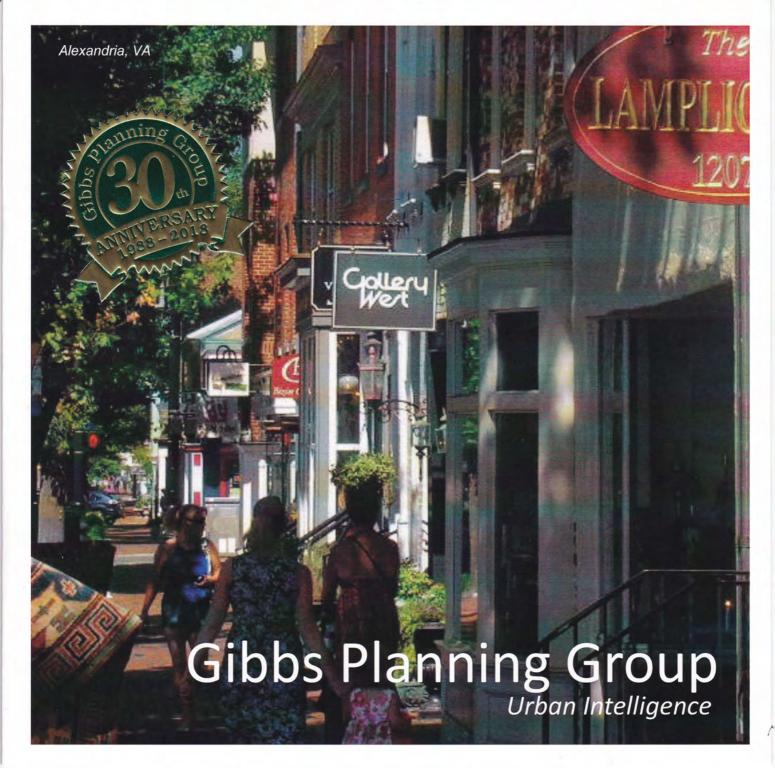
Completed Harvard University Graduate School of Design class "Urban Retail: Essential Planning, Design, and Management Practices"

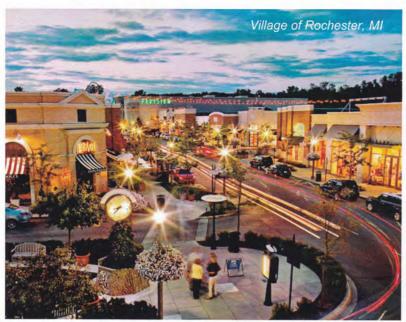
Education

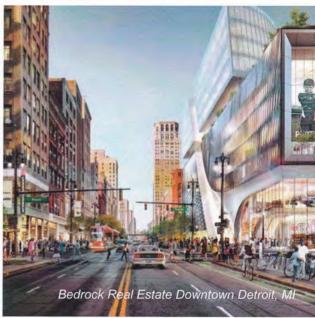
University of Michigan – Ann Arbor
Taubman College of Architecture & Urban Planning Graduate
Certificate in Real Estate Development
The Ohio State University
Moritz College of Law
Juris Doctor
Skidmore College
Bachelor of Arts in Government

Memberships

State Bar of Michigan Congress for the New Urbanism graduate

























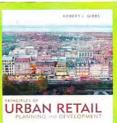
Representative Clients

- Alexandria, VA
- Auckland, NZ
- Bedrock Real Estate
- Beverly Hills, CA
- Birmingham, MI
- Boyne Resorts
- Central Michigan University
- Charleston, SC
- Delray Beach, FL
- Des Moines, IA
- Disney
- DPZ Architects
- General Motors
- Harbour Town, Hilton Head
- Holland, MI
- Home Fed Corp.
- Houston, TX
- Kentland's, MD
- Knoxville, TN
- Kalamazoo, MI
- · Las Cruses, NM
- Legacy Town Center, TX
- Mackinac Island, MI
- Madison, WI
- Marquette, MI
- Memphis, TN
- Moule Polyzoides Architects
- Naples, FL
- Palm Desert, CA
- Palm Beach, FL
- Portland, OR
- Queensland Investment Corp.
- Rosemary Beach, FL
- Santa Cruz, CA
- Sarasota, FL
- Seaside, Fl
- Saint Paul, MN
- Sioux Falls, SD
- Taubman Centers
- Troy, MI
- University of Pennsylvania
- · Wasilla, AK
- Wayne State University



Professional Services

- Retail Market Studies
- Real Estate Advisory Services
- Shopability Studies
- Visual Merchandising Workshops



"There is no question retaining Gibbs Planning was the wisest expenditure our city has ever

"Gibbs has a commercial sensibility unlike anything possessed by the urban planners who usually design downtown-renewal efforts." Atlantic Monthly

Contact:

Robert Gibbs rgibbs@gibbsplanning.com 240 Martin Street Birmingham, MI 48009 248.642.4800 gibbsplanning.com















What We Do

In more than 250 communities across the country, our strategies have resulted in built projects that immediately improve residents' quality of life: thriving downtowns, bustling shopping districts, inviting neighborhoods, and productive employment centers.

As urban strategists, our role is to keep the big picture in sight, while simultaneously providing deep expertise in the strategic, market, financial, and economic elements that make projects possible and successful. We recognize that special and economically viable places result not just from one factor, but from the combination of quality design, supportive markets, developer capacity, and financial strength. During every assignment, we engage the public and private champions essential to rallying support and overcoming obstacles.

Leland Consulting Group, established in 1989, has over 29 years of experience providing strategic real estate development advisory services to both public and private sector clients across the United States. **Development Downtown** and District **Advisory** Development **Services** Mobility, Real Transit, **Estate** and TOD **Assets Economic** Housing **Development** Retail

Who We Are

Leland Consulting Group was founded by Dave Leland in 1989. His philosophy that shapes our company culture is best summarized by one of his projects. Dave was consulting to the CEO of a national home builder and was asked by the client to attend an executive level meeting. While sitting around the table a VP challenged the CEO and asked why Dave was at the meeting. The CEO calmly replied that Dave was the only person in the room that would tell him if he had spinach in his teeth. We are not idealists or yes people. We give you meaningful and actionable advice grounded in reality. We will tell you if you have spinach in your teeth.



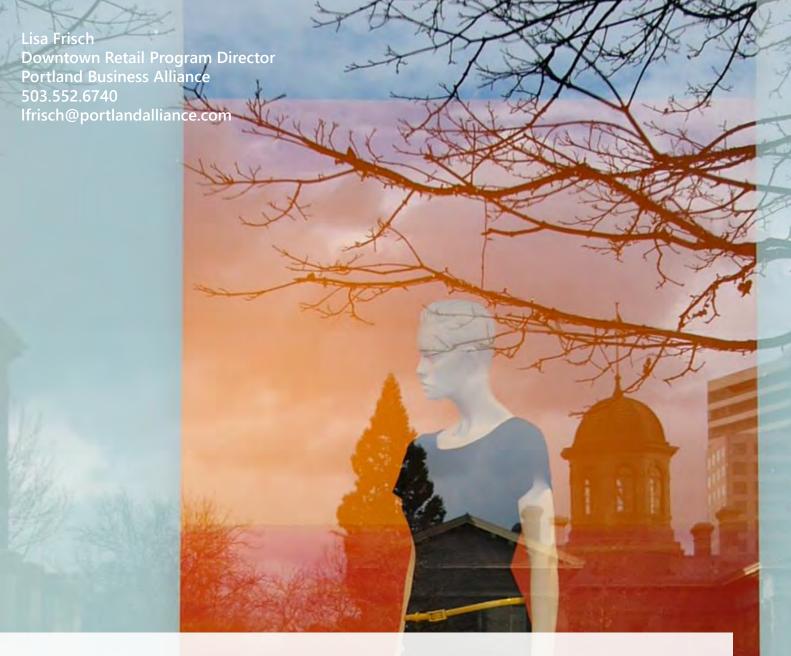
Millenia Development Advisory and Public-Private Partnership Services

For over 10 years, Leland Consulting Group has worked with McMillin Land Development Company to provide strategic advisory services for Millenia, a 210acre site that will become a mixed-use, transit-oriented town center in the heart of Otay Ranch - a 23,000acre new community located between San Diego and the U.S.-Mexican border. One of only 240 projects nationwide in the USGBC's LEED-Neighborhood Development pilot program, the City Council of Chula Vista unanimously approved entitlements for Millenia in September 2009. Leland Consulting Group's role in the project focused on creating a public-private partnership between McMillin Land Development Company and the City of Chula Vista that balances public goals and private financial realities in order to move Millenia through the planning, entitlement, and implementation phases. Throughout the planning phases, Leland Consulting Group also provided market research, regulatory recommendations, site programming and phasing strategies, a public financing plan, and ongoing advisory services for senior management at the McMillin Companies. The project broke ground in 2013. In 2018, Leland Consulting Group prepared a development strategy that successfully supported a plan amendment to adjust development targets to changing retail and residential market conditions.

/ Image credit: RTKL

Todd Galarneau Executive Vice President Meridian Development 619.794.1204 alarneau@meridiandevelopment.com





Downtown Retail Strategy

Leland Consulting Group served as advisor to the mayor of Portland and a diverse group of downtown stakeholders to design a retail strategy for Portland's downtown. In addition to analyzing market conditions, conducting a leakage analysis, tracking sales patterns, and gathering other background information, Leland Consulting Group examined emerging trends in retail, anchor and junior anchor tenants seeking expansion opportunities into new markets, and a set of detailed case studies of successful "Signature Retail Streets" in Pasadena, Vancouver, BC, Seattle, Boston, and Chicago. The case study evaluation revealed the critical conditions necessary for signature streets to succeed and applied those principles against conditions in Portland so that weaknesses could be mitigated. The firm also provided advisory services to the mayor about the need for concentrated and dedicated management of the downtown retail environment and ongoing recruitment of new retailers while helping to strengthen existing retailers. Portland's retail has, as a result of the strategy, moved from a recovery phase into an expansion phase.



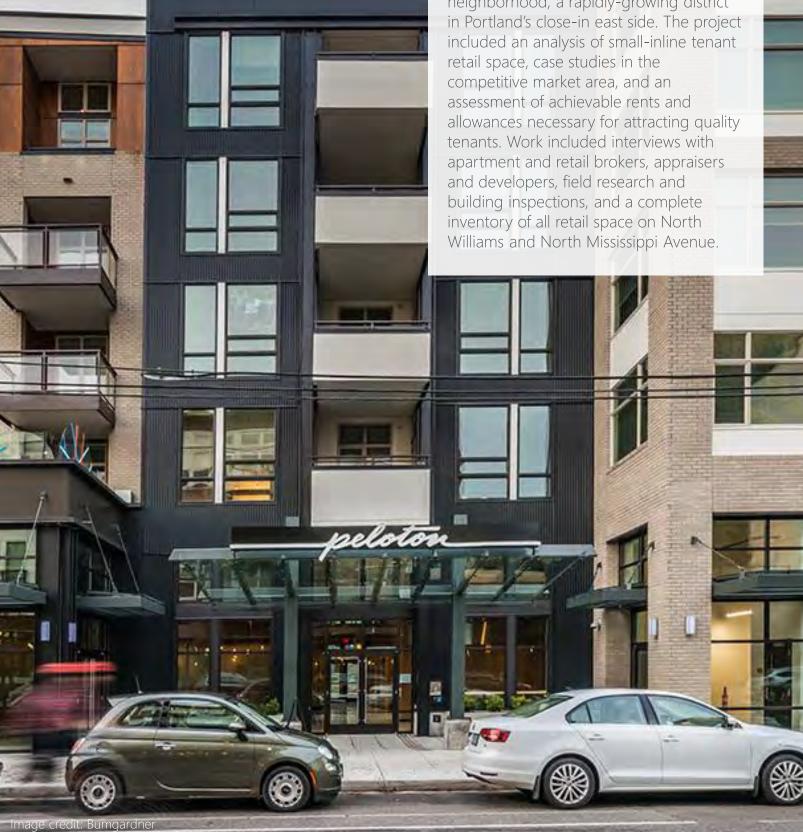
Retail Feasibility and Strategy

Leland Consulting Group was retained to evaluate the market feasibility of the retail component of major mixed-use (multifamily + ground floor retail) downtown projects in Los Angeles and Anaheim. Despite their highly urban regional settings, both the Arts District and downtown Anaheim operate as fairly distinct "small towns" within their respective cities. In LA's rapidly gentrifying Arts District, both retail and residential developments compete in a complex grey area, where industrial and quasi-industrial land uses are often interchangeable with office, gallery, live/work and wide-ranging flex uses. Anaheim's downtown has some of the nation's most innovative new retail and dining space, but also suffers from a lack of useful market data. In both cases, we helped steer the client towards reasonable rent expectations, but with strategic input for realizing a better upside in the market, relative to cookie-cutter five-over-one mixed use projects.

213.533.3739 valerie.kwong@aig.com

Retail Market Analysis Leland Consulting Group was engaged by

a private client to conduct a market analysis and assess upcoming market trends for the retail component of a mixed-used development of apartments and ground floor retail in Portland's Boise neighborhood, a rapidly-growing district in Portland's close-in east side. The project included an analysis of small-inline tenant retail space, case studies in the competitive market area, and an assessment of achievable rents and allowances necessary for attracting quality tenants. Work included interviews with apartment and retail brokers, appraisers and developers, field research and building inspections, and a complete inventory of all retail space on North





Restaurant Strategy

Beaverton, Oregon is suburban community west of Portland and home to companies such as Nike, Tektronix, and startups such as Act-On software. While serving as a technical and design hub for the region, the City's economic development staff heard frequently from company CEOs that they could not recruit talent or take clients to dinner locally due to the limited restaurant scene. The City hired LCG to prepare a restaurant strategy to recruit new restaurants. As part of the project, LCG educated the client on national restaurant trends, financing, location needs, and a targeted marketing strategy and recommended that the City focus on reusing existing buildings and creating a focused hub with a clear vision. The result is the Foodie Corridor and staff has recruited nine restaurants to the area in 18 months.

https://www.beavertonoregon.gov/1913/Join-the-Downtown-Foodie-Corridor



Port of Vancouver Waterfront Master Plan and Development Strategy

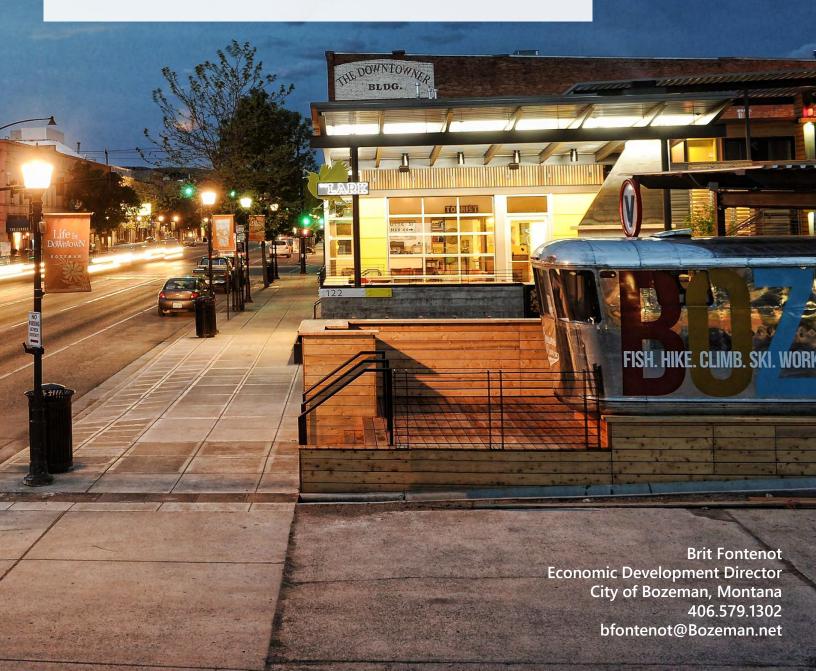
Leland Consulting Group was engaged by the Port of Vancouver, USA to guide the market and financial analysis, economic and fiscal impact analysis, and development strategy for its 12-acre property on the Columbia River adjacent to downtown Vancouver. The work began with market and financial analysis, site planning, conceptual building design, cost estimation, and due diligence regarding zoning and the regulatory environment for the near-term development of office, hotel, parking, and retail uses, with office and hotel development being the lead land uses. Following the Port's internal adoption of a Waterfront Master Plan in November 2015, LCG began to work with the Port on recruiting and negotiating with hotel and mixed-use developers. LCG led preparation of two developer RFQs and worked with the Port to select two preferred development partners: Vesta Hospitality, who plans to build a new, 160+ room AC (Marriott) Hotel on the site, and Holland Partner Group, who proposed to build new office, retail, and housing. LCG has continued to work with the Port on ground lease negotiations for the hotel project, and a lease was signed by both parties in summer 2017. Ground breaking is anticipated in 2019. LCG also assisted with the recruitment of a new waterfront restaurant, Warehouse 23, and other elements of the project including waterfront trails, plazas, and other features of the site. LCG led a fiscal and economic impact analysis of the proposed development, which demonstrated that about 950 jobs will take place on-site at build out, which will in turn spur about 570 more induced and indirect jobs elsewhere in the community. The total project cost is expected to be about \$210 million; total 25year fiscal impact (tax and fee revenues that will accrue to the City of Vancouver, Port, Clark County, State and other public agencies) will be \$92.5 million.

www.portvanusa.com/key-projects/waterfront-project/

Jack Flug, Senior Financial Analyst Port of Vancouver USA, Washington 360.816.9856 jflug@portvanusa.com

Economic Development Strategy

Leland Consulting Group worked with City staff and local stakeholders to determine Bozeman's distinct industry strengths and opportunities to grow the economic base. As a unique community with significant growth, this strategy had to align the need to strategically grow the industry base balanced with increasing "no growth" sentiments. As a result, instead of recruiting companies, the City would focus on retaining them. One key need that emerged from all businesses was a unified talent attraction initiative. Furthermore, throughout the process it was recognized that due to Bozeman's significant growth and desire to contain sprawl, regional collaboration with the county and surrounding communities was necessary. With limited regional focus and leadership, the strategy identified the need for City economic staff as the lead champion for this regional focus. LCG prepared the overall vision and the detailed, prioritized action plan with clear metrics needed to achieve the vision. The final strategy was unanimously approved by City Commission.







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Ted Kamp Senior Associate

Edward "Ted" Kamp provides market analysis in support of strategic land use decisions for public planners and private developers. Drawing on expertise in GIS, economic, and demographic analysis, he incorporates user-friendly information design to convey critical market intelligence to stakeholders. His work spans a variety of development contexts including urban renewal, suburban revitalization, and transit-oriented development. Recent client work has covered locales across the central and western US, including the metropolitan Denver area, Colorado; Dallas-Fort Worth, El Paso and Houston, Texas; Henderson, Nevada; Bartlesville, Tulsa and Oklahoma City, Oklahoma; Billings, Montana; Albuquerque, New Mexico; and Juarez, Mexico. In addition, he taught the Urban Market Analysis course for planning graduate students at the University of Colorado-Denver for five years.

After receiving a BBA (with honors) from the University of Oklahoma and an MS in Marketing/Consumer Behavior from the University of Arizona, Ted worked for five years in Chicago doing market research and strategic planning for the Leo Burnett advertising agency. He subsequently earned a Masters in Urban and Regional Planning (and completed PhD coursework) at the University of Colorado-Denver. He has provided urban market analysis consulting services for the past 17 years.

Education

University of Colorado: Master of Urban and Regional Planning, PhD coursework University of Arizona: Master of Science, Marketing (Consumer Behavior *Concentration)*

University of Oklahoma: Bachelor in Business Administration (with honors)

Awards/Publications

- 1999 Outstanding Graduate: Urban and Regional Planning Masters Program, University of Colorado-Denver
- 1998 ASCP McClure Student Award: "Empathy and Planning" (best paper nationally by a masters student)
- Author, with Deborah MacInnis: "Characteristics of Portrayed Emotions in Commercials: When Does What is Shown in Ads Affect Viewers," Journal of Advertising Research, December 1995

Representative **Project Experience**

- Waterfront Master Plan and Development Strategy, Port of Vancouver, Washington
- Arts District Mixed-Use Retail Feasibility and Strategy, Los Angeles, California
- Kaka'ako TOD District Development Strategy, Honolulu, Hawaii
- Mixed-Use Retail Feasibility and Strategy, Anaheim, California
- Town Center Specific Plan, Covina, California
- Merle Hay Road Market Study, Johnston, Iowa
- Retail Market Analysis, Canby, Oregon
- Restaurant Marketing Strategy, Beaverton, Oregon
- Golf Entertainment Center Feasibility Analysis, Southern Oregon
- Comprehensive Plan, Brighton, Colorado
- International Air Center Economic Feasibility Study, Roswell, New Mexico
- Wilburton-Grand Connection Study, Bellevue, Washington
- Marina District Master Plan, Everett, Washington
- Office Market Study, Austin,
- Northwest Growth Area Plan, Coralville, Iowa
- State of Oregon Statewide and Site-Specific Property and Facilities Evaluations

LELAND CONSULTING GROUP





Chris Zahas, AICP Managing Principal

Chris is a real estate strategist and project manager with an emphasis on urban corridors, downtown revitalization, employment districts, transit-oriented development, and public-private partnerships. His project approach is to assist public and private sector clients in turning broad visions into prioritized and achievable action plans by combining market and economic research with strategic advice that is tied to the fundamental principles of real estate development. In all cases, Chris keeps the focus of projects on implementation, always anticipating next steps and never hesitating to advise a client to change directions when that is the best course. In over 17 years at Leland Consulting Group, he has managed more than 25 downtown and corridor implementation strategies and played a strategic advisor role in dozens more. In the economic development realm, he brings a deep understanding of economic and demographic trends, ensuring that long-term strategies reflect the evolving drivers of how businesses choose to locate and where people choose to live. Prior to joining Leland Consulting Group, Chris coordinated economic development projects for the Portland Development Commission, Portland's redevelopment agency.

Education

Portland State University: Master of Urban & Regional Planning Lewis and Clark College: Bachelor of Arts, International Affairs

Publications and Public Speaking Experience

- Guest lecturer: Portland State University, University of Oregon
- Rail~Volution
- Western Planners Conference
- Urbanism Next
- Nevada Chapter of the American Planning Association
- Utah Chapter of the American Planning Association
- Washington Association of Realtors
- Contributing Author: Sustainable and Resilient Communities: A Comprehensive Action Plan for Towns, Cities, and Regions, 2011

Professional Memberships

- Urban Land Institute
- American Planning Association
- American Institute of Certified Planners (#019464)
- City Club of Portland
- Hyperloop Advanced Research Partnership, Treasurer

Representative **Project Experience**

- Waterfront Master Plan and Development Strategy, Port of Vancouver, Washington
- Downtown Retail Strategy, Portland, Oregon
- Kaka'ako TOD District Development Strategy, Honolulu, Hawaii
- Wine Industry Strategy, Douglas County, Oregon
- Marmalade Block Redevelopment Public-Private Partnership, Salt Lake City, Utah
- Downtown Housing and Revitalization Initiative, Boise,
- Riverfront Master Plan and Preliminary Development Strategy, Eugene, Oregon
- Millenia Mixed-Use Development Project, Chula Vista, California
- Professional Business and Medical District Master Plan, Redmond, Oregon
- City Center Vision, Vancouver, Washington
- Downtown Civic Core Subarea Plan, Renton, Washington
- OMSI District Plan, Portland, Oregon
- Colfax Connections Corridor Alternatives Analysis, Denver, Colorado
- Central Area Plan, Bend, Oregon
- State of Oregon Statewide and Site-Specific Property and **Facilities Evaluations**





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Our services

The Community Land Use and Economics Group is a small, specialized consulting firm that helps community leaders create vibrant downtowns and neighborhood commercial centers. Our work focuses on developing forward -looking economic transformation strategies, with particular emphasis on cultivating locally owned businesses, creating effective tools and incentives to stimulate new investment, reusing older and historic commercial buildings, and outlining practical implementation plans.

We provide a broad range of economic analysis, business development, planning, policy and evaluation services for downtowns and neighborhood commercial districts. Our services include:

Economic analysis and business development planning

- Retail market analysis
- Business mix and land use analysis
- Retail sales gap analysis
- Business development plans for commercial districts
- Independent business development and recruitment planning
- Economic and fiscal impact analysis
- Identification and development of niche markets and clusters
- Adaptive use and rehabilitation finance strategies for historic commercial buildings

Strategic and implementation planning

- Strategic planning for downtown and neighborhood commercial district revitalization initiatives
- Practical, detailed implementation plans for revitalization programs
- District marketing and promotion strategies

Consumer and public opinion surveys

- District intercept surveys
- Community-wide surveys
- Business surveys
- Economic and lifestyle profiling of key customer groups
- Focus groups and community input processes

Policy and program performance

- District assessments
- Evaluations of district management organizations
- Economic benchmarking
- Local, regional and state policy planning to stimulate and support revitalization initiatives

Training workshops, speeches, and keynote addresses

We offer speeches and workshops on a broad range of downtown and neighborhood commercial district economic development topics.

Our clients include local and state governments, nonprofit organizations, business improvement districts, developers, and planning firms in the US and abroad.

Our team

Our two principals, Josh Bloom and Kennedy Smith have more than 40 years of experience in downtown revitalization. Josh and Kennedy both served as senior staff for the National Trust for Historic Preservation's National Main Street Center – Kennedy as the Center's director and Josh as a senior program officer. Both of us also served as managers of local downtown development programs before joining the Main Street Center's staff and have first-hand experience with the daily challenges and long-term opportunities of downtown economic development. While our backgrounds involve many years of work with local Main Street programs, both of us also have considerable experience working with BIDs, downtown development authorities and many other downtown management organizations, as well as with developers, historic preservation organizations, financial institutions, and other community development partners.

Josh Bloom

Josh is a leader in the revitalization of historic commercial districts. He uses local data to craft market-based strategies that help cities and communities build economically differentiated, dynamic places. He lectures and publishes on two of his favorite topics — creating sustainable clusters of independent and chain businesses, and the development of crowdsourced and crowdfunded community-owned businesses.

Before joining the CLUE Group, Josh lead the urban expansion efforts of the National Trust for Historic Preservation's National Main Street Center, establishing the citywide Boston Main Streets program in 19 neighborhoods, as well as individual neighborhood Main Street programs in Cleveland, St. Louis, Los Angeles, New Orleans, Miami, Philadelphia, and others.

Josh received his B.A. from Columbia University and a master's in historic preservation from the University of Pennsylvania. A former molecular biologist,

he has more than 20 years of experience in revitalizing downtowns, first as executive director of Main Street South Orange, New Jersey in the early 1990s, and then as a senior program officer for the National Main Street Center from 1995-2005. He joined the CLUE Group in 2005. In 2007, he graduated from the preservation carpentry program at the North Bennet Street School, a historic trades school in Boston. Josh serves as an officer on the board of directors of Weavers Way Cooperative, a \$20 million enterprise in Philadelphia with two grocery stores, a pet supplies store, and two health and beauty aid stores.

Kennedy Smith

Kennedy is one of the nation's foremost experts on commercial district revitalization, downtown economics, and independent business development. She co-founded the CLUE Group in 2004. Kennedy's work focuses particular attention on creating dynamic retail development plans, cultivating locally owned businesses, creating effective business and property development incentives, finding new uses for key historic buildings, and strengthening the organizational infrastructure needed to create vibrant town centers.

Before launching the CLUE Group, Kennedy served on the staff of the National Trust for Historic Preservation's National Main Street Center for 19 years, the last 14 of them as the Center's director. During her tenure the Main Street program was recognized as one of the most successful economic development programs in the US, generating more than \$18 billion in new investment and stimulating development of 226,000 net new jobs and 56,000 new businesses and expanding to a nationwide network of 2,000 towns and cities.

Kennedy's work has been featured in news media ranging from the *New York Times, Business Week, Forbes, Governing, NPR* and *Red Herring* to "Donahue," "CBS Sunday Morning," and Public Radio International's "Marketplace." She has written numerous articles on the economic dynamics of traditional business districts and is a popular speaker on small businesses, retail development policy, and commercial district development issues. Kennedy has been honored by

Planetizen as one of the "100 Most Influential Urbanists of All Time" (2017) and one of the "100 Top Urban Thinkers" (2009). Fast Company magazine selected her for its first list of "Fast 50 Champions of Innovation," recognizing "creative thinkers whose sense of style and power of persuasion change what our world looks like and how our products perform." In May 2004, the National Trust for Historic Preservation recognized her achievements with its President's Award, for her "leadership and vision ... in creating one of the most admired and successful preservation programs in the country."

Kennedy received her B.A. in urban studies from Bryn Mawr College, then attended graduate school at the University of Virginia's School of Architecture. She was a Loeb Fellow at Harvard University from 2005-2006. In addition to her work with the CLUE Group, Kennedy also teaches historic preservation economics for Goucher College's graduate program in historic preservation. She is a popular speaker on downtown economic development issues.

Our collaborators

We have collaborated on assignments with some of the most skilled, experienced professionals involved in community development and commercial district revitalization. Our collaborators include urban planners, developers, equity investors, environmentalists, and transportation specialists. Some of our recent project partners include:

- Brown & Keener Urban Design
- Crowdsourced Placemaking Group
- czbLLC
- Dover, Kohl & Partners
- Duany Plater-Zyberk & Company
- Elan Planning, Design & Landscape Architecture
- Gianni Longo & Associates
- Heritage Consulting, Inc.
- Hill Studio
- Jair Lynch Development Partners
- The Lakota Group
- Renaissance Downtowns
- The Urban Agenda
- Zimmerman/Volk Associates

Our approach

We are committed to downtown and neighborhood economic development planning that cultivates locally owned businesses, engages a broad range of public- and private-sector entities, builds on local skills and traditions, reinforces overall community economic development goals, offers opportunities for economic and environmental sustainability, and positions the downtown as the vibrant center of civic life. Our retail development and market analysis work is guided by the following principles:

- Market-based strategy: We believe that, for historic and older downtowns and neighborhood commercial centers to re-establish themselves as vibrant, competitive commercial districts, it is critical that their development be guided by dynamic, market-based strategies that cross-cut all aspects of the revitalization process physical improvements, business development, marketing, partnerships. We therefore use market analysis to define two or three cross-cutting market-based strategies that serve as a framework for a comprehensive program of development activities. Older commercial centers are economic ecosystems in which many factors physical infrastructure, the markets served by district businesses, public perceptions of the district, financial incentives, and much more are tightly interrelated. We try to anticipate the ways in which each market-based strategy might affect all these interrelated factors, helping ensure program balance and opening participation in the revitalization process to the broadest possible range of participants.
- **Tools appropriate for downtowns:** We use market analysis tools appropriate for traditional commercial districts. Retail market analysis for older and historic commercial districts differs significantly from retail market analysis for shopping centers, shopping malls, and new town centers. For example, shopping malls are almost exclusively retail in nature, and they provide a relatively limited range of products and services to

consumers with relatively similar demographic characteristics. Older commercial districts, however, have multiple uses — retail, professional offices, housing, government, entertainment, and many more — and serve a broad range of consumers with many different demographic characteristics. For these reasons, retail market analysis for older and historic districts must examine multiple factors and multiple options simultaneously.

- Innovative solutions: We explore and pursue innovative economic development solutions to commercial district revitalization challenges. Historic and older town centers operate within vastly different economic contexts than they did several decades ago, and reestablishing market viability and cultural vibrancy requires strategies that create and combine new economic uses and that engage multiple marketing channels in innovative ways.
- **Community engagement:** We like to involve as many members of the community in the market analysis and master planning processes as possible and to disseminate information widely. The more people who share the information, the greater the level of collaboration on an economic development strategy— and the greater the level of support for the process and outcomes. For this reason, we encourage local organizations and agencies to actively participate in gathering and interpreting market information.
- Locally owned businesses: We look for opportunities to strengthen and cultivate locally owned businesses opportunities to add new product lines to existing businesses, spin off new businesses from existing ones, expand business sales through e-commerce, and so on. We believe that locally owned businesses provide the critical market distinctiveness that helps position a historic commercial center as a unique destination and investment venue.

- Strategic advantages: We believe that all communities have unique skills, cultural resources and assets. We look for these resources and explore ways that they might be cultivated to create new businesses and small-scale industries for the district.
- Housing: We look for opportunities to increase housing downtown. District residents provide additional rental income for district property owners, relieving pressure on ground-floor business tenants. They also patronize the district's businesses, providing additional sales opportunities for the district's retailers, services businesses, and professional offices. And a retail base that serves district residents and workers also helps alleviate parking and traffic problems.
- Cultural vibrancy: We use market analyses not only to craft solid business development strategies but also to create vibrant arts, culture and entertainment programs. Downtowns are the most public places in a community the symbolic heart, where the community comes together to celebrate, relax, and experience a sense of belonging and civic identity. We believe that a vibrant arts, culture, and entertainment program is vital to improving quality of life, creating an enticing environment attractive to new investment, and strengthening community identity.

Why choose us?

- We specialize in improving the economics of commercial districts. Unlike multidisciplinary planning and economic development firms whose staff are often generalists, we offer specialized expertise and leading practitioners in the economics of older and historic commercial districts.
- Broad perspective: Each of us has worked on hundreds of projects throughout the United States and abroad, including many of the most innovative and ground-breaking revitalization projects of the past several decades. We bring this wealth of information and examples from communities throughout the US and other nations to our assignments, helping our clients build on the experiences of other communities to solve your economic development challenges.
- Our rolodex. Over the past two-plus decades, we have worked with thousands of professionals and policy makers. From investors, developers, foundation officers and policy makers to small business innovators, marketing professionals, architects, transportation planners, and urban designers, we have one of the most impressive networks of contacts in the entire field of downtown and neighborhood commercial corridor economic development, making it possible for us to offer you the latest information and insider tips on programs and projects that might benefit your work.
- We focus on implementation. We have consistently found that the greatest weakness in many planning efforts is turning recommendations into tangible implementation steps. We are committed to helping projects become reality by breaking market transformations into small, achievable, and measurable actions. And, when possible, we build our recommendations around existing work plans and planning documents.

- We are committed to independent businesses. Independent businesses reflect a commercial district's personality, and they are crucial to distinguishing one community from another and one shopping area from another. Many of the support systems that helped cultivate independent businesses in the past have disappeared over the past few decades. We help civic leaders rebuild those support systems and create an environment that fosters small business growth and innovation.
- We believe in strengthening existing businesses first. Many market analyses and business development plans estimate the number of square feet of various kinds of retail space a district can support. That's fine but we look at things a little differently: We estimate the dollar volume of new commercial sales we believe a district can realistically absorb, of course but our first priority is to help existing businesses absorb as much of that as possible.
- We conduct original research. We conduct original research throughout the year to learn first-hand what's really happening in older downtowns and neighborhoods throughout North America. Our research includes ongoing surveys of independent retail businesses, multi-year studies of changes in the business composition of downtowns and neighborhood commercial districts, and research on trends affecting the economics of older commercial centers. Emerging energy technologies, increased interest in 'green' building and planning, the internationalization of work, aging households, the federal budget deficit, and the maturing of a generation of young adults that has grown up with the internet will all have an impact on downtown development in the next decade. We believe it is crucial to anticipate and plan for these changes.
- Our senior staff is directly involved throughout the project. Unlike larger firms that delegate much of their work to junior associates, we offer the direct, hands-on involvement of our senior principals throughout the project.

■ We work within your budget. No matter what your budget is, we feel confident we can help you improve the economic performance of your commercial district.

What our clients say

"Your work generated so much enthusiasm here that, within several months of your report, we literally tripled our program's funding."

- Executive director, downtown development organization

"The day after your meeting, we got \$25,000 in new commitments from people who said that, if the ideas you presented are ones that we are pursuing, they want to support us."

- Executive director, downtown development organizationi

"Again, thank you for your sage counsel. Your depth of knowledge on revitalization is astounding and is a true help to struggling communities like ours."

- Executive director, downtown development organization

"Your report knocked it out of the ballpark."

- City manager

"You brought together a wealth of complex knowledge in a succinct, accessible, and organized fashion. I just wanted to say thank you."

- City attorney

"Your work was especially well received, and I appreciate the way you just went right to work and scoped your study to provide relevant and complete high-level findings appropriate to the amount of time allocated. You really lived up to your reputation – thank you for that."

- Project manager, planning and urban design firm

"Thank you! Your report could not have been better, and it has been a pleasure working with you."

- Director, municipal office of economic development

"Kennedy Smith's breadth of knowledge on economic issues impacting downtowns was absolutely essential to helping our revitalization program reach the next level."

- Executive director, downtown development organization

"What an energizing session Saturday! Thanks for putting together those great action steps for the next six months to year. Perfect!"

- Executive director, Business Improvement District

"I appreciate the energy, focus, and humor that you bring to this. We wouldn't be where we are without you."

- Statewide Main Street Program coordinator

"We found working with the CLUE Group a rewarding experience not only because they are professional but their sincere interest in our community made the partnership a positive one."

- Executive director, Chamber of Commerce

"I am compelled to write you after attending the ICSC event yesterday. It was fantastic to hear you speak! As a retail broker, I can't express how educating and motivating it was. Thank you so much for visiting!"

- Retail broker

Profiles of some of our projects

National Main Street Center (2014+): After noticing that a growing number of commercial districts participating in the Main Street program were not making consistent economic progress, the National Main Street Center engaged the CLUE Group to examine the problem and identify potential solutions. After surveying hundreds of downtown and neighborhood revitalization programs and interviewing dozens of practitioners, we found that many community Main Street programs had gradually shifted their focus away from economic development and towards marketing and promotion, primarily because they lacked solid economic development strategies. We proposed two changes in the Main Street program's methodology. First, we suggested that local program activity should be based on two or three comprehensive economic development strategies that bring about a significant transformation in the district over the course of 5-10 years, with activities in each of the "four points" of the Main Street Approach chosen specifically to advance one or more of these strategies. Second, we suggested that the organizational structure of local Main Street programs become more flexible, shifting emphasis from four standing committees to a broader network of partners. The board of directors of the National Main Street Center agreed with our recommendations and engaged us to test the new methodology in ten pilot communities and to develop a set of training and reference materials for the new approach.

Retail development strategy for Huntington Station, New York (2014): In 2013, Renaissance Downtowns was designated the master developer for the area around Huntington Station, New York's commuter rail station. The following year, Renaissance Downtowns engaged the CLUE Group to create a retail development strategy for the transit-oriented district.

Our recommendations were built around two key guidelines: First, differentiating Huntington Station's retail offerings from those of two nearby commercial centers (Huntington Village, a historic, mixed-use downtown; and

the Walt Whitman Mall, a regional shopping mall) and, second, maintaining primary focus on station-area retail, with access and visibility from both the main highway and the Long Island Railroad Station. These two guidelines will serve as litmus tests for a variety of retail and business development options. Our recommendations included strengthening existing businesses by adding product lines and improving marketing; using station-area offices and small industries to build a new economic anchor for Huntington Station; creating two strong marketing programs to support two major business clusters; and creating a robust set of tools and incentives to support business development and business growth.

One of the small business development tools we recommended for the Huntington Station TOD area is a process for crowdsourcing business ideas, then testing the viability of the most popular suggestions – in essence, ensuring that sufficient market demand exists to support a new business or a business expansion. Renaissance Downtowns launched a crowdsourcing website through which community members can suggest and vote on ideas for new businesses. When a proposed business receives 100 "like" votes, the CLUE Group prepares a feasibility study to test the business's likely economic viability. To date, we have prepared feasibility studies for a restaurant cluster, year-round farmers market and kitchen incubator, community center, 24/7 daycare center, and an environmentally friendly children's and parenting store.

Retail development strategy for downtown Atlantic City (2012): Dominated by casinos, downtown Atlantic City offers few retail experiences for residents and visitors, and the district lacks adequate housing for casino workers or employees of the nearby hospital, community college, and other nearby institutions. New Jersey's Casino Reinvestment Development Authority commissioned retail and housing market analyses and development strategies from the CLUE Group (retail) and Zimmerman/Volk Associates (housing). Our work focused on strengthening retail performance on Atlantic Avenue, the district's backbone; developing a solid retail core to support a proposed arts and entertainment district; and developing retail activity along several key streets linking the

Boardwalk and casinos to The Walk, a 500,000 square foot lifestyle center several blocks north of Atlantic Avenue. Our research uncovered not only ample market demand for a variety of new retail businesses and business clusters but also a strong opportunity to promote the authenticity of the district's historic commercial buildings and locally owned businesses. In addition to outlining four business development plans, we also recommended a variety of actions to remove regulatory barriers to downtown business development and property rehabilitation, create new business development tools, and coordinate business development activities among existing organizations.

Retail market analysis and business development strategy for downtown Bristol, Connecticut (2011): Bristol demolished most of its historic downtown in the 1970s and replaced it with an enclosed shopping mall – but, by the 1990s, the mall had failed. The City of Bristol demolished the mall several years ago and selected Renaissance Downtowns to be master developer for a new, mixed-use downtown. Renaissance, in turn, engaged the CLUE Group to conduct a retail market analysis and draft a business development strategy for downtown Bristol. Through Bristol Rising!, a crowdsourcing and crowd-funding organization, more than 2,000 Bristol-area residents are now actively involved in helping recruit businesses, raise money for priority projects, and shape the new district. The CLUE Group continues to provide ongoing guidance on downtown business development as Bristol's new mixed-use town center moves closer to its 2013 ground-breaking.

Economic development strategy for downtown Beverly, Massachusetts (2010):

The town of Beverly, Massachusetts has assets most communities would envy: a long shoreline, a rich maritime history, two colleges, a growing base of creative industries, and easy access to Boston, just half an hour south. But over the past several decades the town has struggled to attract new economic growth. Neighboring Salem attracts thousands of tourists, and new industry has settled in other nearby pockets along the northeastern tech corridor, seemingly leapfrogging over Beverly. Beverly Main Streets, Inc., the community's nonprofit downtown economic development organization, conducted a series of

community visioning meetings in 2009, identifying strategies for using arts as an economic catalyst in downtown Beverly. It then engaged the CLUE Group to test the market viability of the ideas that emerged and to help turn the community's vision into an implementation plan.

We realized that the scope of work the organization was considering was too broad and needed to be more tightly focused in order to gain traction with property and business owners, lenders, city officials, and other organizational partners. We also realized that the community needed some additional resources and incentives to stimulate development. We found several specific regulatory barriers that were discouraging new growth. And, we identified several market strengths of which the community was largely unaware.

Our recommendations focused on three key strategies: strengthening and expanding the district's creative sector; strengthening Cabot Street's role as a commercial center for the community, colleges, and visitors; and strengthening Rantoul Street's role as a center for small industries and as a community-serving commercial center. We worked closely with Beverly Main Streets, Inc.'s board, committees, and partners to break each strategy into specific tasks, prioritize and sequence the tasks, and assign responsibility and budget for each one, resulting in a 3-5 year work plan to advance the district's goals.

Retail Action Roadmap for Washington, DC (2010): The City of Washington, DC's Office of Planning conducted a citywide retail market analysis, but it needed help in using the data to develop strategies for business development that were sensitive to each individual neighborhood's specific needs and opportunities and that encouraged development of locally owned businesses (versus national retail chains). The Office of Planning engaged the CLUE Group to create a "retail action roadmap" for the city. The plan we prepared included over 50 specific tools to support development and growth of locally owned businesses, including some citywide tools (such as relaxing restrictions on mobile vending and facilitating development of small business investment groups) and some specific to individual neighborhoods.

Other recent or current assignments include:

- Retail market analysis and business development strategy for downtown Cooperstown, New York (as a subcontractor to Elan Planning, Design, and Landscape Architecture)
- A study of the economic impacts of "The Swings", an interactive musical installation for public spaces designed by Daily Tous Les Jours, an interactive design studio
- A plan for using arts as an economic development strategy in Pasadena,
 California's Playhouse District
- Retail market analysis and business development strategy for a TOD area in downtown Bethel, Connecticut (as a subcontractor to Duany Plater-Zyberk & Company Architects & Town Planners)
- Strategies for reusing and recapitalizing 200 medieval fortified churches in Transylvania
- Examination of the potential economic benefits of creating a state park for the Brandy Station and Cedar Mountain Civil War battlefields in central Virginia
- A business development strategy for Steinwehr Avenue in Gettysburg, Pennsylvania, immediately across from the main entrance to the Gettysburg National Military Park
- Retail market analysis and business development strategy for downtown New Rochelle, New York

Contact us

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CBRE ADVISORY & TRANSACTION SERVICES RETAIL OVERVIEW

GLOBAL REACH

With offices worldwide, CBRE Retail Services offers global reach and capabilities to serve retailers, restauranteurs, investors and developers of assets across all retail environments. We are passionate retail advisors with global capacity and deep local market expertise. Whether you're breaking ground in New York, expanding in London or forging a long-term global strategy, our 1,300+ retail professionals worldwide help

with whatever you need, wherever you need it.



ADVANTAGE OF SCALE

THE AMERICAS

150 RESEARCH & ANALYTICS PROFESSIONALS

We deliver institutional quality multi-market knowledge

14,025+ RETAIL TRANSACTIONS PER YEAR

CBRE delivers precise and relevant transaction knowledge locally, regionally, nationally and globally

100m SQUARE FEET UNDER MANAGEMENT

We possess the deepest access to retail professionals and potential clients everywhere

100 CAPITAL MARKETS PROFESSIONALS

We have full access to capital and financial solutions

1,300 RETAILERS REPRESENTED

Our professionals possess the broadest and most complete knowledge of the retailer movement

300m SQUARE FEET OF LEASING

Our highly diverse portfolio of assets provides the best optics into all the best practices





















































ADVANTAGES OF PARTNERING WITH CBRE

What You Get:

- Single point of contact to harness CBRE resources
- A strategic, integrated approach
- Passionate experts with a deep understanding of consumers
- Predictive analytics to help navigate the dynamic retail landscape
- Forward-looking real estate strategies that achieve objectives
- Solutions that enhance competitive advantage by impacting bottom line performance and topline business value

INTEGRATED SERVICES EXPERTISE

We understand every aspect of the business of retail.
We deliver more to clients and drive better business outcomes.

Asset Services

CBRE provides comprehensive services to owners and investors of a variety of retail property formats. We are experts in strategic planning, leasing, operations and the development of value-enhancement plans that help to make sure your property achieves its ultimate potential.

Capital Markets

Our National Retail Partners professionals specialize in the sale, debt and structured finance placement assistance, and recapitalization of retail properties. We provide best-in-class service by leveraging our collective team experience and relationships and sharing proprietary real-time marketing information.

Development

CBRE offers experience in ground-up development, in-fill redevelopment and retail within mixed use projects, ranging from single-tenant facilities to large town and power centers. Our team has the experience and relationships necessary to build value for the local community and financial partners alike.

Facilities Management

CBRE's Facilities Management expertise helps our clients create safe, secure and high-performing workplaces. Our team will help your people and portfolio perform at their highest capacity through risk reduction, sustainability advances, cost certainty and operational excellence.

Floored

With Floored, CBRE offers clients the unique ability to visualize the future of their retail spaces. Floored Plans and Floored Build allow our clients to customize and explore interactive floorplans, as well as to create an interactive experience with 3D modeling—even before a space is built.

Economic Incentives

CBRE leverages labor-market intelligence, site selection solutions and incentive negotiations to enhance our clients' return on investment. Our experts use proprietary tools to identify the best mix of qualified labor pool, tax and infrastructure incentives and other considerations for new stores, warehouse and distribution facilities or headquarters relocations.

Landlord Representation & Leasing

CBRE's personal approach, comprehensive range of services and breadth of global intelligence allows us to drive better business outcomes for our retail investor clients. Our professionals have experience across all formats and all markets, empowering our team to help maximize the value of your assets, no matter the size or location.

Location Analytics

We analyze our wealth of industry-specific data to help clients understand consumers and their spending habits. Our services improve competitiveness and performance; reduce cost; optimize network expansion; facilitate retail business-model changes; boost revenue growth and efficiency; and aid in M&A restructuring and optimization.

Mall & Large Format

CBRE's mall and large format team is a partner for both occupiers and investors navigating the changing landscape of the retail environment. Our professionals are equipped with market-leading research and an intricate understanding of mall, outlet and lifestyle center properties, offering clients unmatched guidance and perspective.

Occupier Restructuring & Disposition

Our professionals create customized strategies for retailers with a need to assess and optimize their holdings. We can help you manage occupancy and capital costs related to merger & acquisition activity, underperforming locations, change in prototype and corporate restructuring. We also create new avenues of value from distressed real estate through development, redevelopment and adaptive reuse.

Occupier Tenant Representation

CBRE's more than 530 retail professionals represent 1,300 retailers, offering the broadest and most complete knowledge of the retailer movement. Our experienced professionals have the retail expertise necessary to build advantage for your brand, no matter your size, specialty or location.

Portfolio Services

Our 665 dedicated lease administration specialists distill complex documents to the information clients need most. We offer centralized lease organization so critical dates aren't missed, and we help clients meet all property condition requirements to avoid extra charges.

Predictive Analytics

Forum Analytics is an industry leader in advanced real estate forecasting and analytics. Our consulting expertise and global mapping and modeling platform, combined with our depth of proprietary data assets provide an information-driven approach to real estate planning.

Project Management

CBRE's project managers work on our client's behalf as owner's representatives. We can manage the project delivery team along with schedule, cost and quality control for your next development, redevelopment or capital improvement project.

Site Selection

CBRE's best-in-class site selection process is tailored to suit your unique needs. With extensive market research, due diligence and on-the-ground knowledge, CBRE can help you succeed—whether you're looking for one location or 100.

Supply Chain & Logistics

Our specialists offer in-depth expertise on supply chain, from transportation optimization and network design to facility operations assessment, capacity analysis and insource versus outsourcing. Supply Chain and real estate decisions are interwoven, and our experts will help you achieve the right balance between cost and customer service.

Transaction Management

With almost 350 dedicated transaction managers, CBRE can coordinate all of your requirements for sale or lease transactions. From site selection to sale or lease execution, we'll help you get the ideal property for your needs at the best price as quickly as possible.

Valuation & Advisory

CBRE's dedicated Retail Valuation Group specializes in the appraisal of single-tenant, strip, neighborhood, community and power centers and malls. Our experience in the retail environment, paired with access to real-time transaction information and extensive market analysis, offers unmatched value to our clients.









Connecting Point.

For more than 25 years, The Zall Company has built relationships with the industry's most important decision makers. Our reputation with executive-level retailers and property owners enables us to facilitate complex negotiations that achieve mutually beneficial agreements in less time.

Landlord Representation: Merchandising your shopping area to attract top-end consumers is our specialty—the result of careful, long-term development of strong relationships with high-caliber national and international brands. Through in-depth property and marketing analysis, we develop strategies to increase occupancy while maximizing returns

We transform the shopping experience with fashion-forward brands that drive higher rates of consumer engagement. — Stuart Zall, founder and president of The Zall Company

Our experienced teams will respond in person to issues threatening to stall a negotiation. As a **Retail Brokers Network** (www.retailbrokersnetwork.com) member, we leverage local knowledge from more than 60 affiliated offices throughout the U.S. and Canada.

Tenant Representation: We identify opportunities in regional malls, urban shopping districts and lifestyle centers. To ensure success, we study your business, relocation needs, and the criteria that drive revenues. Capitalizing on the strength of our relationships with major developers, we access the best properties with credibility to negotiate strong deals.





Retail Leasing.

We help landlords formulate merchandising plans with a mix of brand categories that attract higher rates of consumer engagement. Through extensive national and international networks of retail tenants, we aggressively pursue strong retail, dining and entertainment brands to create a vibrant heartbeat in your mall or shopping center. Our property and tenant networks reduce vacancies and increase occupancy-more efficiently and at higher rates.

Retail Intelligence.

As a partner in **Retail Intelligence Advisors** (www.retailintelligenceadvisors.com), we have full access to the insights of a leading shopping-center advisory firm. The industry's most robust analytical tools help us "see around the corner," predicting consumer behavior and trends-information to help you make sound strategic planning and investment decisions. These results increase the accuracy of financial modeling, including rates of return and other critical financial metrics.

Analytical modeling includes the following areas:

- Trade area analysis
- Property analysis
- Competitive analysis
- Market positioning strategies
- Tenant mix strategies
- Sales forecasting
- Site feasibility
- Acquisition due diligence
- Investment risk/opportunity assessment

BROKERS WITHOUT BORDERS®

- Connected to the world's foremost retail brokerage firms
- Access to the industry's most robust analytical tools
- Respond immediately to situations threatening to stall negotiations
- Facilitate negotiations between tenants, landlords and government agencies















Calvin Klein Chica's



















The Zall Company 4725 S. Monaco Street, Suite 340 Denver, CO 80237 303-804-5656





www.zallcompany.com

An International Leader in Retail Brokerage.

Direct access to executive-level decision makers

National and international broker network

Adept at negotiating with all parties

Retail industry's most robust analytical tools

Merchandising plans that drive revenues

Representing landlords and retailers

Leasing high street retail, shopping malls and outlets

Denver Boca Raton Dallas San Francisco Xi'ar





REQUEST FOR PROPOSALS FOR RETAIL FRONTAGE LINE REVIEW

Sealed proposals endorsed <u>"DOWNTOWN RETAIL REVIEW"</u>, will be received at the Office of the City Clerk, 151 Martin Street, PO Box 3001, Birmingham, Michigan, 48012; until **Tuesday, October 2, 2018 at 3:00pm** after which time bids will be publicly opened and read.

The City of Birmingham, Michigan is accepting sealed bid proposals from qualified professional firms to conduct a review of retail trends and policy in relation to its downtown. This work must be performed as specified in accordance with the specifications contained in the Request For Proposals (RFP).

The RFP, including the Specifications, may be obtained online from the Michigan Intergovernmental Trade Network at http://www.mitn.info or at the City of Birmingham, 151 Martin St., Birmingham, Michigan, ATTENTION: Jana L. Ecker, Planning Director.

The acceptance of any proposal made pursuant to this invitation shall not be binding upon the City until an agreement has been executed.

Submitted to MITN: August 30, 2018

Deadline for Submissions: October 2, 2018 at 3:00pm **Contact Person:** Jana L. Ecker, Planning Director

P.O. Box 3001, 151 Martin Street Birmingham, MI 48012-3001

Phone: 248-530-1841

Email: jecker@bhamgov.org



REQUEST FOR PROPOSALS FOR RETAIL FRONTAGE LINE REVIEW

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INTRODUCTION

For purposes of this request for proposals, the City of Birmingham will hereby be referred to as "City" and the private consulting firm or firms will hereby be referred to as "Contractor."

At this time, the City of Birmingham, Michigan is seeking a comprehensive review of its Retail Frontage Line policy. It is accepting sealed bid proposals from qualified professionals who have experience in creating zoning policies that strengthen retail corridors in traditional walkable downtowns, projecting retail trends, and conducting retail market analysis. The purpose of this RFP is to request sealed bid proposals from qualified candidates. The bid shall include presentation of qualifications, capabilities, and costs for providing a comprehensive review of Birmingham's Retail Frontage Line policy and providing recommendations for modifications to existing policy to continue to enhance Birmingham's thriving downtown retail district in accordance with the following objectives:

- 1. Build on existing policies to strengthen the downtown retail environment in order to continue developing a pedestrian oriented experience as outlined in the City's Downtown Master Plan;
- 2. Review what first floor retail means for a successful downtown and provide recommendations to comply;
- 3. Identify ways to enhance and strengthen core retail areas; and
- 4. Evaluate unique circumstances in the retail area, including non-conforming building forms, and provide recommendations to address these circumstances.

The Red Line Retail Frontage in Downtown Birmingham consists of 3.25 linear miles with approximately 280 first floor businesses. Its purpose is to require street level uses that will create a downtown environment that activates the street and contributes to a walkable pedestrian experience. This zoning policy was first proposed in the Downtown Birmingham 2016 Plan which was adopted in 1996. The Redline Retail Frontage policy and permissible uses are defined as follows:

Retail Frontage Line is defined as:

All lot lines abutting a public street that are required to be retail, as designated on the Downtown Birmingham 2016 Regulating Plan.

Retail Use is defined as:

Any of the following uses, Artisan, community, commercial, entertainment (including all establishments operating with a liquor license obtained under Chapter 10, etc.) bistro or restaurant uses.

Commercial Use is defined as:

Premises used generally in connection with purchase, sale, barter, display, or exchange of goods, wares, merchandise, or personal services.

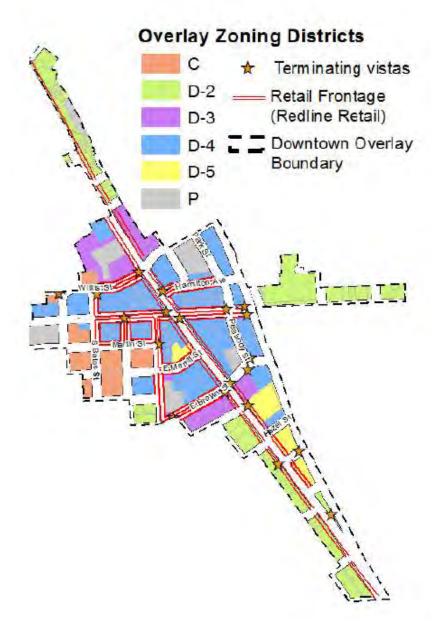
Personal Services is defined as (Adopted November 13, 2017):

Establishment Open to general public and engaged primarily in providing services directly to individual consumers, including, but not limited to, personal care services, services for care of apparel and other personal items, but not including business to business services, medical, dental, and/or mental health services.

Section 3.04(C)(6) in the Downtown Birmingham Overlay District states:

Buildings that have frontage along the required retail frontages, as specified on the Regulating Plan, shall consist of retail with minimum depth of 20 feet from the frontage line within the first story.

The boundary of the current Retail Frontage Line is illustrated in the Overlay Zoning Map provided below:



Since the inception of the 2016 Plan and the resulting creation of the Redline Retail District/Retail Frontage Line, the City has maintained a strong commitment to requiring and strengthening first

floor retail uses and promoting Birmingham as a premier urban shopping destination within the region.

It is anticipated that the selection of a firm will be completed by <u>December 2018</u>. An agreement for services will be required with the selected Contractor. A copy of the Agreement is contained herein as Attachment A. Contract services will commence upon execution of the service agreement by the City.

This work must be performed as specified in accordance with the specifications outlined by the Scope of Work contained in this Request for Proposals (RFP).

SCOPE OF WORK

The selected Contractor will work with the City to review and provide recommendations for Birmingham's Redline Retail Frontage Line based on the objectives listed above. The scope of services is as follows:

- 1. Review the Downtown Overlay District's Retail Frontage Line Boundary Requirements and the City Manager's Research Directives for the Planning Board. The definition of Retail was recently addressed by City Commission to provide more clarity about personal services in relation to commercial uses in the Retail Frontage Line boundary. After the new definition for personal services was adopted, the City Manager directed the Planning Board to continue studying the larger issue of retail use in Downtown Birmingham, specifically but not limited to the following:
 - a. To evaluate the current geographic boundary of the Retail District to determine if modification is needed, and to also consider whether a priority level hierarchy consisting of the downtown core and other areas within the current Redline Retail Boundary is advisable.
 - b. To evaluate current properties in the Redline Retail Boundary that were not built to support first floor retail uses and provide recommendations to address this issue. Such properties may, for example, have not been built with first floor frontage at grade or the building was not previously designed to support retail use.
 - c. To recommend ordinance language to address the prohibition of desks, workstations and office related amenities placed within the first 20 feet of depth of window frontage within the Retail District .
- 2. Review Current Research Done by City Staff & Consultants. The City has conducted an inventory of all businesses in the Redline Retail District and organized them by zoning categories in order to help determine where there are strong clusters of retail use. The City has also gathered available asking rent data and occupancy rate data to help determine the various levels of demand. Data such as quarter mile and half mile walking radius, proximity to metered parking, and how retail has expanded into new buildings since 1996 when the Redline Retail District was adopted was also considered. The City reviewed a three-tiered system of allowable first floor uses and various boundaries for these tiers as well. An inventory of existing buildings not suitable for retail use with the Redline Retail District was also completed. The Contractor selected will review this current research, in addition to reviewing prior market studies completed for the Birmingham Shopping District in 2012, 2013 and 2016.

- 3. Provide an Existing Conditions Report. The City wishes to evaluate the distribution of first floor uses, asking rents, vacancies, and size of leasable retail spaces in order to determine the current retail environment in downtown. A comparison of second and third floor office rents versus first floor retail rents is also desirable in determining demand and the premium for first floor space. The Contractor will update the existing conditions report for the entire Redline Retail District to establish the state of retail in Downtown Birmingham. The existing conditions report should be used to determine Birmingham's retail strengths and weaknesses in the Redline Retail District compared to similar local, regional and national cities with similar demographics, insufficient mass transit and walkable downtowns and to identify possible policy options to enhance the retail experience in Downtown Birmingham.
- **4. Provide Future Trends in Retail and Projections for Retail Demand in Similar Walkable, Urban Communities.** The City's retail district has a mixture of national retailers, restaurants, and independent boutique shops. The City would like to see projections of shopper and retailer preferences for main street shopping districts such as Birmingham's with similar demographics and insufficient mass transit. The City would also like to see projections of how demand for main street retail may change in relation to current trends in regards to malls, big box stores, online shopping, walkable, urban retail and other similar trends, as well as anticipated market changes over the next 5 to 10 years to assist in crafting retail policy that allows Birmingham to maintain its current status as a premier urban shopping destination.
- **5. Evaluate Current Retail Frontage Line.** The current Retail Frontage Line is 3.25 linear miles of first floor storefronts along Downtown's main streets, with consistent retail requirements and regulations throughout the district. The Contractor should consider the creation of a priority level hierarchy that permits different pedestrian oriented uses and or varying retail requirements and regulations within the current Redline Retail Boundary.
- **6. Coordinate Public Engagement.** Public participation will be an important aspect of the Retail Frontage Line boundary review. The Contractor shall conduct public engagement to get feedback from building owners, retailers, and citizens. The Contractor will be expected to conduct a minimum of two public engagement activities to receive input and engage the public on the Retail Frontage Line policy and the suggested tiered system reviewed by the Planning Board. The Contractor will be expected to coordinate their public notifications with the Birmingham Shopping District.
- **7. Provide Final Analysis Including Potential Options for Retail Tiers and Pedestrian Oriented Uses Within Each Tier.** The final analysis should include recommendations to strengthen and enhance Downtown Birmingham's retail environment based on the existing Downtown Master Plan strategies as well as findings from the existing conditions analysis, retail trends and projections, and comparative analysis with similar communities. Recommendations should consider whether or not there should be a priority level hierarchy with multiple tiers of permissible 1st floor uses. If multiple tiers are recommended, final analysis should include where the potential boundaries of these tiers should be. An evaluation of current properties in the Reline Retail Boundary that were

not built to support first floor retail uses should also be conducted, and the final report should include recommendations to address this issue. The final report should include a prohibition of desks and other office furniture within the first 20 feet of depth of window frontage on the first floor and provide recommendations and/or ordinance language to address this issue.

8. Attendance at Meetings._The contractor shall expect to attend a minimum of five meetings with the City Commission and other boards, as well as organize and conduct a minimum of two public engagement activities with business owners, retailers and citizens. This outline is not necessarily all-inclusive and the Contractor shall include in the proposal any other tasks and services deemed necessary to satisfactorily complete the project. Additional meetings with both the Planning Board and City Commission may be requested as needed.

DELIVERABLES

The Contractor shall provide a detailed report of their findings and conduct a final presentation to the Planning Board and City Commission.

- 1. One (1) reproducible PDF digital file and sixteen (16) hard color copies of the completed Report; and
- 2. One web-friendly, reduced size PDF digital file of the final Report for publication on the web and social media.

All data, illustrations and projections created or compiled throughout the project shall become the sole property of the City of Birmingham.

TIME SCHEDULE AND COST PROPOSAL

All proposals must include a proposed time schedule for completion of the report and a fixed price agreement with an associated fee schedule for extra meeting costs, should they be required. Reimbursable expenses will be billed at direct cost plus a 10% administrative charge. Normal reimbursable expenses including... associated with the project are to be included in the estimated fees as outlined in the proposal.

The Contractor shall perform all services outlined in this RFP in accordance with the requirements as defined and noted herein.

INVITATION TO SUBMIT A PROPOSAL

Proposals shall be submitted no later than Tuesday, October 2, 2018 at 3:00pm to:

City of Birmingham Attn: City Clerk 151 Martin Street Birmingham, Michigan 48009

One (1) electronic copy and one (1) hard copy of the proposal must be submitted. The proposal should be firmly sealed in an envelope, which shall be clearly marked on the outside, "Downtown Retail Review". Any proposal received after the due date cannot be accepted

and will be rejected and returned, unopened, to the proposer. Respondents may submit more than one proposal provided each proposal meets the functional requirements.

SUBMISSION REQUIREMENTS

All proposals that wish to be considered must contain the following:

- (i) Cover Letter;
- (ii) Outline of qualifications of the Contractor and of the key employees that will be involved in the project. The project team should include each of the following skill sets:
 - Retail market analysis;
 - Retail trends and projections;
 - Zoning policy related to downtown retail corridors; and
 - Experience working with cities that have a mixed-use, form based code.
- (iii) Outline of Contractor(s) experience with the preparation of retail analyses, public engagement activities, and zoning policy recommendations, including references from at least two relevant communities where such plans have been completed. (Portions of sample plans prepared by the Contractor should be submitted with the proposal, up to a maximum of twenty-five (25) pages);
- (iv) Outline presenting a description of the scope of work to be completed, broken down into the following separate components:
 - (i) Review the Downtown Overlay District's Retail Frontage Line;
 - (ii) Review current research done by City staff;
 - (iii) Provide an updated existing conditions report;
 - (iv) Provide details of how the public engagement strategy will be implemented;
 - (v) Provide trends in retail and projections for retail demand in Birmingham;
 - (vi) Evaluate current boundary of Retail Frontage Line, as well as proposed boundaries for a tiered system of first floor uses;
 - (vii) Provide final analysis with recommendations for retail boundaries and uses within each boundary;
- (i) Proposed time frame for completion of each component of the scope of work;
- (ii) A statement of any additional services that you recommend, if any. Define hourly rates for additional services by discipline.
- (iii) Bidders Agreement (Attachment B);
- (iv) Cost Proposal (Attachment C); and
- (v) Iran Sanctions Act Vendor Certification (Attachment D).

INSTRUCTIONS TO BIDDERS

- 1. Any and all forms requesting information from the bidder must be completed on the attached forms contained herein (see Contractor's Responsibilities). If more than one bid is submitted, a separate bid proposal form must be used for each.
- 2. Any request for clarification of this RFP shall be made in writing and delivered to: Jana L. Ecker, Planning Director, 151 Martin Street, Birmingham, MI, or via email to jecker@bhamgov.org. Such request for clarification shall be delivered, in writing, no later than 5 days prior to the deadline for submissions. Email requests must contain in their subject line "Request for Clarification". All inquiries received will be answered and posted on MITN at least 3 days prior to the RFP submission due date.

- 3. All proposals must be submitted following the RFP format as stated in this document and shall be subject to all requirements of this document including the instruction to respondents and general information sections. All proposals must be regular in every respect and no interlineations, excisions, or special conditions shall be made or included in the RFP format by the respondent.
- 4. The contract will be awarded by the City of Birmingham to the most responsive and responsible bidder and the contract will require the completion of the work pursuant to these documents.
- 5. Each respondent shall include in their proposal, in the format requested, the cost of performing the work. Municipalities are exempt from Michigan State Sales and Federal Excise taxes. Do not include such taxes in the proposal figure. The City will furnish the successful company with tax exemption information when requested.
- 6. Each respondent shall include in their proposal the following information: Firm name, address, city, state, zip code, telephone number, and fax number. The company shall also provide the name, address, telephone number and e-mail address of an individual in their organization to whom notices and inquiries by the City should be directed as part of their proposal.

EVALUATION PROCEDURE AND CRITERIA

The City will utilize a qualifications-based selection process in choosing a Contractor for the completion of this work. The evaluation panel will consist of City staff, board members, and/or any other person(s) designated by the City who will evaluate the proposals based on, but not limited to, the following criteria:

- Ability to provide services as outlined.
- Experience of the Contractor with similar projects.
- Content of Proposal.
- Cost of Services.
- Timeline and Schedule for Completion.
- References.

TERMS AND CONDITIONS

- 1. The City reserves the right to reject any or all proposals received, waive informalities, or accept any proposal, in whole or in part, it deems best. The City reserves the right to award the contract to the next most qualified Contractor if the successful Contractor does not execute a contract within ten (10) days after the award of the proposal.
- 2. The City reserves the right to request clarification of information submitted and to request additional information of one or more Contractors.
- 3. The City reserves the right to terminate the contract at its discretion should it be determined that the services provided do not meet the specifications contained herein. The City may terminate this Agreement at any point in the process upon notice to Contractor sufficient to indicate the City's desire to do so. In the case of such a stoppage,

the City agrees to pay Contractor for services rendered to the time of notice, subject to the contract maximum amount.

- 4. Any proposal may be withdrawn up until the date and time set above for the opening of the proposals. Any proposals not so withdrawn shall constitute an irrevocable offer, for a period of ninety (90) days, to provide the services set forth in the proposal.
- 5. The cost of preparing and submitting a proposal is the responsibility of the Contractor and shall not be chargeable in any manner to the City.
- 6. Payment will be made within thirty (30) days after invoice. Acceptance by the City is defined as authorization by the designated City representative to this project that all the criteria requested under the Scope of Work contained herein have been provided. Invoices are to be rendered each month following the date of execution of an Agreement with the City.
- 7. The Contractor will not exceed the timelines established for the completion of this project.
- 8. The successful bidder shall enter into and will execute the contract as set forth and attached as Attachment A.

CONTRACTOR'S RESPONSIBILITIES

Each bidder shall provide the following as part of their proposal:

- 1. Complete and sign all forms requested for completion within this RFP.
 - a. Bidder's Agreement (Attachment B)
 - b. Cost Proposal (Attachment C)
 - c. Iran Sanctions Act Vendor Certification Form (Attachment D)
 - d. Agreement (Attachment A **only if selected by the City**).
- Provide a description of completed projects that demonstrate the firm's ability to complete projects of similar scope, size, and purpose, and in a timely manner, and within budget.
- 3. Provide a written plan detailing the anticipated timeline for completion of the tasks set forth in the Scope of Work.
- 4. The Contractor will be responsible for any changes necessary for the plans to be approved by the City of Birmingham.
- 5. Provide a description of the firm, including resumes and professional qualifications of the principals involved in administering the project.
- 6. Provide a list of sub-contractors and their qualifications, if applicable.
- 7. Provide three (3) client references from past projects, include current phone numbers. At least two (2) of the client references should be for similar projects.

8. Provide a project timeline addressing each section within the Scope of Work and a description of the overall project approach. Include a statement that the Contractor will be available according to the proposed timeline.

CITY RESPONSIBILITY

The City will provide a designated representative to work with the Contractor to coordinate both the City's and Contractor's efforts and to review and approve any work performed by the Contractor.

SETTLEMENT OF DISPUTES

The successful bidder agrees to certain dispute resolution avenues/limitations. Please refer to paragraph 17 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

INSURANCE

The successful bidder is required to procure and maintain certain types of insurances. Please refer to paragraph 12 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

CONTINUATION OF COVERAGE

The Contractor also agrees to provide all insurance coverages as specified. Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the agreement, the City may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the contract amount. In obtaining such coverage, Birmingham shall have no obligation to procure the most cost effective coverage but may contract with any insurer for such coverage.

EXECUTION OF CONTRACT

The bidder whose proposal is accepted shall be required to execute the contract and to furnish all insurance coverages as specified within ten (10) days after receiving notice of such acceptance. Any contract awarded pursuant to any bid shall not be binding upon the City until a written contract has been executed by both parties. Failure or refusal to execute the contract shall be considered an abandonment of all rights and interest in the award and the contract may be awarded to another. The successful bidder agrees to enter into and will execute the contract as set forth and attached as Attachment A.

INDEMNIFICATION

The successful bidder agrees to indemnify the City and various associated persons. Please refer to paragraph 13 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

CONFLICT OF INTEREST

The successful bidder is subject to certain conflict of interest requirements/restrictions. Please refer to paragraph 14 of the Agreement attached as Attachment A for the details and what is required of the successful bidder.

EXAMINATION OF PROPOSAL MATERIALS

The submission of a proposal shall be deemed a representation and warranty by the Contractor that it has investigated all aspects of the RFP, that it is aware of the applicable facts pertaining to the RFP process and its procedures and requirements, and that it has read and understands the RFP. Statistical information which may be contained in the RFP or any addendum thereto is for informational purposes only.

ANTICIPATED PROJECT TIMELINE

Evaluate Respondents

Interview Contractors

Award Contract

Project Kick-Off Meeting

Project Update

Final Draft of Plan Completed

October 2018

November 2018

December 2018

January 2019

March 2019

June 2019

The Contractor will not exceed the timelines established for the completion of this project. A shorter timeline is encouraged and preferred.

ATTACHMENT A - AGREEMENT FOR DOWNTOWN RETAIL REVIEW

This AGREEMENT, made thisday of, 2018, by and between CITY OF BIRMINGHAM, having its principal municipal office at 151 Martin Street, Birmingham, MI (hereinafter sometimes called "City"), and, Inc., having its principal office at (hereinafter called "Contractor"), provides as follows: WITNESSETH:
WHEREAS , the City of Birmingham has heretofore advertised for bids for the procurement and performance of services required to perform retail consulting services to provide a comprehensive review and analysis of existing retail conditions and policy in the City's Central Business District and to provide recommendations for improvement, including future retail strategy, policy and implementation, and in connection therewith has prepared a request for sealed proposals ("RFP"), which includes certain instructions to bidders, specifications, terms and conditions.
WHEREAS , the Contractor has professional qualifications that meet the project requirements and has made a bid in accordance with such request for cost proposals to perform retail consulting services to evaluate current and future retail strategies and practices in the City's Central Business District and provide recommendations for improvement.
NOW, THEREFORE, for and in consideration of the respective agreements and undertakings herein contained, the parties agree as follows:
1. It is mutually agreed by and between the parties that the documents consisting of the Request for Proposal to perform retail consulting services to evaluate current and future retail strategies and practices in the City's Central Business District and provide recommendations for improvement and the Contractor's cost proposal dated, 2018 shall be incorporated herein by reference and shall become a part of this Agreement, and shall be binding upon both parties hereto. If any of the documents are in conflict with one another, this Agreement shall take precedence, then the RFP.
2. The City shall pay the Contractor for the performance of this Agreement in an amount not to exceed, as set forth in the Contractor's, 2018 cost proposal.
3. This Agreement shall commence upon execution by both parties, unless the City exercises its option to terminate the Agreement in accordance with the Request for Proposals.
4. The Contractor shall employ personnel of good moral character and fitness in performing all services under this Agreement.

The Contractor and the City agree that the Contractor is acting as an independent

Contractor with respect to the Contractor 's role in providing services to the City pursuant to this Agreement, and as such, shall be liable for its own actions and neither the Contractor nor its employees shall be construed as employees of the City. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the City nor

5.

the Contractor shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The Contractor shall not be entitled or eligible to participate in any benefits or privileges given or extended by the City, or be deemed an employee of the City for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the City.

- 6. The Contractor acknowledges that in performing services pursuant to this Agreement, certain confidential and/or proprietary information (including, but not limited to, internal organization, methodology, personnel and financial information, etc.) may become involved. The Contractor recognizes that unauthorized exposure of such confidential or proprietary information could irreparably damage the City. Therefore, the Contractor agrees to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Contractor shall inform its employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Contractor further agrees to use such confidential or proprietary information only for the purpose of performing services pursuant to this Agreement.
- 7. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan. The Contractor agrees to perform all services provided for in this Agreement in accordance with and in full compliance with all local, state and federal laws and regulations.
- 8. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.
- 9. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Contractor without the prior written consent of the City. Any attempt at assignment without prior written consent shall be void and of no effect.
- 10. The Contractor agrees that neither it nor its subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Contractor shall inform the City of all claims or suits asserted against it by the Contractor's employees who work pursuant to this Agreement. The Contractor shall provide the City with periodic status reports concerning all such claims or suits, at intervals established by the City.
- 11. The Contractor shall not commence work under this Agreement until it has, at its sole expense, obtained the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with carriers acceptable to the City of Birmingham.
- 12. The Contractor shall maintain during the life of this Agreement the types of insurance coverage and minimum limits as set forth below:

- A. <u>Workers' Compensation Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- B. <u>Commercial General Liability Insurance</u>: Contractor shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.
- C. <u>Motor Vehicle Liability</u>: Contractor shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- D. <u>Additional Insured</u>: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following shall be *Additional Insureds*: The City of Birmingham, including all elected and appointed officials, all employee and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any other coverage that may be available to the additional insured, whether any other available coverage by primary, contributing or excess.
- E. <u>Professional Liability</u>: Professional liability insurance with limits of not less than \$1,000,000 per claim if Contractor will provide service that are customarily subject to this type of coverage.
- F. <u>Cancellation Notice</u>: Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance (and Professional Liability Insurance, if applicable), as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal, shall be sent to: Finance Director, City of Birmingham, PO Box 3001, 151 Martin Street, Birmingham, MI 48012-3001.
- G. <u>Proof of Insurance Coverage</u>: Contractor shall provide the City of Birmingham at the time the Agreement is returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below.
 - 1) Two (2) copies of Certificate of Insurance for Workers' Compensation Insurance;
 - 2) Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance:
 - 3) Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance:
 - 4) Two (2) copies of Certificate of Insurance for Professional Liability Insurance;

- 5) If so requested, Certified Copies of all policies mentioned above will be furnished.
- H. <u>Coverage Expiration</u>: If any of the above coverages expire during the term of this Agreement, Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least (10) days prior to the expiration date.
- I. <u>Maintaining Insurance</u>: Upon failure of the Contractor to obtain or maintain such insurance coverage for the term of the Agreement, the City of Birmingham may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the Agreement amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.
- 13. To the fullest extent permitted by law, the Contractor and any entity or person for whom the Contractor is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City of Birmingham, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Birmingham against any and all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the City of Birmingham, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Birmingham, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham.
- 14. If, after the effective date of this Agreement, any official of the City, or spouse, child, parent or in-law of such official or employee shall become directly or indirectly interested in this Agreement or the affairs of the Contractor, the City shall have the right to terminate this Agreement without further liability to the Contractor if the disqualification has not been removed within thirty (30) days after the City has given the Contractor notice of the disqualifying interest. Ownership of less than one percent (1%) of the stock or other equity interest in a corporation or partnership shall not be a disqualifying interest. Employment shall be a disqualifying interest.
- 15. If Contractor fails to perform its obligations hereunder, the City may take any and all remedial actions provided by the general specifications or otherwise permitted by law.
- 16. All notices required to be sent pursuant to this Agreement shall be mailed to the following addresses:

City of Birmingham Attn: Jana L. Ecker 151 Martin Street Birmingham, MI 48009 248.530.1841 CONTRACTOR (Insert Contractor Information)

17. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it

shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds \$1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in the Oakland County Circuit Court or the 48th District Court.

18. <u>FAIR PROCUREMENT OPPORTUNITY:</u> Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham.

IN WITNESS WHEREOF, the said parties have caused this Agreement to be executed as of the date and year above written.

WITNESSES:	CONTRACTOR	
	By:	
	Its:	
	CITY OF BIRMINGHAM	
	By: Andrew Harris Its: Mayor	
	By: Cherilynn Mynsberge Its: City Clerk	
Approved:		
Jana L. Ecker, Planning Director (Approved as to substance)	Mark Gerber, Director of Finance (Approved as to financial obligation)	
Timothy J. Currier, City Attorney (Approved as to form)	Joseph A. Valentine., City Manager (Approved as to substance)	

ATTACHMENT B - BIDDER'S AGREEMENT FOR DOWNTOWN RETAL REVIEW

In submitting this proposal, as herein described, the Contractor agrees that:

- 1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.
- 2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

PREPARED BY (Print Name)	DATE
AUTHORIZED SIGNATURE	
Title	E-MAIL ADDRESS
COMPANY	
ADDRESS	PHONE
NAME OF PARENT COMPANY	PHONE
ADDDESS	

ATTACHMENT C - COST PROPOSAL FOR DOWNTOWN RETAL REVIEW

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be a lump sum, as follows:

Attach technical specifications for all proposed materials as outlined in the Contractor's Responsibilities section of the RFP (p. 6)

COST PROPOSAL

	ITEM	BID AMOUNT			
Ť	TOTAL BID AMOUNT	\$			
Ī	ADDITIONAL BID ITEMS				
	Additional meetings with City staff and boards	\$			
	Other -	\$			
	Other -	\$			
<u> </u>	GRANDTOTAL AMOUNT	\$			
_					
Firm	n Name				
Auth	norized signature	Date			

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM FOR DOWNTOWN RETAL REVIEW

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

PREPARED BY (Print Name)	DATE	
AUTHORIZED SIGNATURE	E-MAIL ADDRESS	
TITLE		
COMPANY		
ADDRESS	PHONE	
NAME OF PARENT COMPANY	PHONE	
ADDRESS		
TAXPAYER I.D.#		

City Commission & Planning Board Joint Meeting June 18, 2018

B. RETAIL ORDINANCE REVIEW

Assistant Planner Cowan reviewed the direction to the Planning Board (PB) to:

- Evaluate the boundary of the redline retail district ('Redline');
- Identify buildings less-suited to retail; and
- Discuss what is permitted in retail spaces within the first twenty feet from the door. Assistant Planner Cowan discussed the maps provided to the meeting which delineated:
- The distribution of uses in the Redline;
- Market-rent data for various areas of the Redline; and,
- How the retail distribution in the Redline reflected the stated development goals of the 2016 Plan.

Assistant Planner Cowan then explained that the PB considered:

- Dividing the Redline into multiple tiers with more or less strict retail zoning requirements: D4 and D5 would have the strictest retail zoning requirements, and D2 and D3 would have slightly looser retail zoning requirements.
- Maintaining a strict retail core and then decreasing stringency in tiers as the zoning moves out from the City center.
- Maintaining a strict retail core, and relaxing the retail zoning requirements along the edges.

Assistant Planner Cowan said the PB recommends hiring a consultant because they feel they lack sufficient information regarding retail market and trends in Birmingham.

PB Chairman Clein reiterated that none of the above possibilities was moved as a recommendation to the Commission by the PB at this time, and that if the Commission is interested in exploring the possibilities, hiring a consultant would be the next step. PB Chairman Clein emphasized that the issue of where to draw zoning lines would be an important issue for a consultant to address.

Commissioner Nickita suggested Buxton may be able to provide some of the necessary information since the company is already working with the Birmingham Shopping District (BSD) in a consultant role. He also said the goals of the delineation need to be made more clearly.

Planning Director Ecker specified:

• The Commission this evening was only provided with five pages of highlights out of the PB's review materials, which comprise about 500 pages per PB agenda item.

- The PB has reviewed all information available from Buxton and the BSD from the last three years.
- Each property has been reviewed methodically for demand on the space, what kind of business is currently located in the property, what kind of businesses are suitable for the property, and other factors.
- Her understanding is that Buxton is only doing research on niche retailers in Birmingham, not a more systemic study.
- The PB is sure the retail core should remain and should be zoned strictly. All other possibilities remain open for consideration.

Commissioner Nickita explained that he was not questioning whether there has been sufficient research into this issue by the PB. Rather, his main concern was that the Commission was provided a map of Birmingham retail areas with green, red and blue sections, with no indication as to what those colors signify.

Commissioner DeWeese delineated the relevant issues as what is happening now in the Redline area, and what the City would like to be happening in 20 years in the Redline area, citing changes to Bates Street as a future anchor for retail. He continued that:

- Buxton could clarify why retailers are not moving to Birmingham. With that information, the City can then explore options for remedying the perceived issues.
- If a business in the Redline area is over a certain percentage of replacement, the business must be brought up to code.
- If a business in the Redline area is under a certain percentage of replacement, said business should retain grandfathered status.
- There may be use in providing incentive to businesses that elect to come up to code.
- In terms of street-friendliness, differentiation should be made between services like banks, which have windows open and engaging to the street, and doctors' offices, which have windows closed and not-engaging to the street and no after-hours use.
- Retail businesses that do not have street-centric windows should be encouraged to shift that practice through zoning and code enforcement.
- Birmingham's goal is to make the pedestrian experience friendly, open, interactive, and street-centric.
- The development of outdoor dining in Birmingham has enhanced the liveliness of the streetscape, for one example.

Ms. Whipple-Boyce explained that the PB had hypotheses as to what the green, red and blue sections on the provided map could signify, but had not narrowed it down enough to provide it as a legend. She added that:

- The PB will explore Commissioner DeWeese's concerns after the zones are clarified.
- In order to clarify the zones and the conditions leading to the delineation of the zones a consultant would be helpful.

Mr. Share said the PB undertook the process to explore reasons for vacant retail spaces, which turned into a need to consider the City's future retail goals. In order to do that, however, the PB needs to:

- Understand what broader retail trends are in order to best suggest a policy for the City.
- Know what kind of incentives would actually be desirable for retail businesses. A consultant specializing in retail is the most prudent way to obtain such information.

Commissioner Boutros suggested asking Buxton if they are able to provide the information the PB needs, and if not, agreed the City should hire an outside consultant to explore these questions. The City must also be very clear on its goals for a consultant if that route is pursued.

Commissioner Hoff commended the PB on its work and said it returned what the Commission requested. She said the red zone on the map was clearly strict retail, the blue zone seemed to allow for more services, and the green zone is to be clarified. She continued Buxton should be able to provide retail trends and information, even if that is not currently part of its contract with Birmingham. Once that information is available a more informed exploration of these issues can continue.

Mayor Harris said:

- Procedurally staff can draw of a Request for Proposals (RFP) for a consultant, and at that point Buxton could determine whether they are an appropriate fit for the role. Until the City determines the criteria for an RFP, however, a consultant cannot be hired.
- He agrees with Commissioner Hoff that the PB has done thorough research and due diligence, and based on the information concurs that a retail consultant should be hired.

Commissioner Sherman concurred with Mayor Harris and Commissioner Hoff.

Planning Board Minutes July 11, 2018

2. Retail Discussion

Mr. Cowan recalled the Planning Board has been studying Redline Retail Districts since January. They brought their findings to the City Commission and asked to bring in a retail consultant. Therefore, the Planning Dept. has created a retail consultant RFP for the Planning Board to review. The scope of work includes a review of the City's current Retail Frontage Line policy, data the Planning Board has gone over, an existing conditions analysis, retail trends and projections, and a final analysis with policy recommendations. Included are a few specific issues that the City wishes to address:

- Is there enough demand for retail in Birmingham to justify 3.25 linear miles of a Retail Frontage Line?
- What are the future trends and projections for retail that are suitable for Birmingham?
- What mix of uses contributes to a viable, walkable retail corridor?
- Would a tiered system that expands permissible uses on the first floor in certain areas contribute or detract from a walkable downtown?

The RFP lists the Scope of Work:

- 1. Review the Downtown Overlay District's Retail Frontage Line Boundary. Requirements and the City Manager's Research Directives for the Planning Board.
 - Evaluate the current geographic boundary of the Retail District for modification;
 - Evaluate current properties in the Redline Retail Boundary that were not built to support first-floor retail uses;
 - Evaluate a prohibition of desks, workstations and office related amenities placed within the first 20 ft. depth of window frontage within the Retail District and recommend ordinance language to address the issue.
- 2. Review current research done by City staff.
- 3. Provide an Existing Conditions Report.
- 4. Provide Trends in Retail and Projections for Retail Demand in Downtown Birmingham.
- 5. Evaluate the Current Boundary of Retail Frontage Line, as well as Proposed Boundaries for a Tiered System of First Floor Uses.
- 6. Provide Final Analysis with Recommendations for Retail Boundaries and Uses Within Each Boundary.
- 7. Attendance at Meetings.
 - o One (1) initial meeting with the Planning Board to discuss the process and finalize a schedule.
 - One (1) meeting with the Planning Board to provide a preliminary update of findings.
 - One (1) final meeting with the Planning Board to provide a final presentation of findings and recommendations.

Mr. Williams wanted to see the RFP's scope of work expanded to include a meeting where the public would be invited. Also, acknowledge that the bidder will have to work with the Birmingham Shopping District ("BSD").

Mr. Jeffares suggested finding out from retailers in Birmingham who have stores in other communities what is going on in those communities and their approach to zoning.

- Ask if Birmingham should even have a Redline District or just buildings dedicated to retail.
- What businesses would be affected by eliminating desks that are placed in the window?
- Add to number 4: Evaluate Birmingham in a peer group that has a similar lack of public transportation.
- For number 6, question the need for Retail Boundaries.

Mr. Williams thought that participation from retail owners and building owners is important for a successful outcome. Mr. Share added it is incumbent upon City administration to reach out and tell the public this is an excellent time for them to provide their input.

Chairman Clein suggested that Public Participation is listed as an integral part of the Scope of Work. He thought that Public Engagement should be a separate line item and bid separately. He wants to hear what the consultant suggests for Public Engagement.

Mr. Williams hoped to have the BSD show up so that they are part of the solution.

Chairman Clein said if the City Manager wants this board to further review the RFP, it can be brought back at the next meeting. If not, they can take the comments and move forward.

Planning Board Minutes July 25, 2018

1. Retail Discussion

Chairman Clein rejoined the meeting.

Mr. Cowan recalled the Planning Board has been studying the Redline Retail District since January. They brought their findings to the City Commission and asked to bring in a retail consultant. The Planning Dept. has now prepared an RFP for a retail consultant for the Planning Board to review.

On July 11, 2018, the Planning Dept. presented the first draft of the RFP to the Planning Board. The Board's suggestions from that meeting have been incorporated into tonight's draft.

Mr. Boyle did not understand why the word "Line" is included in the title, "Retail Frontage Line Review." Mr. Cowan replied that he went by the definitions from the Zoning Ordinance. Board members concluded that the title should be changed to omit "Line" and reworded to "Downtown Retail Review".

Mr. Williams concluded with regard to SCOPE OF WORK (5) Trends in Retail and Projections, that the scope of retail is changing rapidly and the projection should be for up to 10 years.

Chairman Clein said his only concern with SCOPE OF WORK (7) Coordinate Public Engagement, is they are specifically prescribing how many meetings will be held. Perhaps say that it is a minimum of two public engagement meetings to receive feedback. The suggestion was to substitute "meetings" with "activities." That would give the consultant the opportunity to do different things. Everyone liked that idea.

Mr. Williams pointed out that getting the public to engage is critical to getting public buy-in.

Ms. Ecker provided language for SCOPE OF WORK (7) Coordinate Public Engagement: "The Contractor will be expected to host two (2) public engagement activities to receive input and engage the public related to the Retail Frontage Line policy . . ." Further, for SCOPE OF WORK (7) Attendance at Meetings (c), change "meetings" to "activities."

Motion by Mr. Williams

Seconded by Mr. Emerine to forward this proposed RFP along to the City Commission for their consideration.

Motion carried, 7-0.

VOICE VOTE

Yeas: Williams, Emerine, Boyle, Clein, Koseck, Ramin, Whipple-Boyce

Nays: None

Absent: Jeffares, Share

DRAFT City Commission Minutes August 13, 2018

08-224-18 RFP FOR DOWNTOWN RETAIL REVIEW

Planning Director Ecker reviewed her August 2, 2018 memo to City Manager Valentine.

Commissioner Nickita said this RFP must be refined in order to better align with the Commission's directives to the Planning Board on the issue. He clarified that the issue comes down to retail front particulars, and whether they should be expanded, whether the locations should be altered, whether there should be zoning tiers, and a couple of other considerations.

Commissioner Sherman:

- Concurred with Commissioner Nickita;
- Noted that there was mission creep on this RFP as soon as the Planning Board's July 11, 2018 meeting; and,
- Recommended the Planning Board review the Joint Commission-Planning Board meeting minutes from June 18, 2018 for the specific Commission directives.

Planning Director Ecker:

- Confirmed there are no plans to get rid of the redline retail district, and that the RFP language can be updated to reflect that.
- Stated the Planning Board would like to change the name of the redline retail district.
- Stated that the goal is to have a consultant explore how to strengthen retail within the redline retail boundaries, instead of removing any areas from the boundaries.

Commissioner Nickita said the sole objective of this RFP is to determine how best to organize the the redline retail district in order to continue developing a pedestrian-oriented experience in downtown Birmingham.

City Manager Valentine stated that the RFP would be updated by City staff to reflect the Commission's comments and would be brought back before the Commission at the next meeting. If the Commission would also like the Planning Board to review the amended RFP, that could be arranged as well.

Mayor Pro Tem Bordman said the boundaries of the redline retail district should remain the same, that a tiered zoning system might be acceptable, and that the goal is to determine what other kinds of retail uses would suit the 2016 Plan.



MEMORANDUM

Police Department

DATE: October 15, 2018

TO: Joseph A. Valentine, City Manager

FROM: Scott A. Grewe, Operations Commander

APPROVED: Chief Mark H. Clemence

SUBJECT: Parking spot located at 160 Elm St.

INTRODUCTION:

A request was received by the police department to remove one parking spot located at 160 Elm Street.

BACKGROUND:

On August 1st, the police department received an email from Cindy Zamplas asking that this parking spot be removed. Ms. Zamplas works at the Law Firm of Victoria at the corner of Maple and Elm and stated that their driveway is often blocked by Birmingham Fire trucks when they respond to All Seasons and commercial trucks making local deliveries. Ms. Zamplas stated the removal of this parking spot would allow emergency vehicles space to park along the curb and not interfere with traffic on Elm or access to their parking lot. Ms. Zamplas also provided photos that are attached to show the problem that has occurred.

Assistant Chief Paul Wells of the Birmingham Fire Department was contacted who stated this parking spot has caused problems. He advised that they respond to a high frequency of medical runs at All Seasons and often multiple runs at the same time (As of August 6th the Fire Department had responded to All Season 106 times this year). Wells stated when they respond to multiple runs at All Seasons they may have up to five vehicles on site and are forced to park on the street. Due to the frequent responses to this location Wells requests this spot be eliminated. He stated eliminating this spot will reduce the impact to traffic and private lot access as well as make entering and exiting All Seasons parking lot with their vehicles much easier.

LEGAL REVIEW:

There was no legal review conducted regarding this parking spot.

FISCAL IMPACT:

The work required to remove this parking space will be conducted by Department of Public Services staff.

SUMMARY:

The removal of the parking spot located at 160 Elm would allow for easier access to All Season for the Fire Department as well as provide an area for them to park during their numerous runs

to this location. By doing so we will reduce the impact to private parking lots and traffic in the area.

This request was reviewed by the Multi-Model Transportation Board (MMTB) at their August 8th meeting. The MMTB approved the request and recommended the spot be removed.

ATTACHMENTS:

- 1. Email from Ms. Zamplas requesting action be taken including photos taken by her.
- 2. Email from Asst. Chief Wells.
- 3. August 8th MMTB minutes.

SUGGESTED RESOLUTION:

To remove one parking spot on Elm St. located in front of 160. Elm Street.



Scott Grewe <sgrewe@bhamgov.org>

772 E. Maple Rd and Elm St. - concern over emergency vehicles and parking spot on Elm St.

2 messages

Cindy Zamplas <cindy@woodland2014.com>

To: "sgrewe@bhamgov.org" <sgrewe@bhamgov.org> Co: "pwells@bhamgov.org" cpwells@bhamgov.org

Wed, Aug 1, 2018 at 4:05 PM

Hello Commander Grewe.

Thank you for returning my phone call today regarding the parking spot on Elm St. located directly in front of the driveway for All Seasons Assisted Living. I work at the Law Firm of Victoria and have an office on the 2nd floor and I am able to clearly see the traffic issues on Elm Street caused by this parking space. All Seasons Assisted Living brings frequent emergency vehicles to the street and when this happens you can see from the photos below it causes traffic issues and more importantly may cause emergency vehicle access problems.

Assistant Chief Wells visited the site today and we went over my concerns and the photos below. He had asked me to send the attached photos for your review. As you can see from the 1st photo that the white truck could not pass around the parked car and had to back up into our parking lot. The 2nd photo where the fire truck blocked our access to the street, wherein we could not have been able to leave our parking lot in an emergency. I am not faulting the superior work of the fire department, they could not move up because of the parked car. I sincerely appreciate your attention in this matter. I truly believe the removal of this parking space is important to the safety of all concerned. If you have any other questions, please call me at 248-723-1600.

Again thank you so much for investigating this parking space issue.

Sincerely,

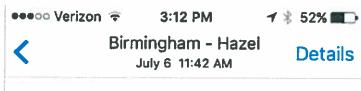
Cindy Zamplas

From: Cindy Zamplas < cindyzamplas@icloud.com>

Sent: Wednesday, August 1, 2018 3:38 PM

To: Cindy Zamplas
Subject: Photos





















Sent from my iPhone

Scott Grewe <sgrewe@bhamgov.org>
To: Cindy Zamplas <cindy@woodland2014.com>
Cc: "pwells@bhamgov.org" <pwells@bhamgov.org>

Thu, Aug 2, 2018 at 7:31 AM

Ms. Zamplas,

Thank you for forwarding me you observations regarding the congestion caused during medical runs at All Seasons. I will speak with the Fire Dept. and look further into this issue. This parking spot was recently reviewed by the Multi-Model Transportation Board (MMTB) who decided to keep the spot, after removing the one further north, due to the high demand for parking in the area. After a review of the situation I will advise you of the status and if and when it will go back to the MMTB for review.

If you have any questions please let me know.

Regards, Cmdr. Grewe



Scott Grewe <sgrewe@bhamgov.org>

111 Elm St. All seasons

1 message

Paul Wells <pwells@bhamgov.org>
To: "Grewe, Scott" <Sgrewe@bhamgov.org>

Thu, Aug 9, 2018 at 7:33 AM

Commander Grewe,

The Birmingham Fire Department responded to All Seasons (11 Elm) 106 times so far this year. Roughly 15 of these calls required a rescue (ambulance) from a mutual aid city to respond as well because our rescue was on another call. Depending on the type of call our response of emergency vehicle ranges from 1 truck to 5 trucks. For example, a fire alarm will have 5 trucks and a lift assist will have 1 truck respond. Another factor with our response is the fact that our trucks depending on where they are in the city when an emergency comes in will respond to All Seasons from different directions as pictured in the photos that were provided.

Thank you,

Paul

Paul Wells, Assistant Fire Chief Birmingham Fire Department Cell (248) 302-6443

CITY OF BIRMINGHAM MULTI-MODAL TRANSPORTATION BOARD THURSDAY, OCTOBER 4, 2018 City Commission Room 151 Martin Street, Birmingham, Michigan

Minutes of the regular meeting of the City of Birmingham Multi-Modal Transportation Board held Thursday, October 4, 2018.

Chairperson Johanna Slanga convened the meeting at 6:03 p.m.

1. ROLL CALL

Present: Chairperson Johanna Slanga; Board Members Vice-Chairperson

Lara Edwards, Amy Folberg, Daniel Rontal, Doug White; Alternate

Board Member Daniel Isaksen

Absent: Board Member Katie Schafer; Student Representative Alex

Lindstrom

Administration: Jana Ecker, Planning Director

Austin Fletcher, Asst. City Engineer Scott Grewe, Police Dept. Commander

Paul O'Meara, City Engineer

Carole Salutes, Recording Secretary

Fleis & Vanderbrink ("F&V"):

Justin Rose, Traffic Engineer

MKSK: Brad Strader

- 2. INTRODUCTIONS (none)
- 3. **REVIEW AGENDA** (no change)
- 4. APPROVAL OF MINUTES, MMTB MEETING OF SEPTEMBER 6, 2018

Motion by Mr. White Seconded by Ms. Folberg to approve the MMTB Minutes of September 6, 2018 as presented.

Motion carried, 6-0.

VOICE VOTE

Yeas: White, Folberg, Edwards, Isaksen, Rontal, Slanga,

Abstain: None Nays: None Absent: Schafer

5. CONTINUATION OF PUBLIC HEARING
2019 Local Streets Program - Paving Street Widths

- a) N. Glenhurst Dr. (Oak to Raynale St.)
- b) Raynale St. (Glenhurst Dr. to Chesterfield)
- c) Brookwood Ln.
- d) Kenwood Ct. (western portion only)

The continued public hearing opened at 6:03 p.m.

Ms. Ecker gave a presentation which began by walking through the residential street width standards that were passed by the City Commission within the last two months. The Commission wanted to do this because they feel it is their responsibility as governing officers to make the infrastructure better such as:

- Promote a walkable city;
- Multi-modal planning to accommodate walkers, cyclists, drivers, and transit users by following National Standards and Best Practices.

The City Commission directed the MMTB to create residential street standards so that every year something consistent would be done and there would not be a big debate every time another street comes up for replacement. Also they were directed to study infrastructure costs and come up with consistent approaches throughout the area.

Birmingham's Residential Street Standards are based on recommended Standards and Best Practices from:

- American Assoc. of State Highway and Transportation Officials ("AASHTO");
- Institute of Transportation Engineers ("ITE");
- Urban Land Institute ("ULI");
- · Congress for New Urbanism;
- National Assoc. of City Transportation Officials ("NACTO"); and
- Peer cities.

The yield neighborhood street going down to 26 ft. in width allows for parking on both sides of the street but it is very narrow and a yield condition is created when

there is opposing traffic and one of the motorists needs to stop and yield to the other. This slows traffic and is generally considered to make the street safer.

Birmingham's Residential Street Standards use established practices as a base and are also based on:

- Emergency response access;
- Winter weather:
- Existing street widths;
- · Characteristics of different neighborhoods.
- ➤ New and Existing Unimproved Residential Streets
 When streets are improved or newly constructed the standards below are applied:
- 26 ft. in width from curb to curb;
- If the right-of-way is less than 50 ft., the street width shall be a minimum of 20 ft. with parking allowed on one side only.
 - > Existing, Improved Residential Streets

When previously built streets are reconstructed, this standard shall generally be applied:

- If existing street width is 28 ft. or less, street may generally be reconstructed at the existing width unless an exception is met.
 - > Exceptions and Modifications
- · High or low frequency use of on-street parking;
- Daily traffic volumes exceed 1500 vehicles:
- Street is a published school bus route or is a frequent emergency response route;
- Street is adjacent to a school, religious institution, City park, multiple-family residential development, or other use that generates high traffic volumes:
- The road as proposed would result in the removal of two or more trees:
- 85th percentile speed is more than 5 mph over the posted speed limit and/or documented operational or safety concerns.

Ms. Ecker clarified that an exception or modification for one of the above reasons could be granted if the residents want it. However, the street would have to be built between 20 ft. and 30 ft. in width based on the new Residential Street Standards.

Mr. O'Meara noted that most of the Quarton Lake area still has unimproved streets. The improved streets were built in the 1940s with curb and gutter and permanent pavement. The water and sewer lines also have issues that need to

be addressed. For those reasons this area was nominated in the budget as needing work.

Ms. Ecker pointed out that <u>Raynale St.</u> doesn't seem to meet any of the exceptions or modifications that would demonstrate they should consider varying from the 26 ft. wide standard. The only thing would be that it is somewhat near a school and busses travel along it as well.

Even at school pick-up and drop-off times N. Glenhurst Dr. did not have many cars parked along the street. It did not come close to the 1500 traffic volume.

- > Residential Street Width Recommendations per City Standards
- Raynale St. Reduce to 26 ft. in width with parking on both sides to create a yield condition street;
- N. Glenhurst Dr. Reduce to 26 ft. in width with parking on both sides to create a yield condition street;
- Brookwood Ln. Maintain 24 ft. width with parking on both sides (existing yield condition street);
- Kenwood Ct. Maintain 24 ft. width with parking on both sides (existing yield condition street).

> Parking Counts

Commander Grewe explained that additional parking counts were taken on Glenhurst Dr. during school arrival and dismissal times. Counts were first taken on Thursday, September 20. The weather was rainy that day, so counts were taken the next day too (Friday, September 21) in the event that weather had impacted the counts. Parked car counts were only slightly higher on Friday than on the day before (during inclement weather).

N. Glenhurst Dr., north of Oak St. during morning drop-off and afternoon pick-up: 8:40 a.m. = 5 cars 3:45 a.m. = 3 cars

Ms. Folberg pointed out that at the last meeting photographs were presented by residents that show huge parking numbers on N. Glenhurst Dr.

Mr. O'Meara acknowledged that both N. Glenhurst Dr. and Raynale St. carry school busses.

Ms. Ecker explained for Ms. Folberg that generally bike lanes are not seen on residential streets that carry less than 1500 vehicles a day because there is already very little traffic and it is going slowly enough for a bike to ride down the street in the existing condition.

Chairperson Slanga opened up discussion to the public at 6:40 p.m.

Mr. John Martin was present with his wife, Chris Martin. They reside on the corner of Lyonhurst and Raynale St. Mr. Martin said they don't experience speeding. The street width allows them to back out without being concerned about an accident. There is no one living on Raynale St. or N. Glenhurst Dr. that in any way supports this design. Most residents have a concern about spending City money to fix something that is a non-problem. Mr. O'Mara verified there is a slight savings by narrowing the street but it is not a major decision factor in this.

Ms. Debby Greene, 1388 Kenwood Ct., noted that the notification signs were removed from their neighborhood the day after the last meeting and have not been up for a month. Otherwise there would be more residents in attendance. Repair the streets, but do not create an issue where there is none.

Ms. Suzanne Lasser, 1120 N. Glenhurst Dr., said the parking count there is fallacious because of circumstances that occur. When the plan was done it accommodated smaller cars that got better gas mileage. Now that has all changed. GM and Ford are no longer going to manufacture sedans. It will all be vans, trucks and SUVs. That will create a more dangerous situation when they are parked on narrow streets. Their streets are wider. Keep them as they are.

Ms. Dianne D'Angelo, 1235 N. Glenhurst Dr., said three other families that couldn't be present tonight agree with her comments. What she is hearing is the reason to do this is for safety and because everybody else is doing it. She doesn't see a problem with being different. As far as safety goes, speeding has not been an issue. Many of the residents have two-car garages and the third car is parked on the street. She thinks that more narrow would be less safe, especially for emergency vehicles. In response to her question about how many people have been injured on N. Glenhurst Dr. because of speeding, Commander Grewe stated there have been no injury accidents in the last three years. Ms. D'Angelo added there are better ways to spend the money. She gets the feeling this smacks of totalitarianism. She doesn't know anyone on her street that wants this done.

Ms. Barbara Trunski, 1220 N. Glenhurst Dr., mentioned that those who live north of Raynale St. were never informed about what is going on. She feels that whatever is done south of Raynale St. will impact them. Further, as people have said, there was no notice about tonight's meeting. She feels they are one of the few areas in the City that has decent streets. That is why they picked their house. With all the cars parked on the narrow streets it is not possible to get by and they are terrible to drive on. Why make their roads bad so they are like the

rest of the City. Because houses are constantly being knocked down or having major renovations there are always going to be huge construction and delivery vehicles parked everywhere.

Mr. John Greene, 1388 Kenwood Ct., noted that his wife spoke earlier. He added that with the notice signs being down it feels to him as a citizen that they are trying to wear everyone down by having the same meeting without publicity. Kenwood Ct. is 24 ft. in width and there have been times when they have had to leave their car down the street because of not being able to get through to their driveway. No one has come forth that wants to go to the narrow streets.

Mr. Steve Hall, said he and his wife Susan live at 1120 Lyonhurst. Fourteen residences abut Raynale St. None of them are in favor of this project. They don't know of any speeding or accidents that have happened on Raynale St. They live in Harrowgate Estates. The proposal is to narrow half of Raynale St. in Harrowgate Estates and half of N. Glenhurst Dr. in Harrowgate Estates. The comment made in the proposed project is that in the year following those other halves will be taken care of; but they will require a Special Assessment District because they are unimproved roads. The problem is there must be approval from all of Raynale St. and all of N. Glenhurst Dr. before starting. That will be a big hurdle. If complete approval is not obtained then half the street would be narrow and half would be wide. Therefore he suggests that the whole neighborhood plan needs to be in place before tackling any one piece.

Additionally, there is the issue of schools. He thinks their street gets three busses in the morning and three in the afternoon. What the policy doesn't address is that to get to the school other streets must be used. Quarton School has made a big effort to recruit students from outside the area. That drives traffic. Covington is a special school and gets its students from a larger area.

If a school is going to be drawing from a big area, it impacts traffic and that issue is not addressed in the policy statement. Also he doesn't see anything in the policy statement that talks about the future. Half of the residents on Raynale St. have been there for forty years and as they age they will be using more and more contractors for everyday maintenance. Furthermore, houses will be torn down and new ones built, all with associated construction traffic.

Therefore he suggests that the planning process, given this new policy, needs to change to work on a neighborhood basis before embarking on a project; otherwise there will be a risk of not maintaining the consistent streets policy for a neighborhood.

Mr. Alan Lasser, 1120 N. Glenhurst Dr., asked what harm there is in not following the new rules. Why not just follow what the neighborhood wants. Chairperson Slanga answered that the elected officials for this City asked this board to advise them. This board can be disruptive and change the plan if they feel it is necessary.

Mr. Mike Kal said that he and his wife, Marty, live at 1851 Raynale St. He suggested that with the proposed changes Raynale St., based on everything that has been heard over the last two meetings, will be less safe.

Mr. Isaksen stated he is not comfortable with voting against a policy that the City Commission has made official. Maybe this board needs to send a message to the Commission that the policy is not popular with the residents and it needs to be changed on that basis.

Dr. Rontal noted this body has been appointed by the City Commission to study the problem and to listen to the citizenry. The Board is trying to balance those two things. Perhaps the order of events should be to repave to existing widths unless a series of things exist that indicate the infrastructure needs to be changed, such as high speed, frequent accidents, etc. If there is no problem, why make such a huge change.

Discussion revealed that 30 ft. as a maximum street width was introduced at the City Commission level and has been in effect for 20 years.

Dr. Rontal motioned to send a message to the City Commission that we need to re-visit the City residential street width standards in terms of triggering events for changing the width because the citizenry has decided that it is not happy with where we are at. The motion failed for lack of a second.

Motion by Ms. Folberg Seconded by Dr. Rontal to keep Kenwood Ct. and Brookwood Ln. at their existing width.

Dr. Rontal noted in terms of the idea of spending the City's money and fixing what needs to be fixed, the money to rebuild the streets is going to be roughly the same regardless of the width.

Ms. Folberg said with respect to N. Glenhurst Dr. the pictures reveal that at times during the day parking is sufficiently aggravated that she is not comfortable recommending going down to a 26 ft. width.

Motion carried, 6-0.

VOICE VOTE

Yeas: Folberg, Rontal, Edwards, Isaksen, Slanga. White

Nays: None Absent: Schafer

Motion by Ms. Folberg

Seconded by Dr. Rontal that N. Glenhurst Dr. and Raynale St. be repaved at their existing width, which is 32 ft.

Ms. Folberg explained the thinking behind her motion is that it makes more sense for that neighborhood, and it will yield more consistent streets. Also, there are no safety issues. Further, it seems to her that wider streets are safer for bicycles.

Public comments on the motion were taken at 7:40 p.m.

Mr. Steve Hall, 1120 Lyonhurst, did not think there would be any problem with the neighbors in supporting the motion.

Ms. Debby Greene, 1888 Kenwood Ct., said the motion is what the residents want. She doesn't think there is anything wrong with that being a valid reason for the decision making.

Ms. Barbara Trunski, 1220 N. Glenhurst Dr., received clarification that the Commission will receive all of the reasons and thinking behind the motion that was made. Ms. Ecker told her notification signs will go up and there will be another chance for public comment when this matter comes before the City Commission.

Ms. Suzanne Lasser, 1120 N. Glenhurst Dr., complimented the Board for listening to the residents and what they want.

Ms. Edwards said if the City wants the roads repaved at 26 ft. in width and the Board only wants to take the exceptions into consideration, then they don't even need a public hearing because it is set in stone. Ms. Folberg answered that a public hearing is needed to alert them to an exception.

Motion carried, 4-2.

ROLLCALL VOTE

Yeas: Folberg, Rontal, Slanga, White

Nays: Edwards, Isaksen

Absent: Schafer

6. REQUEST FOR REMOVAL OF ON-STREET PARKING SPACE FOR ELM ST. SOUTH OF MAPLE RD.

Commander Grewe recalled that at the April 5, 2018 meeting the Board denied the request from a resident of All Seasons to remove the parking spot.

On August 1st, the Police Dept. received an e-mail from Ms. Cindy Zampias asking that this parking spot be removed. Ms. Zampias works at Victoria law firm at the corner of Maple Rd. and Elm St. and stated that their driveway is often blocked by Birmingham fire trucks when they respond to All Seasons. Ms. Zampias stated the removal of this parking spot would allow emergency vehicles space to park along the curb and not interfere with traffic on Elm St. or access to their parking lot.

Asst. Chief Paul Wells of the Birmingham Fire Dept. was contacted who stated this parking spot has caused problems when they respond to a high frequency of medical runs at All Seasons and often multiple runs at the same time. He stated when this happens there is no room for the extra fire vehicles on-site, which causes them to park on Elm St. Wells said when this happens they are forced to park blocking a private driveway and/or traffic on Elm St. He stated eliminating this spot will reduce the impact on traffic and private lot access and make entering and exiting All Seasons parking lot with their vehicles much easier.

Mr. Isaksen noted there is some new information and the difference for him is the Fire Dept.'s input that they don't like the spot

Motion by Ms. Edwards Seconded by Mr. Isaksen to remove one parking spot on Elm St. located in front of 160 Elm.

Motion carried. 6-0.

VOICE VOTE

Yeas: Edwards, Isaksen, Folberg, Rontal, Slanga, White

Nays: None Absent: Schafer

7. MAPLE RD. AND PIERCE ST. CROSSWALK SIGNING

Mr. O'Meara said they have asked F&V to consider the fact that people have complained about motorists not stopping when they see a pedestrian and they want to make the intersection more pedestrian friendly. The recommendation that came back was to add yellow diamond signs with the pedestrian picture and arrows. Commander Grewe said that stopping for pedestrians is technically a rule within the State law. His opinion was that these signs do a great job by bringing attention to the crosswalk.

Mr. Justin Rose said because it is at an existing intersection this sign should be sufficient.

It was agreed this signage is a matter of people getting used to it.

Motion by Mr. Isaksen Seconded by Dr. Rontal to install W11-2 signing at the crosswalk on the west side of the intersection of Maple Rd. and Pierce St.

Motion carried, 6-0.

VOICE VOTE

Yeas: Isaksen, Rontal, Edwards, Folberg, Slanga, White

Nays: None Absent: Schafer

8. MOPED/SCOOTER PARKING DOWNTOWN

Ms. Ecker advised there are unused triangular spaces 100 sq. ft. in size along Old Woodward Ave. in Downtown between the new bump-outs and the angled parking. The City has been asked to examine these spaces as potential parking locations for mopeds. What is being proposed would not change the configuration of the road but there is an opportunity to fit in three scooter, moped, or motorcycle spots.

Birmingham does not have a policy for a required size or dimension of moped spaces or motorcycles. Nor does the City have a requirement for the provision of these spaces. Preliminary examples have been drawn into the unused triangular spaces of the Old Woodward Ave. plans for review.

Example 1: Three 3 ft. wide spaces

Example 2: One 4.5 ft. space and one 3 ft. space

Responding to Dr. Rontal, Ms. Ecker said the direction at this point is that there would be no charge for these spots. As of now, no post signs are meant for the spaces. The recommendation is that stencils of mopeds or motorcycles be painted on the ground in each of the spots.

Mr. Isaksen said the 4.5 ft. x 8 ft. spot would fit a large motorcycle. His inclination was toward Example 2 because it offers more options.

Commander Grewe stated that parking over a line in a designated spot is a violation and it would be the same thing here. The determination is made by looking at the ground. If Example 2 is used, anyone could park. If Example 1 is used, they are saying no to motorcycles unless they are small enough to fit. Adding these spots will give mopeds legal places to park, although there aren't a lot of mopeds around town.

Motion by Mr. Isaksen

Seconded by Ms. Edwards that in the unused triangular spaces along Old Woodward Ave. install three 3 ft, x 6 ft. parking spots for mopeds with a stencil of a moped mark on the pavement.

Motion carried, 6-0.

VOICE VOTE

Yeas: Isaksen, Edwards, Folberg, Rontal, Slanga, White

Nays: None Absent: Schafer

9. MEETING OPEN TO THE PUBLIC FOR ITEMS NOT ONTHE AGENDA

Mr. Strader updated the Board on the Maple Rd. design project. F&V, City staff and MKSK have been working on design refinements and will be presenting a refined design to the City Commission for their input. They have had meetings with M-DOT on the issue of losing parking. This Board had said to get rid of the Xs if more parking can be recovered. They have worked through a number of design sequences and have been able to reduce the amount of lost parking from 20 spaces down to 10, even with the bumpouts. That is partly because M-DOT has allowed them to go a little closer to the crosswalks and go with the typical Birmingham design standards. So they are back to the Xs now.

Additionally, at the Park, Peabody, Maple Rd. intersection they have come up with an alternative they think meets this Board's objectives. The bumpout will be on the NE corner and there won't be an island. Vehicles will stop and there will

be a pedestrian activated signal so the pedestrians can press a button and the westbound to northbound traffic will stop.

Ms. Ecker reminded everyone that this will be preliminary approval by the City Commission and it will then come back to this board.

- 10. MISCELLANEOUS COMMUNICATIONS (none)
- 11. NEXT MEETING NOVEMBER 1, 2018 at 6 p.m.
- 11. ADJOURNMENT

No further business being evident, the board members adjourned at 8:21 p.m.

Jana	Ecker,	Planning	Director	
Paul	O'Meai	ra. Citv Eı	ngineer	

MEMORANDUM

DATE: October 22, 2018

TO: Joseph A. Valentine

FROM: Timothy J. Currier, City Attorney

SUBJECT: Underground Electric Line Easement for Brookside Development

INTRODUCTION:

The Brookside Development Group, LLC is building the development just north of the North Old Woodward parking structure. A proposed Underground Electric Line Easement Agreement is being presented to the Commission for their approval to allow power to be brought from a DTE electrical pole in the middle of Lot 5 to the Brookside Development building, just north of the North Old Woodward parking structure.

BACKGROUND:

In order to get power to the property, the lines had to be run by DTE to a pole in the middle of Lot 5 (the surface lot next to the parking structure). The desire was to have these lines placed underground from that pole to the building. In this regard, an underground electric line easement was negotiated with Brookside Development Group, LLC's attorney and signed by the principal of Brookside Development Group, LLC, Gary Shiffman, its manager. The easement provides for underground conduit from the pole to the building and further agreement that the conduit would be moved at their expense, if the Woodward Bates project at North Old Woodward parking structure is developed. The Brookside Development Group would pay \$6,000 a year in rent for this easement, calculated based on Oakland County's valuation of the taxable value of the property times 3% of that taxable value annually. At the present time, the area that is being involved here is 2,397 square feet, approximately .55 acres. Oakland County estimated the land value at approximately \$200,000. Applying the 3% factor was established by the Commission back in 2015.

LEGAL REVIEW:

This office has reviewed the Underground Electric Line Easement, including the limitations thereon which include moving the easement at a later date at the Grantees' expense. Further, the Agreement pertains to the easement only and not any other capital improvements that may occur on or near the site, which may be assessed to the participants in the Woodward Bates Project.

FISCAL IMPACT:

There is no negative fiscal impact to the City with respect to this proposed easement. There is a \$6,000 annual revenue adjusted by the CPI annually thereafter.

SUMMARY:

We are requesting that the City Commission to approve this easement/

ATTACHMENTS:

Easement and its attachments.
Letter from Oakland County.
2015 letter as to how the calculations were arrived at for the amount to be given.
Easement Lease.

SUGGESTED RESOLUTION:

Resolution approving the Underground Electric Easement as provided herewith. Authorizing the Mayor and Clerk to sign the same on behalf of the City.

UNDERGROUND ELECTRIC LINE EASEMENT

This Underground Electric Line Easement ("Easement Agreement") is entered into by and between the CITY OF BIRMINGHAM ("Grantor"), a Michigan municipal corporation, whose address is 151 Martin Street, Birmingham, Michigan 48009, and the BROOKSIDE DEVELOPMENT GROUP LLC ("Grantee"), a Michigan limited liability company, whose address is 27777 Franklin Road, Suite 200, Southfield, Michigan 48034. The Grantor as fee owner of the property described in **Exhibit "A"** attached ("Grantor's Property"), for and in consideration of the sum set forth below to be paid to the Grantor in accordance with the terms and conditions stated below, hereby grants to the Grantee, it's successors and assigns and all future owners of the property owned by Grantee and described in **Exhibit "B"** attached ("Grantee's Property"), the right to install, construct, operate, maintain, repair, and/or replace an underground electric line, including without limitation the placement of manholes, conduits, pipes and cables as may be necessary, within that portion of Grantor's Property described in **Exhibit "C"** attached and depicted in **Exhibit "D"** attached ("Easement").

In the event Grantor's property within the Easement is disturbed by reason of the exercise of any of the foregoing powers, Grantee shall be responsible for reasonably restoring the property to substantially the condition existing prior to Grantee exercising its powers.

The Grantor shall not construct or place any buildings or permanent structures or improvements of any kind in the Easement without Grantee's prior written consent.

Grantor reserves the right to relocate the Easement to serve Grantee's property through such relocated easement as a result of future development of Grantor owned property, in connection with Grantor's proposed redesign of the so-called "North Old Woodward Parking Structure" or the proposed "Bates Street Development Project" (collectively, the "Future City Development"). If Grantor delivers written notice to the Grantee to relocate the Easement as a result of the Future City Development any time within a period ending 10 years from the date of this Easement, then the improvements installed only by Grantee pursuant to this Easement and not any other improvements, shall be relocated by and at Grantee's own expense, and shall be relocated to the public right-of-way within that portion of the proposed extension of Bates Street's public right-of-way ("Bates Street Extension") contemplated to abut and be immediately adjacent to the southern property line of Grantee's Property. If the Easement is not

able to be relocated within the Bates Street Extension for any reason, then Grantor and Grantee shall mutually agree to the new location, but in any event the new location shall be generally located within the area identified in **Exhibit "E"** attached as the "Potential Relocated Easement Area". Upon relocation of the Easement as provided in this paragraph, the Easement described in **Exhibit "C"** shall be removed or abandoned.

The consideration for the easement granted herein is an annual rent of \$6,000.00 ("Rent"), payable in annual installments commencing on the date of execution of this Easement Agreement. The Rent is calculated based on 3% of the taxable value of the land (ie: the taxable value of the land comprising the Easement as of the date of this Easement Agreement is \$200,000.00 X 3% = \$6,000.00). The Rent shall be adjusted on the annual anniversary date of this Easement in accordance with the CPI Index for the Detroit/Ann Arbor area. Further, in the event the Easement is relocated as contemplated herein, the Rent shall be adjusted to reflect the actual square footage area of the relocated Easement using the same formula set forth above and, further, this Easement Agreement shall be amended for the purpose of incorporating the legal description and sketch of the new location of the Easement. The Easement benefits and adds value to the development on Grantee's Property; thus, simultaneously upon the first transfer of title to a unit in the condominium constructed on Grantee's Property ("Condominium") to a non-developer co-owner, Grantee's payment obligation for Rent set forth in this paragraph shall automatically transfer to the owners' association for the Condominium.

The purpose of this Easement is to provide power to Grantee's Property as of the date hereof and the potential future relocation of the Easement as contemplated herein.

This instrument shall be binding upon and inure to the benefit of the parties hereto, their heirs, representatives, successors, and assigns and the covenants contained herein shall run with the land.

	ITNESS WHEREOF, the undersigr ber, 2018	ned hereunt	o affixed his signature this	day of
	of Birmingham, chigan municipal corporation			
Ву:_		Ву:		
lts:	Andrew M. Harris Mayor	Its:	Joseph A. Valentine City Manager	-
		Ву:		
			Cherilynn Mynsberge	_

Its:

City Clerk

STATE OF I	MICHIGAN)	
COUNTY O	F OAKLAND)SS)	
day of Octob	per, 2018 by Jo Insberge, City C	oseph A. Valentii	ed before me in Oakland County, Michigan, this ne, City Manager of the CITY OF BIRMINGHAM, and OF BIRMINGHAM, and Andrew M. Harris, Mayor of the
Notary Publi	c:		_
	Print or Ty	/pe Name	My commission expires:County Acting in Oakland County, MI

IN WITNESS WHEREOF, the undersigned hereunto affixed his signature this $\frac{18}{200}$ day of 2018.

BROOKSIDE DEVELOPMENT GROUP LLC,

a Michigan limited liability company

BY: / / Gary Shiffman

ITS: Manager

STATE OF MICHIGAN

)SS

COUNTY OF OAKLAND

The foregoing instrument was acknowledged before me in Oakland County, Michigan, this \(\frac{1}{2} \) day of \(\frac{1}{2} \) 2018 by Gary Shiffman, the Manager of Brookside Development Group LLC, a Michigan limited liability company, on behalf of the limited liability company.

Notary Public:

Print or Type Name

My commission expires:____

__County

Acting in Oakland County, MI

DEBBIE PASKU

Notary Public, State of Michigan

County of Macomb

My Commission Expires Jul, 25, 2024

Acting in the County of

When Recorded return to Grantee

Drafted by: Richard D. Rattner, Esq. Williams Williams Rattner & Plunkett, PC 380 N. Old Woodward Ave., Suite 300 Birmingham, Michigan 48009

Mark P. Krysinski Jaffe Raitt Heuer & Weiss, P.C. 27777 Franklin Road - Suite 2500 Southfield, MI 48034 EXB. A: Property Description
Underground Electric Line Easement Between
City of Birmingham ("Grantor") and Brookside
Development Group LLC ("Grantee)"

DESCRIPTION OF TAX PARCEL 19-25-376-097 PER CITY OF BIRMINGHAM TAX RECORD

T2N, R10E, SEC 25 SCHLAACK SUB LOTS 1 TO 8 INCL EXC THAT PART OF LOTS 3 & 4 BEG AT MOST ELY COR OF LOT 3 TH S 67–34–20 W 50.53 FT, TH N 14–06–00 W 50.32 FT, TH N 59–26–20 E TO E LINE OF LOT 4, TH SELY ALG SD LINE TO BEG, ALSO EXC S 24 FT OF LOT 8, ALSO THAT PART OF VAC BATES ST ADJ TO SD LOTS, ALSO OF 'ASSESSOR'S PLAT NO 27' PART OF LOT 10 DESC AS BEG AT NW LOT COR, TH NELY 64.11 FT ALG N LOT LINE, TH NWLY TO BEG, ALSO ALL OF LOTS 11 TO 15 INCL, ALSO LOT 16 EXC.N 40 FT THEREOF, ALSO ALL OF LOT 19,' ALSO EXC PART OF LOTS 3 & 4 OF 'SCHLAACK SUB' & PART OF LOTS 10 & 11 OF 'ASSESSOR'S PLAT NO 27' IN PCL DESC AS BEG AT PT DIST S 63–11–50 W 16.85 FT FROM SE COR OF SD LOT 11, TH S 63–11–50 W 103.15 FT, TH S 59–26–20 W 99.61 FT, TH N 14–06–00 W 6.42 FT, TH N 59–26–20 E 217.53 FT, TH S 30–33–40 E 4.01 FT, TH S 63–11–50 W 16.19 FT, TH S 26–48–10 E 10 FT TO BEG, ALSO EXC PART OF LOT 11 GF 'ASSESSOR'S PLAT NO 27' DESC AS BEG AT SE LOT COR, TH S 63–11–50 W 16.85 FT, TH N 26–48–10 W 10 FT, TH N 63–11–50 E 16.19 FT, TH S 30–33–40 E 10 FT TO BEG 7– 19–05 FR 079

EXB. B:GRANTEE'S PROPERTY DESCRIPTION
Underground Electric Line Easement Between
City of Birmingham ("Grantor") and Brookside
Development Group, LLC ("Grantee")

THE RESIDENCES AT BROOKSIDE:
DESCRIPTION OF A 0.79 ACRE PARCEL LOCATED IN SECTION 25, T2N, R10E, CITY OF BIRMINGHAM, OAKLAND COUNTY MICHIGAN

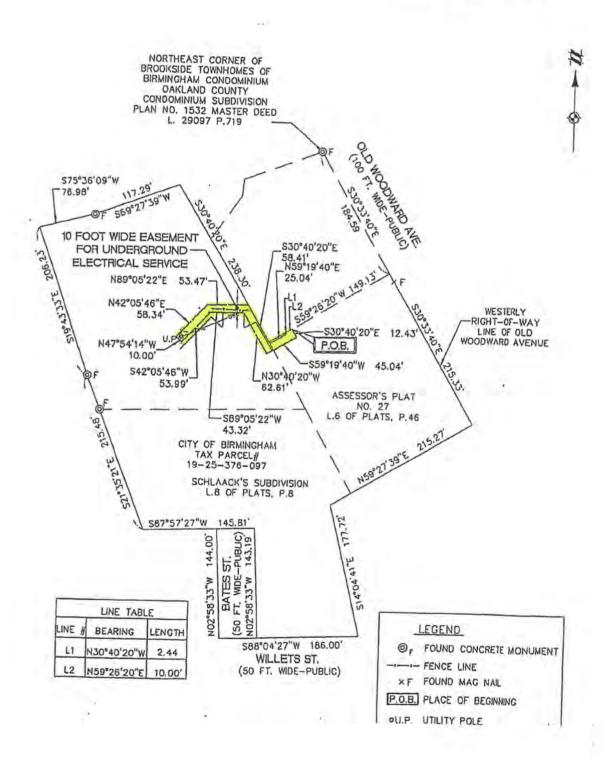
BEGINNING AT THE NORTHEAST CORNER OF LOT 18 OF ASSESSOR'S PLAT NO. 27 AS RECORDED IN LIBER 6 OF PLATS, PAGE 26, OAKLAND COUNTY RECORDS; THENCE S30°33'40"E 184.59 FEET ALONG THE WESTERLY LINE OF OLD WOODWARD AVENUE (100 FEET WIDE) AND THE EASTERLY LINE OF LOTS 16—18 OF SAID ASSESSOR'S PLAT NO. 27; THENCE S59°26'20"W 184.17 FEET; THENCE N30°40'20"W 156.00 FEET ALONG THE WESTERLY LINE OF LOTS 16—18 OF SAID ASSESSOR'S PLAT NO. 27; THENCE N34°11'59"E 70.00 FEET (RECORDED AS 77.00 FEET) ALONG THE APPROXIMATE CENTERLINE OF THE ROUGE RIVER; THENCE N05°16'41"E 22.00 FEET ALONG SAID APPROXIMATE CENTERLINE; THENCE N69°26'20"E 109.97 FEET ALONG THE NORTH LINE OF SAID LOT 18 TO THE PLACE OF BEGINNING, CONTAINING 0.788 ACRES OF LAND, MORE OR LESS, BEING PART OF LOTS 16, 17 AND 18 IN SAID ASSESSOR'S PLAT NO. 27 IN SECTION 26, T2N, R10E, CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN.

EXB. C: Easement Area Description
Underground Electric Line Easement Between
City of Birmingham ("Grantor") and Brookside
Development Group LLC ("Grantee)"

DESCRIPTION OF A 10 FOOT WIDE EASEMENT FOR UNDERGROUND ELECTRICAL SERVICE LOCATED IN SECTION 25, T2N, R10E, CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

Commencing at the Northeost corner of Brookside Tawnhomes of Birmingham Condominium Subdivision Plan No. 1532, as recorded in Liber 29097 Page 719 Oakland County Records; thence S30°33'40"E, 184.59 feet along the Westerly right—of—way line of Old Woodward Avenue (100 feet wide); thence S59°26'20"W 149.13 feet for a PLACE OF BEGINNING; thence S30°40'20"E 12.43 feet; thence S59°19'40"W 45.04 feet; thence N30°40'20"W 62.61 feet; thence S89°05'22"W 43.32 feet; thence S42°05'46"W 53.99 feet; thence N47°54'14"W 10.00 feet; thence N42°05'46"E 58.34 feet; thence N89°05'22"E 53.47 feet; thence S30°40'20"E 58.41 feet; thence N59°19'40"E 25.04 feet; thence N30°40'20"W 2.44 feet; thence N59°26'20"E 10.00 feet to the Place of Beginning, being part of Assessor's Plot No.27 os recorded in Liber 6 of Plats, Page 46, Oakland County Records.

EXB. D. Easement Sketch
Underground Electric Line Easement Between
City of Birmingham ("Grantor") and Brookside
Development Group LLC ("Grantee)"



EXB. E: POTENTIAL RELOCATED ELECTRIC EASEMENT AREA Underground Electric Line Easement Between City of Birmingham ("Grantor") and Brookside Development Group, LLC ("Grantee") NORTHEAST CORNER OF BROOKSIDE TOWNHOMES OF BIRMINGHAM CONDOMINIUM O'AKLAND COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 1532 MASTER DEED L 29097 P.719 \$75°36'09"W 76.98 10 FOOT WIDE EASEMENT \$30°40'20"E FOR UNDERGROUND 55,92 ELECTRICAL SERVICE N59°26'20"E 35.04" NB9°05'22"E 53.47 WESTERLY N42°05'46"E RIGHT-OF-WAY LINE OF OLD WOODWARD AVENUE 58,34 530°40'20"E N47°54'14"W_ 10.00' 10.00 559°26'20"W 45.04 S42"05' 6"W N30°40'20"W ASSESSOR'S PLAT NO 27 L.6 OF PLATS, P.46 60.10 S89°05'22"W 43,32 TAX PARCEL# 19-25-376-097 SCHLAACK'S SUBDIVISION L.8 OF PLATS, P.8 Potential "Relocated Easement Area" 587°57'27"W 145.B1 EASEMENT POTENTIALLY TO BE REMOVED ON ABANDONED UPON BEING RELOCATED WITH BEARING LENGTH

LINE TABLE

LINE # BEARING LENGTH LEGEND BEARING ALENGTH LINE # OF FOUND CONCRETE MONUMENT S88°04'27"W 186.00' N30°40'20"W WILLETS ST. --- FENCE LINE (50 FT. WIDE-PUBLIC) N59°26'20"E XF FOUND MAG NAIL P.O.B. PLACE OF BEGINNING אוחם עדווודון חזוה



RE: FW: Underground Electric Line Easement - Brookside

1 message

Fury, Michael P <furym@oakgov.com>

Mon, Aug 6, 2018 at 11:09 AM

To: Teresa Klobucar <tklobucar@bhamgov.org> Co: "Buelter, Teresa M" <bueltert@oakgov.com>

Good morning Teresa,

Based on the information you provided me about the underground electrical easement, we came up with an estimated land size of 2,397 square feet or .055 acres. The estimated land value would be approximately \$200,000 using our commercial land rate for that location/area for a buildable commercial site. Considering that this is an easement required by the developer it is difficult to know how much they would pay for this property. If you have any questions feel free to contact me by phone or email.

Thanks

Michael Fury

Oakland County Equalization

Real Property Appraiser

248-975-4452

From: Teresa Klobucar [mailto:tklobucar@bhamgov.org]

Sent: Thursday, August 02, 2018 2:59 PM

To: Fury, Michael P

Subject: Fwd: FW: Underground Electric Line Easement - Brookside

----- Forwarded message -----

From: Currier, Tim <TCurrier@bhlaw.us.com>

Date: Wed, Aug 1, 2018 at 5:04 PM

Subject: FW: Underground Electric Line Easement - Brookside To: "tklobucar@bhamgov.org" <tklobucar@bhamgov.org>

Theresa-

Please see the legal description in exhibit A. it has the tax id number in the heading.

Timothy J. Currier

Beier Howlett, P.C.

3001 W. Big Beaver, Ste. 200

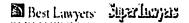
Troy, MI 48084

Direct Dial: (248) 282-1066

Direct Fax: (248) 282-1085

tcurrier@bhlaw.us.com

www.beierhowlett.com



This Internet message may contain information that is privileged, confidential, and exempt from disclosure, and is intended for use only by the person to whom it is addressed. If you have received this in error, please (1) do not forward or use this information in any way; and (2) contact me immediately.

Neither this information block, the typed name of the sender, nor anything else in this message is intended to constitute an electronic signature unless a specific statement to the contrary is included in this message.

Any tax advice contained in this e-mail is not intended to be used, and cannot be used, by the recipient for the purpose of avoiding penalties that may be imposed under the Internal Revenue Code, IRS regulations, or state or local tax laws or regulations.

From: Cochran, Janine

Sent: Wednesday, August 01, 2018 2:52 PM

To: Joe Valentine <jvalentine@bhamgov.org>; Paul O'Meara <pomeara@bhamgov.org>
 Cc: Currier, Tim <TCurrier@bhlaw.us.com>
 Subject: Underground Electric Line Easement - Brookside

You will find attached the Underground Electric Line Easement. Please note that we have changed Exhibit B back to its original description.

Thank you.

Janine A. Cochran

Legal Assistant/Paralegal To Timothy J. Currier,

Mary M. Kucharek, Kenneth J. Sorensen & Donald A. Studt

Beier Howlett, P.C.

3001 W. Big Beaver Rd., Ste. #200 Troy, MI 48084 (248) 645-9400 Ext. 254

jcochran@bhlaw.us.com

This Internet message may contain information that is privileged, confidential, and exempt from disclosure, and is intended for use only by the person to whom it is addressed. If you have received this in error, please (1) do not forward or use this information in any way; and (2) contact me immediately.

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Teresa Klobucar

City of Birmingham

Deputy Treasurer

248-530-1825



RE: FW: Underground Electric Line Easement - Brookside

1 message

Fury, Michael P <furym@oakgov.com>
To: Teresa Klobucar <tklobucar@bhamgov.org>
Co: "Buelter, Teresa M" <bueltert@oakgov.com>

Mon, Aug 6, 2018 at 11:09 AM

Good morning Teresa,

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Thanks

Michael Fury

Oakland County Equalization

Real Property Appraiser

248-975-4452

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Sent: Thursday, August 02, 2018 2:59 PM

To: Fury, Michael P

Subject: Fwd: FW: Underground Electric Line Easement - Brookside

------ Forwarded message ------From: Currier, Tim <TCurrier@bhlaw.us.com>

Date: Wed, Aug 1, 2018 at 5:04 PM

Subject: FW: Underground Electric Line Easement - Brookside To: "tklobucar@bhamgov.org" <tklobucar@bhamgov.org>

Theresa-

Please see the legal description in exhibit A. it has the tax id number in the heading.

Timothy J. Currier

Beier Howlett, P.C.

3001 W. Big Beaver, Ste. 200

Troy, MI 48084

Direct Dial: (248) 282-1066

Direct Fax: (248) 282-1085

tcurrier@bhlaw.us.com

www.beierhowlett.com



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From: Cochran, Janine

Sent: Wednesday, August 01, 2018 2:52 PM

· To: Joe Valentine <jvalentine@bhamgov.org>; Paul O'Meara <pomeara@bhamgov.org>

Cc: Currier, Tim <TCurrier@bhlaw.us.com>

Subject: Underground Electric Line Easement - Brookside

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Thank you.

Janine A. Cochran

Legal Assistant/Paralegal To Timothy J. Currier,

Mary M. Kucharek, Kenneth J. Sorensen & Donald A. Studt

Beier Howlett, P.C.

3001 W. Big Beaver Rd., Ste. #200

Troy, MI 48084

(248) 645-9400 Ext. 254

jcochran@bhlaw.us.com

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Teresa Klobucar City of Birmingham Deputy Treasurer 248-530-1825



TIMOTHY J. CURRIER

tcurrier@bhlaw.us.com Telephone (248) 645-9400 Fax (248) 645-9344

February 9, 2015

****ATTORNEY/CLIENT PRIVILEGE***

Birmingham City Commission 151 Martin Street, P.O. Box 3001 Birmingham, MI 48012-3001

> Re: Manor Park; Medical Marijuana; Land Control and Leases

Dear Commissioners:

Manor Park

Recently, Bill Anderson from Atwell-Group contacted Paul O'Meara concerning the concept plan for the proposed development of 8 new single family homes at the east end of Manor Road in Bloomfield Township just north of Warwick and the Birmingham City limits. In the process of developing this plan, the area believed to be Manor Park was staked out. The survey shows that the former Manor Park Road had been vacated, but an easement had been reserved in the former Manor Road area. The survey provided does show that part of the Manor Park trail does trespass on private property. We are bringing this matter to the attention of the Commission for the purpose of seeking direction on how best to proceed in this matter.

Medical Marijuana

Last week I received an inquiry from Mr. Greg Bockart, President of Distinguished Partners, a commercial real estate group in Birmingham that is working with a client that is involved with medical marijuana. Apparently, the client had read an article from the past that the Birmingham Rail District was an area of interest for the City of Birmingham for the purposes of allowing medical marijuana grow operations in that area. When this matter was first brought to the Commission's attention, the Commission took no action with respect to the proposed ordinance amending the Zoning Ordinance to restrict medical marijuana grow operations to the Rail District and to further require that such operations had to be a certain number of feet away from single family residences. Ms. Ecker has reported that she has also received several telephone calls inquiring about where a medical marijuana grow operation could be placed in the City. The purpose of this communication is to seek direction from the City Commission on how you wish us to proceed.

Land Control

The purpose of this inquiry is to address the comments that some of the Commissioners made in public that a proposed Amendment to the City Charter regarding the acquisition and/or sale of property acquired for vehicular parking was too restrictive. Further, there were additional comments made regarding the timing of when such Charter Amendment should be brought before the public. It was expressed that the time table developed by the City Clerk for the 2015 election season seemed to

A Professional Corporation Established in 1903

Beier Howlett

Birmingham City Commission February 9, 2015 Page 2

****ATTORNEY/CLIENT PRIVILEGE***

be too aggressive. We are bringing this matter to the City Commission to get some direction on how you wish us to proceed.

Leases

Cranbrook Car Care. At the present time, we are discussing two (2) separate projects that involve the lease of City property in conjunction with a real estate development. One is the Cranbrook Car Care Project, where the owner, Mr. Karana wishes to remove the current gas station and have the site redeveloped for the Dearborn Federal Credit Union. Currently, Cranbrook Car Care utilizes for parking a strip of land between Cranbrook and Maple that runs behind the current gas station. The proposal would have this property being used for parking in the future. The question is what is the appropriate lease amount to be charged for this particular property. The property would also be using a small portion of City property at the corner of Cranbrook and Maple, where the current gas station sign is located. The total area that would be leased between the two parcels would be 8,202 square feet. The assessor's records show that the current land value for the Cranbrook Car Care property is \$679,894 for the 16,515 square feet which belong to Karana Real Estate, LLC. Those figures would create a land value of \$41.17 per square foot. If that is extrapolated into the area to be leased from the City, the value of the property being leased would be \$337,676.34. Currently, Mr. Karana has a License Agreement to use the property, and is currently paying \$800 per month for the property under license.

Market Square. We are also currently working on the Market Square project. Market Square is the leased portion of City property located due north of its structure, which is currently greenspace, for the construction of 6 new parking spots on the west side of the property, and the construction of a patio and hedge area on the east side of the property. The parking area is 1,110 square feet. The patio and hedge area is 2,714 ½ square feet. The land value for Market Square is \$462,867. Market Square Enterprises has 13,506 square feet of land that it owns. The amount of land to be leased is 3,824 ½ square feet and would have a value of \$34.27 per square foot, or \$131,065.62.

* * * * * *

Recently, the City leased 9 square feet to the Balmoral project for the purposes of placing the steel support beam at the entrance to the property at the corner of Brown and Woodward. The 9 square feet was leased for \$500 per year. The value of 9 square feet is approximately \$500 a square foot based on the assessor's records. The Hunter House leases parking spots from the City of Birmingham in the amount of \$676 per month, and the Generation Obstetrician's, the former Alban's, leases parking spots near the water tower for \$692 per month.

Recognizing that each parcel is unique and the uses all vary, we have looked at various ways to establish the fair market rental of these 2 new projects. Most formulations include factors that do not exist for the City as a lessor. These factors include the cost of the investment, cost of the

Beier Howlett

Birmingham City Commission February 9, 2015 Page 3

****ATTORNEY/CLIENT PRIVILEGE***

mortgage, interest on the mortgage, utility payments and property taxes. All of the City properties have none of these factors considered in establishing a fair market rental rate.

If the City had cash to invest, the City could only invest in limited items with very low rates in return because of the restrictions of the Department of Treasury.

A further consideration in establishing the fair market rental rate is once these properties are leased, they would be placed on the tax roll where the user will have to pay taxes on it as if they were the actual owner pursuant to State statute. Mr. Karana of Cranbrook Car Care is currently paying the property taxes on the property in addition to his \$800 per month license fee.

Our objective in bringing this matter to the Commission's attention is to get some guidance as to the appropriate lease rates we should be trying to achieve with respect to these projects. The undersigned would suggest that for parcels being used for parking purposes only that 3% of the land value per year may be an appropriate rate considering that it would also be subject to property taxation. It appears that the Hunter House and Alban's leases are slightly less than 3% of the land value.

When a project intends to place a structure on City property would cause its redevelopment in some fashion. A higher rate of return would appear to be appropriate, taking into consideration the work done on the property and the longer term nature of the arrangement. In this regard, a 10% factor of the land value may be appropriate.

In both cases, as with the existing leases, some form of escalator should be used on periodic basis to keep the lease rates in line. Most commonly, they had either established a periodic change by setting an arbitrary figure, or they used the Consumer Price Index for an annual change.

Again, this matter is being brought to your attention for purposes of getting direction on how the Commission would like us to proceed.

Very truly yours,

BEIER HOWLETT, P.C.

Timothy J. Currier Birmingham City Attorney

TJC/jc



MEMORANDUM

Human Resources Department

DATE: October 22, 2018

TO: Joseph A. Valentine, City Manager

FROM: Dana R. Whinnery, Interim Human Resources Manager

SUBJECT: Settlement Agreement and Contract Renewal with Teamsters

Local 214

INTRODUCTION

Teamsters Local 214, affiliated with the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America, represents a total of 27 full-time laborers working primarily within the Department of Public Services. The current collective bargaining agreement expired on June 30, 2018. The City and the Union have engaged in the collective bargaining process to renew the expired Agreement.

BACKGROUND

Upon reaching impasse after three bargaining sessions, the parties, with the assistance of state mediator, Richard Ziegler, reached a tentative settlement on September 24, 2018. Union membership has ratified the attached Settlement Agreement, and it is now presented for consideration by the City Commission.

Significant provisions of the Settlement Agreement include:

- 1. 3-year contract through June 30, 2021.
- 2. Wage increases of 2% in each year of the contract.
- 3. Increases in employee cost sharing for health care.
- 4. Increases in City and employee contributions to the 401(a) retirement plan.
- 5. Modest improvements in other minor economic provisions.

The primary economic provisions are consistent with other existing contracts with other City employee groups, and continue the trend toward increased employee cost sharing for health care.

LEGAL REVIEW

The City's labor attorney has reviewed, and is party to, the signed Settlement Agreement.

FISCAL IMPACT

Funds are budgeted and available in the 2018-19 FY Budget. Costs are partially offset by savings from employee health care cost sharing provisions in the Settlement Agreement.

SUMMARY

The Human Resources Department recommends approval of the Settlement Agreement.

ATTACHMENTS

- Settlement Agreement between the City of Birmingham and Teamsters Local 214
- Notice of ratification letter from Teamsters Local 214

SUGGESTED RESOLUTION:

To approve the Settlement Agreement of September 24, 2018 between the City of Birmingham and Teamsters Local 214 for a renewal of the collective bargaining agreement through June 30, 2021, and to authorize staff to execute a collective bargaining agreement consistent with its terms and conditions. Further, to authorize the transfer of the appropriate funds by the Finance Department.

city of Birmingham -and-TEAMSTERS LOCAL 214

SETTLEMENT AGREEMENT September 24, 2018

It is hereby agreed between the City of Birmingham ("the Employer") and Teamsters Local 214 ("the Union"), that, in tentative settlement of all outstanding issues under negotiation, the parties bargaining teams hereby agree, and agree to recommend ratification to their respective principals, as follows:

- 1. The parties agree to a contract effective from the date of ratification of this Agreement by both parties to and including June 30, 2021.
- 2. The terms of the parties' contract shall be the same as the parties' prior agreement, as amended by the terms of this Settlement Agreement.
- 3. <u>Healthcare Effective 1/1/2019</u> –

Urgent Care visit copay changes from \$25 TO \$50.

Emergency Room copay changes from \$100 TO \$150.

Calendar Year Deductibles changes from:

\$500 Individual / \$1,000 Family (Combined in and out of network)

TC

\$600 Individual / \$1,200 Family (Combined in and out of network)

In-Network Out-of-Pocket max changes from:

\$1,000 Individual /\$2,000 Family

TO

\$1,100 Individual / \$2,200 Family (Including deductible)

Out-of-Network Out-of-Pocket max changes from:

\$1,500 Individual / \$3,000 Family

TC

\$1,700 Individual / \$3,400 Family (Including deductible)

Generic Drugs from \$15.00 copay TO \$ \$20.00 copay

Brand Name Drugs from \$40.00 copay TO \$50.00 copay

Add Specialty Drugs Tier \$75.00 copay

4. Insurance – Revise Article XXX, Section 65 (b), to read as follows:

<u>7th paragraph:</u> Add a third requirement for receipt of the opt-out payment for health insurance as follows: "(3) any other conditions required by law for eligible opt-out arrangements."

5. Grievance Procedure – Revise Article VI, Section 10, to read as follows:

<u>Step 2:</u> The written grievance shall be discussed between the Steward and the department superintendent or designated supervisor. The applicable supervisor shall give his written decision within ten (10) calendar days (excluding Saturdays, Sundays and holidays) of receipt of the written grievance.

<u>Step 3:</u> In the event the grievance is not settled in Step 2, a meeting shall be held between the Steward and the department head within ten (10) working days after the date of the Step 2 decision. The decision of the city shall be given in writing within five (5) calendar days (excluding Saturdays, Sundays and holidays) after the termination of the meeting.

<u>Step 4:</u> In the event the grievance is not settled in Step 3, the Union shall request a meeting with Management, including the City Manager, or his designee, within ten (10) calendar days after the date of the Step 3 decision, at which either party may have outside representatives present. The City Manager, or his designee, shall furnish an answer in writing to the Steward within ten (10) calendar days (excluding Saturdays, Sundays and holidays) after the termination of the meeting.

6. Increase wages set forth in Schedule A as follows:

Effective upon ratification of this

Agreement by both parties

Effective July 1, 2019

Effective July 1, 2020

2.00%

In addition, in the first full pay period following the execution of the new collective bargaining agreement by both parties, each employee in the bargaining unit who was employed by the Employer on September 24, 2018 and remains so employed on the date the City Commission ratifies this Agreement, shall receive a one-time, off schedule payment of \$1000.00, less applicable deductions. This payment will not be added to the wage scales contained in the parties' collective bargaining agreement.

- 7. Revise Article VIII, Section 35 (e) and (f) as follows:
 - (e) Employees awarded a job bid shall have not to exceed six (6) calendar months to qualify for such job.

- (f) The seniority of an employee who qualifies for the job within the six (6) calendar months provided for in Section 35(e) shall, upon completion of such six (6) months, be recognized within the department and classification in which he qualified.
- 8. Article XI, Paragraph 40 Replace the reference to "6 hours" with "5 hours", and replace the reference to "ten cents" with "forty cents".
- 9. Appendix A Increase shift differential to \$0.25 per hour for midnights.
- 10. Appendix A Increase Certification pay by \$0.10 per hour.
- 11. Revise 401a Defined Contribution benefit scale. The City and the employee shall make contributions as follows:

Effective January 1, 2019 Effective July 1, 2020 Effective January 1, 2021 City 9.5%, Employee 4.0% City 9.75%, Employee 4.5% City 10.0%, Employee 5.0%

THE EMPLO

- 12. The Union withdraws all other proposals.
- 13. The Employer withdraws all other proposals.
- 14. The Union will ratify the contract first, and will notify the Employer, in writing, when the contract has been ratified.

THE UNION

TEAMSTERS LOCAL UNION NO. 214

STATE, COUNTY AND MUNICIPAL WORKERS

JOSEPH M. VALENTI Principal Officer

> 2825 Trumbull Ave Detroit MI 48216

Affiliated with the International Brotherhood of Teamsters



MICHAEL LANDSIEDEL Secretary Treasurer

> (313) 962-7729 (313) 962-7891 Fax

October 4, 2018

Joseph A. Valentine, City Manager City of Birmingham 151 Martin Street P.O. Box 3001 Birmingham, MI 48012

Re: Notice of Ratification – City of Birmingham

Dear Mr. Valentine:

It is with pleasure that Teamsters Local 214 notifies you that the City of Birmingham members of Teamsters Local 214 ratified the tentative agreement reached between the parties.

Please notify me of the results of the Employer's vote as soon as possible so that we may finalize this matter and implement all provisions of the negotiated agreement.

Thank you for your attention and cooperation in this matter.

Dwight Thomas

ncerely

Business Representative

DT/lbw

cc:

Adam Kuliuski, Steward

BIRMINGHAM

OCT O 9 RECT

CITY MANAGER'S OFFICE



MEMORANDUM

Human Resources Department

DATE: October 23, 2018

TO: Joseph A. Valentine, City Manager

FROM: Dana R. Whinnery, Interim Human Resources Manager

SUBJECT: 2018-19 Compensation Recommendations for Department Heads

and Administrative / Management Employees

INTRODUCTION

Current Administrative/Management employees consist of 10 City department heads, and approximately 23 other full-time professional employees who are not represented by any labor organization. Collective bargaining with other employee labor groups in recent years (including the pending Teamsters settlement) have included a 2% wage increase this fiscal year. Administrative/Management employees have not yet received any wage adjustments for this year.

BACKGROUND

Performance-Based Pay

Individual administrative and management staff do not receive automatic adjustments in conjunction with salary table changes as do employees in bargaining units. Actual increases for this group are determined through annual performance evaluations. The guidelines that connect performance review scores to salary adjustments continue to reward high-quality performance within the confines of the salary range while withholding such rewards when performance is less than high quality. HR recommends in-range performance increases based upon department head recommendations, and HR and City Manager approval, for the Department Heads and Administrative/Management group (including part-time staff not represented by a labor organization).

Performance Increment

In the past, the Commission has approved a variable pay component for management staff. This provides individuals at or near their salary range maximum the ability to achieve a performance increment (currently about 15 key staff members). This performance increment, when achieved, is not built into base salary, but is a one-time lump sum payment and is subject to City Manager and HR approval. For fiscal year 2018-19, HR recommends an increment of up to 2.00%.

401(a) Defined Contribution Plan

The City's Defined Contribution Plan, a 401(a), is an integral part of its employee compensation package – also leveraged for recruitment and retention purposes. Currently, over 40% of administrative/management staff are enrolled in the defined contribution plan. Enhancements have recently been negotiated with other employee groups represented by labor organizations. Accordingly, HR recommends an increases in the City 401(a) contribution to 9.5% (currently 9.0%),

effective January 1, 2019. This not only helps maintain internal equity, but also helps maintain the City's market position, and its ability to attract and retain quality talent.

Health Care Cost Sharing

The City has established a pattern of increasing employee cost sharing for health care. Accordingly, and consistent with recent changes to other City employee group health plans, it is recommended that the following additional employee cost sharing measures be implemented, effective January 1, 2019: increase of copay for emergency room/illness services to \$150; increase of calendar year deductible to \$600 individual/\$1,200 family (combined in and out-of-network); increase of annual in-network out-of-pocket maximum to \$1,100 individual/\$2,200 family; increase of annual out-of-network out-of-pocket maximums to \$1,700 individual/\$3,400 family; and, increase in specialty drug copay to \$75.

LEGAL REVIEW

No legal review is required.

FISCAL IMPACT

Funds are available and budgeted in the 2018-19 FY Budget. Costs are partially offset by additional employee health care cost sharing provisions.

SUMMARY

For fiscal year 2018-2019, HR recommends a 2% salary table adjustment for Department Heads and Administrative/Management classifications, as well as for part-time employees not represented by labor organizations, effective July 1, 2018, and in in-range increases based on performance in accordance with the attached merit increase guidelines. Further, HR recommends an increase in the City's 401(a) contributions for Administrative/Management employees to 9.5%, effective January 1, 2019. Additionally, HR recommends approval of additional employee health care cost sharing measures, including increases in specific copays, calendar year deductibles, annual out-of-pocket maximums, and specialty drug riders as specified above in this memorandum.

ATTACHMENTS

7/1/2018 Merit Increase Guidelines

SUGGESTED RESOLUTION:

A. To approve the recommendation by the Human Resources Department to implement a 2% salary table adjustment and in-range adjustments based upon performance for full-time and part-time employees in the Department Head and Administrative/Management classifications effective July 1, 2018.

AND

B. To approve the recommendation by the Human Resources Department to implement the 2% performance increment through June 30, 2019 with individual eligibility to be in accordance with merit increase guidelines (attached).

AND

C. To approve ICMA plan amendments to the 401(a) plan for the Department Heads and Administrative/Management, effective January 1, 2019, to increase the City contribution to 9.5%.

AND

D. To approve the additional employee health care cost sharing measures, effective January 1, 2019, to increase of copay for emergency room/illness services to \$150; increase of calendar year deductible to \$600 individual/\$1,200 family (combined in and out-of-network); increase of annual in-network out-of-pocket maximum to \$1,100 individual/\$2,200 family; increase of annual out-of-network out-of-pocket maximums to \$1,700 individual/\$3,400 family; and, increase in specialty drug copay to \$75.

AND

E. To approve the transfer of the necessary funds by the Finance Department to the respective departmental personnel accounts.

CITY OF BIRMINGHAM Department Heads & Administrative Employees 7/1/2018 Merit Increase Guidelines

Employees currently occupying a position <u>above the 75th Percentile</u> of their salary range on the July 1, 2018 salary table.

Please indicate if, based upon performance, a performance increment of up to 2.00% of base salary (not to exceed salary range maximum) is recommended for each individual at or near the salary range maximum.

Merit <u>Increase</u>	Market <u>Adjustment</u>	Performance Review Score*
+ 3.0%	2.0%	4.50 to 5.00
+ 2.0%	2.0%	4.00 to 4.50
+ 1.0%	2.0%	3.50 to 4.00
0.0%	2.0%	3.00 to 3.50
-1.5%	2.0%	2.50 to 3.00
-2.5%	2.0%	2.00 to 2.50

Total adjustment may not exceed salary range maximum.

*Performance Review Rating Scale

- 5 Outstanding
- 4 Exceeds Expectations
- 3 Meets Expectations
- 2 Below Expectations
- 1 Unsatisfactory

CITY OF BIRMINGHAM Department Heads & Administrative Employees 7/1/2018 Merit Increase Guidelines

Employees currently occupying a position **below the 75th Percentile** of their salary range on the July 1, 2018 salary table.

Merit <u>Increase</u>	Market <u>Adjustment</u>	Performance Review Score*	
+6.5%	2.0%	4.5 to 5	5.0
+4.5%	2.0%	4.0 to 4.5	
+2.5%	2.0%	3.5 to 4.0	
+1.5%	2.0%	3.25 to 3.75	
0.0%	2.0%	3.0 to 3.5	
-1.5%	2.0%	2.75 to 3.25	
-2.5%	2.0%	2.5 to 3.0	
-3.5%	2.0%	2.0 to 2.5	

Total adjustment may not exceed salary range maximum.

- 5 Outstanding
- 4 Exceeds Expectations
- 3 Meets Expectations
- 2 Below Expectations
- 1 Unsatisfactory

^{*}Performance Review Rating Scale

City of Birmingham A Walkable Community

MEMORANDUM

Finance Department

DATE: October 19, 2018

TO: Joseph A. Valentine, City Manager

FROM: Mark Gerber, Director of Finance/Treasurer

SUBJECT: September 2018 Investment Report

Public Act 213 of 2007 requires investment reporting on the City's general investments to be provided to the City Commission on a quarterly basis. This information is also required to be provided annually, which the City has and will continue to include within the audited financial statements.

General investments of the City are governed by state law and the City's General Investment Policy approved by the City Commission. The services of an outside investment advisor are utilized to assist the treasurer in determining which types of investments are most appropriate and permitted under the investment policy, maximize the return on the City's investments within investment policy constraints and provide for cash flow needs.

The two primary objectives for investment of City funds are the preservation of principal and liquidity to protect against losses and provide sufficient funds to enable the City to meet all operating requirements that might be reasonably anticipated. Investment activities include all City funds except the retirement and retiree health-care funds as follows:

- General Fund
- Permanent Funds
- Special Revenue Funds
- Capital Projects Fund
- Enterprise Funds
- Debt Service Funds
- Component Unit Funds
- Internal Service Funds

Overall, the City has \$88.7 million invested in various securities according to its general investment policy as of September 30, 2018.

The City has two pooled funds (CLASS Pool and J-Fund), which are used to meet payroll, contractor and other accounts payable needs. As indicated on the attached schedule, there is approximately \$15.5 million invested in pooled funds at the end of September. A maximum of 50% of the portfolio may be invested in pooled funds that meet state guidelines. The amount currently invested in pooled funds is 17%.

Currently there is approximately \$6.3 million, or 7%, of the City's portfolio invested in commercial paper. A maximum of 20% of the City's investments may be held in commercial paper with the highest rating of A-1/P-1 by at least two standard rating services.

The City also holds approximately \$31.7 million, or 36%, of its investments in government securities, which are obligations of the United States. The maximum amount of investments that may be held in government securities is 100%.

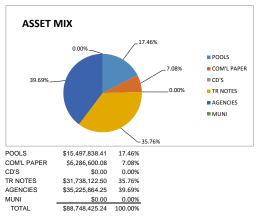
Investments in federal agencies total approximately \$35.2 million, or 40%, of the City's investments. The maximum amount of the portfolio that may be invested in federal agencies is 75%.

The Investment Policy requires that the average maturity of the portfolio may not exceed two and one-half years. The current average maturity of the portfolio is .85 years.

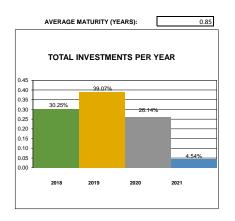
CITY OF BIRMINGHAM GENERAL INVESTMENT PORTFOLIO SUMMARY

9/30/2018

	MATURITY							CURRENT	YEARLY	% OF
YEAR	DATE	DESCRIPTION	% YIELD	*	ISSUER	PAR VALUE	COST	MARKET VALUE	TOTAL	70TAL
2018	9/30/2018	CLASS POOL	2.170%	CITY	MICHIGAN CLASS	2,082,889.76	2,082,889.76	2,082,889.76	TOTAL	TOTAL
2016										
	9/30/2018	J FUND	1.872%	CITY	COMERICA BANK	13,414,948.65	13,414,948.65	13,414,948.65		
	10/28/2018	AGENCY	1.257%	INSIGHT	FNMA/MIZUHO SECURITIES	2,000,000.00	1,999,600.00	1,970,000.00		
	10/30/2018	AGENCY	2.000%	INSIGHT	FHLB	1,500,000.00	1,500,000.00	1,464,030.00		
	10/31/2018	TR NOTE	1.250%	INSIGHT	U.S.	1,000,000.00	1,003,046.88	999,340.00		
	11/1/2018	AGENCY	1.010%	INSIGHT	FFCB	2,000,000.00	1,998,418.00	1,997,960.00		
	11/13/2018	COM'L PAPER	1.400%	INSIGHT	J.P. MORGAN SECURITIES LLC	1,500,000.00	1,481,800.01	1,499,301.29		
	12/14/2018	AGENCY	2.170%	INSIGHT	FNMA	1,175,000.00	1,172,274.00	1,172,344.50		
	12/15/2018	TR NOTE	2.051%	INSIGHT	U.S.	1,250,000.00	1,242,578.13	1,247,587.50		
	12/31/2018	TR NOTE	1.030%	INSIGHT	U.S.	1,000,000.00	1,015,000.00	998,180.00		
	,,					_,,,	_,,	555,.55.55	26,846,581.70	30.25%
2019	1/25/2019	COM'L PAPER	2.440%	INSIGHT	CREDIT SUISSE SECURITIES USA LLI	1,500,000.00	1,487,495.00	1,488,003.33		
	1/31/2019	TR NOTE	1.050%	INSIGHT	U.S.	1,500,000.00	1,522,031.25	1,495,920.00		
	2/6/2019	COM'L PAPER	2.500%	INSIGHT	CP ING US FUNDING LLC	2,000,000.00	1,966,944.44	1,991,161.24		
	2/15/2019	TR NOTE	2.062%	INSIGHT	U.S.	1,500,000.00	1,510,136.72	1,514,572.12		
	2/15/2019	TR NOTE	2.111%	INSIGHT	U.S.	1,250,000.00	1,257,226.56	1,239,195.38		
	2/28/2019	TR NOTE	1.375%	INSIGHT	U.S.	2,000,000.00	2,020,625.00	1,991,800.00		
j	3/18/2019	AGENCY	1.514%	INSIGHT	FHLB	1,500,000.00	1,497,091.50	1,493,160.00		
	3/26/2019	COM'L PAPER	2.560%	INSIGHT	J.P. MORGAN SECURITIES LLC	1,325,000.00	1,308,134.22	1,308,134.22		
		AGENCY	1.090%	INSIGHT	FHLMC			992,930.00		
j	4/15/2019	TR NOTE		INSIGHT	U.S.	1,000,000.00	1,001,060.00			
	5/15/2019		2.347%			1,000,000.00	1,007,578.13	1,003,830.00		
	5/31/2019	TR NOTE	1.510%	INSIGHT	U.S.	1,500,000.00	1,499,765.63	1,490,100.00		
	6/14/2019	AGENCY	1.100%	INSIGHT	FHLB	1,000,000.00	1,015,560.00	993,700.00		
	6/15/2019	TR NOTE	2.501%	INSIGHT	U.S.	2,000,000.00	1,976,796.88	1,977,040.00		
	7/11/2019	AGENCY	1.075%	INSIGHT	FNMA	1,500,000.00	1,500,000.00	1,482,615.00		
	7/19/2019	AGENCY	1.023%	INSIGHT	FHLMC	1,500,000.00	1,493,850.00	1,480,260.00		
	8/15/2019	TR NOTE	2.558%	INSIGHT	U.S.	1,100,000.00	1,110,574.00	1,109,196.00		
	9/27/2019	AGENCY	1.193%	INSIGHT	FNMA	1,500,000.00	1,497,000.00	1,477,350.00		
	9/30/2019	TR NOTE	1.356%	INSIGHT	U.S.	1,750,000.00	1,764,150.39	1,734,285.00		
	10/21/2019	AGENCY	1.626%	INSIGHT	FHLB	1,500,000.00	1,496,295.00	1,481,925.00		
	10/28/2019	AGENCY	1.360%	INSIGHT	FFCB	1,500,000.00	1,497,300.00	1,479,885.00		
	11/15/2019	TR NOTE	2.531%	INSIGHT	U.S.	1,450,000.00	1,465,406.25	1,459,534.23		
	11/15/2019	TR NOTE	2.673%	INSIGHT	U.S.	2,000,000.00	2,015,631.70	2,015,547.27		
	12/31/2019	TR NOTE	1.385%	INSIGHT	U.S.	1,000,000.00	1,007,226.56	986,640.00		
		TR NOTE								
	12/31/2019	IK NOTE	1.377%	INSIGHT	U.S.	1,000,000.00	1,008,787.77	986,640.00	34,673,423.79	39.07%
2020	1/17/2020	AGENCY	1.459%	INSIGHT	FHLMC	1,750,000.00	1,751,680.00	1,722,700.00	34,073,423.73	33.0776
2020	1/21/2020	AGENCY	1.084%	INSIGHT	FNMA	1,500,000.00	1,526,535.00	1,478,655.00		
	1/29/2020	AGENCY	2.721%	INSIGHT	FHLB	1,000,000.00	988,229.66	985,590.00		
	2/15/2020	TR NOTE	2.733%	INSIGHT	U.S.	2,000,000.00	2,024,147.33	2,023,200.00		
	3/27/2020	AGENCY	1.010%	INSIGHT	FNMA	2,000,000.00	2,044,860.00	1,967,400.00		
	3/31/2020	TR NOTE	1.448%	INSIGHT	U.S.	1,000,000.00	997,773.44	979,690.00		
	4/6/2020	AGENCY	1.396%	INSIGHT	FFCB	1,500,000.00	1,507,725.00	1,473,600.00		
	4/30/2020	TR NOTE	2.784%	INSIGHT	U.S.	1,000,000.00	993,671.88	993,710.00		
j	5/8/2020	AGENCY	1.166%	INSIGHT	FHLMC	2,000,000.00	2,026,400.00	1,961,280.00		
]	6/30/2020	AGENCY	1.300%	INSIGHT	FNMA	1,500,000.00	1,500,000.00	1,462,500.00		
j	7/31/2020	TR NOTE	2.798%	INSIGHT	U.S.	2,000,000.00	1,993,756.70	1,993,440.00		
	10/13/2020	AGENCY	1.398%	INSIGHT	FFCB	1,325,000.00	1,322,018.75	1,285,819.75		
j	10/26/2020	AGENCY	1.762%	INSIGHT	FFCB	1,500,000.00	1,499,490.00	1,467,060.00		
j	11/30/2020	AGENCY	1.224%	INSIGHT	FNMA	2,000,000.00	2,021,902.00	1,943,800.00		
	12/31/2020	TR NOTE	1.601%	INSIGHT	U.S.	1,500,000.00	1,507,382.81	1,464,375.00		
L l		<u> </u>							23,202,819.75	26.14%
2021	2/15/2021	TR NOTE	2.856%	INSIGHT	U.S.	2,000,000.00	2,043,121.51	2,034,300.00		
]	2/23/2021	AGENCY	2.791%	INSIGHT	FFCB	2,000,000.00	1,995,800.00	1,991,300.00		
]		1								
		1								
		1							4,025,600.00	4.54%
	_		1.794%			89,372,838.41	89,581,716.51	88,748,425.24	88,748,425.24	100.00%



COMPARATIVE RETURNS								
City Portfolio 1-Yr TR 2-Y								
Current Month	1.79%	2.52%	2.64%					
Previous Month	1.63%	2.52%	2.64%					
1 Year Ago	1.11%	1.20%	1.32%					



* INSIGHT:	\$73,250,586.83	82.54%
*ASSIGNED TO CITY:	\$15,497,838.41	17.46%
•	\$88,748,425.24	100.00%



MEMORANDUM

Finance Department

DATE: October 19, 2018

TO: Joseph A. Valentine, City Manager

FROM: Mark Gerber, Director of Finance/Treasurer

SUBJECT: First Quarter Financial Reports

Background

Chapter 7, section 3(b) of the City charter requires the Director of Finance to report on the condition of the City quarterly. Quarterly reports are prepared for the first 3 quarters of the year with the annual audit serving as the 4th quarter report. Only the following funds are reported quarterly because by state law they require a budget: General Fund, Greenwood Cemetery Perpetual Care Fund, Major and Local Street Funds, Solid Waste Fund, Community Development Block Grant Fund, Law and Drug Enforcement Fund, Baldwin Public Library Fund, Principal Shopping District Fund, Brownfield Redevelopment Authority Fund, Triangle District Corridor Improvement Authority Fund, and the Debt Service Fund.

Overview

Attached is the first quarter 2018-2019 fiscal year financial reports. The reports compare budget to actual for the current fiscal year and the prior fiscal year for the same quarter. This allows comparisons between fiscal years as well as percentage of budget received/spent for the year. The budget categories used for each fund are the same ones approved by the Commission when they adopted the budget. Budget discussions that follow will focus on each fund individually.

At this point, 25% of the fiscal year has lapsed.

General Fund

Overall, the activity in the General Fund for fiscal year 2018-2019 is comparable to the prior fiscal year. Revenues are approximately \$1,800,000 higher than last year as a result of an increase in property tax revenue, building permits and fines and forfeitures. The increase in property tax revenue of approximately \$1,350,000 is primarily the result of an increase in taxable value from the prior year. Licenses and Permits are up approximately \$235,000 from the previous year primarily as a result of large commercial permit fees received in the first quarter of 2018-2019 compared to 2017-2018. Fines and forfeitures have increased in 2018-2019 as a result of the 48th District Court distributing court revenue on a monthly basis versus on a quarterly basis in 2017-2018.

Current year expenditures in total for the General Fund are approximately \$1,250,000 higher than the prior year. Public Safety is approximately \$235,000 higher than the prior year as a result of increase in personnel costs and equipment maintenance costs. Transfers Out is approximately \$800,000 higher than the previous year as a result of higher budgeted transfers to other funds and higher 48th District Court funding levels.

Greenwood Cemetery Fund

Quarterly revenue from cemetery plot sales was not received until after September 30th. No expenditures have been made so far this fiscal year.

Major Street Fund

Total revenues are approximately the same as the previous year. Intergovernmental is approximately \$88,000 lower as a result of receiving October 2017's payment in September 2017. Transfers In increased approximately \$100,000 as a result of a budgeted increase in funding from the General Fund for this fund.

Overall expenditures are similar to the previous fiscal year. Maintenance of Roads and Bridges is approximately \$75,000 higher than the previous year due to cape seal work.

Local Street Fund

Total revenues for the year are approximately \$40,000 more than the prior year as a result of a increase in transfers from the General Fund (\$75,000) which was partially offset by a decrease in Intergovernmental revenue due to receiving October 2017's payment from the state in September 2017 (\$37,000).

Total expenditures are approximately \$210,000 more than the prior year mainly as a result of an increase in Maintenance of Roads and Bridges of \$235,000. The increase is the result of cape seal work performed.

Solid Waste Fund

Revenues are comparable to the prior fiscal year.

Expenditures are approximately \$85,000 more than the previous year. This is the result of one more payment being processed to SOCRRA in FY 2018-2019 than in FY 2017-2018 through September 30^{th} .

Brownfield Redevelopment Authority Fund

Revenues are approximately \$280,000 higher compared to the prior year as a result of an increase in taxable values captured.

Expenditures are approximately the same as the prior fiscal year.

Principal Shopping District

Total revenues and expenditures are comparable to the previous fiscal year.

Community Development Block Grant Fund

Expenditures are higher in the current fiscal year as a result of work performed on the exterior ADA door to the police department.

Triangle District Corridor Improvement Authority

Development opportunities are ongoing with private land owners and developers in the Triangle District.

Law and Drug Enforcement Fund

Expenditures are higher in the current fiscal year as a result of new laptop computers and radar units for patrol cars.

Baldwin Library

Revenue has increased approximately \$137,000. This is the result of an increase in the property tax revenue as a result of an increase in taxable value.

Expenditures are approximately \$94,000 higher than the prior fiscal year as a result of architectural fees and library materials (books and online services).

Debt Service Fund

Revenues and expenditures are slightly lower as a result of scheduled debt service costs for the year compared to the previous year. Expenditures are at 92% spent for the year as a result of making a principal payment in September.

QUARTERLY BUDGET REPORT

GENERAL FUND

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

		2018-2019			2017-2018	
	AMENDED	YEAR-TO-DATE	% OF BUDGET	AMENDED	YEAR-TO-DATE	% OF BUDGET
	BUDGET	ACTUAL	USED	BUDGET	ACTUAL	USED
		•	•	•	•	•
REVENUES:						
USE OF FUND BALANCE	-	-	0%	483,050	-	0%
TAXES	24,941,490	24,903,918	100%	23,591,500	23,562,127	100%
LICENSES AND PERMITS	3,173,150	778,294	25%	3,134,260	540,650	17%
INTERGOVERNMENTAL	2,130,740	4,485	0%	2,014,620	56,188	3%
CHARGES FOR SERVICES	3,356,410	686,766	20%	2,873,130	639,227	22%
FINES AND FORFEITURES	1,838,990	303,251	16%	1,744,940	100,313	6%
INTEREST AND RENT	398,230	91,645	23%	294,290	46,975	16%
OTHER REVENUE	536,410	7,260	1%	108,090	27,966	26%
TRANSFERS IN	100,000	25,000	25%	100,000	25,000	25%
TOTAL REVENUES	36,475,420	26,800,619	<u>73</u> %	34,343,880	24,998,446	<u>73</u> %
EXPENDITURES:						
GENERAL GOVERNMENT	5,959,170	1,100,388	18%	5,503,600	1,016,982	18%
PUBLIC SAFETY	13,666,220	3,058,895	22%	12,559,870	2,822,833	22%
COMMUNITY DEVELOPMENT	3,437,110	615,027	18%	3,390,720	564,176	17%
ENGINEERING AND PUBLIC SERVICES	4,902,753	1,039,744	21%	6,183,120	952,009	15%
TRANSFERS OUT	8,510,150	2,498,408	29%	6,706,570	1,703,301	25%
TOTAL EXPENDITURES	36,475,403	8,312,462	23%	34,343,880	7,059,301	<u>21</u> %

QUARTERLY BUDGET REPORT GREENWOOD CEMETERY FUND

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019					2017-2018		
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED] .	BUDGET	ACTUAL	USED	
REVENUES:								
CHARGES FOR SERVICES	80,000	-	0%		200,000	-	0%	
INTEREST AND RENT	12,000	3,510	29%		11,600	2,474	21%	
TRANSFERS IN			0%		20,000	20,000	100%	
TOTAL Revenues	92,000	3,510	4%		231,600	22,474	10%	
EXPENDITURES:								
OTHER CONTRACTUAL SERVICE			0%		20,000		0%	
TOTAL EXPENDITURES						_		

QUARTERLY BUDGET REPORT

MAJOR STREETS

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019			2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET	AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED	BUDGET	ACTUAL	USED	
REVENUES:							
USE OF FUND BALANCE	-	-	0%	1,096,260	-	0%	
INTERGOVERNMENTAL	1,205,910	135,268	11%	1,397,260	223,868	16%	
INTEREST AND RENT	12,980	8,312	64%	8,100	3,617	45%	
OTHER REVENUE	1,850	-	0%	56,370	200	0%	
TRANSFERS IN	2,500,000	625,000	25%	2,100,000	525,000	25%	
TOTAL REVENUES	3,720,740	768,580	21%	4,657,990	752,685	16%	
			_			_	
EXPENDITURES:							
ADMINISTRATIVE	18,980	6,578	35%	18,200	6,355	35%	
TRAFFIC CONTROLS & ENGINEERING	405,350	50,095	12%	710,520	24,873	4%	
CONSTRUCTION OF ROADS & BRIDGES	1,209,770	135,874	11%	2,795,110	191,938	7%	
MAINTENANCE OF ROADS & BRIDGES	454,580	131,874	29%	377,140	58,483	16%	
STREET CLEANING	156,840	45,317	29%	173,690	46,937	27%	
STREET TREES	255,670	40,856	16%	241,870	45,981	19%	
SNOW AND ICE REMOVAL	322,820	11,399	4%	341,460	12,148	4%	
TOTAL EXPENDITURES	2,824,010	421,993	<u>15</u> %	4,657,990	386,715	<u>8</u> %	

QUARTERLY BUDGET REPORT

LOCAL STREETS

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019			2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET	AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED	BUDGET	ACTUAL	USED	
REVENUES:							
USE OF FUND BALANCE	-	-	0%	669,505	-	0%	
INTERGOVERNMENTAL	492,550	54,966	11%	513,498	92,002	18%	
INTEREST AND RENT	35,030	7,796	22%	36,330	2,624	7%	
OTHER REVENUE	644,970	2,525	0%	396,000	5,284	1%	
TRANSFERS IN	2,500,000	625,000	25%	2,200,000	550,000	25%	
TOTAL REVENUES	3,672,550	690,287	19%	3,815,333	649,910	17%	
			_			-	
EXPENDITURES:							
ADMINISTRATIVE	26,730	8,515	32%	25,600	8,205	32%	
TRAFFIC CONTROLS & ENGINEERING	70,020	19,299	28%	68,990	16,199	23%	
CONSTRUCTION OF ROADS & BRIDGES	1,294,270	30,324	2%	1,497,903	48,621	3%	
MAINTENANCE OF ROADS & BRIDGES	1,063,190	456,188	43%	1,294,160	221,281	17%	
STREET CLEANING	178,580	49,527	28%	240,940	43,284	18%	
STREET TREES	517,350	104,628	20%	498,640	120,510	24%	
SNOW AND ICE REMOVAL	181,670	9,790	5%	189,100	9,615	5%	
TOTAL EXPENDITURES	3,331,810	678,271	<u>20</u> %	3,815,333	467,715	<u>12</u> %	

QUARTERLY BUDGET REPORT

SOLID WASTE

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019			2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET	AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED	BUDGET	ACTUAL	USED	
REVENUES:							
USE OF FUND BALANCE	78,370	-	0%	85,720	-	0%	
TAXES	1,875,000	1,880,043	100%	1,820,000	1,824,964	100%	
INTERGOVERNMENTAL	4,450	-	0%	4,500	-	0%	
CHARGES FOR SERVICES	17,600	4,991	28%	9,600	4,538	47%	
INTEREST AND RENT	20,890	3,822	18%	14,460	1,899	13%	
OTHER REVENUE	-		0%		25	0%	
TOTAL REVENUES	1,996,310	1,888,856	<u>95</u> %	1,934,280	1,831,426	<u>95</u> %	
EXPENDITURES:							
PERSONNEL COSTS	162,820	19,245	12%	152,320	19,057	13%	
SUPPLIES	12,000	948	8%	10,000	790	8%	
OTHER CHARGES	1,806,490	351,474	19%	1,761,960	268,381	15%	
CAPITAL OUTLAY	15,000	900	6%	10,000	663	7%	
TOTAL EXPENDITURES	1,996,310	372,567	<u>19</u> %	1,934,280	288,891	<u>15</u> %	

QUARTERLY BUDGET REPORT

BROWNFIELD REDEVELOPMENT FUND

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017 % OF FISCAL YEAR COMPLETED: 25%

		2018-2019			2017-2018				
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET		
	BUDGET	ACTUAL	USED] [BUDGET	ACTUAL	USED		
REVENUES:									
USE OF FUND BALANCE	-	-	0%		-	-	0%		
TAXES	609,040	609,040	100%		328,500	328,500	100%		
CHARGES FOR SERVICES	1,500	-	0%		3,000	-	0%		
INTEREST AND RENT	1,620	924	57%		1,130	370	33%		
OTHER REVENUE	20,000	1,685	8%		20,600	3,068	15%		
TRANSFERS IN			0%				0%		
TOTAL REVENUES	632,160	611,649	<u>97</u> %		353,230	331,938	<u>94</u> %		
EXPENDITURES	531.760	15.614	3%		329.460	12.530	4%		

QUARTERLY BUDGET REPORT

PRINCIPAL SHOPPING DISTRICT

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019			_	2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED		BUDGET	ACTUAL	USED	
REVENUES:								
USE OF FUND BALANCE	116,300	-	0%		204,140	-	0%	
SPECIAL ASSESSMENTS	897,300	600	0%		901,970	-	0%	
INTEREST AND RENT	6,390	1,863	29%		3,900	820	21%	
OTHER REVENUE	190,000	63,371	33%		190,000	88,812	47%	
TOTAL REVENUES	1,209,990	65,834	<u>5</u> %		1,300,010	89,632	<u>7</u> %	
EXPENDITURES	1,209,990	296,010	24%		1,300,010	256,320	20%	

QUARTERLY BUDGET REPORT

COMMUNITY DEVELOPMENT BLOCK GRANT

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019				2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED		BUDGET	ACTUAL	USED	
INTERGOVERNMENTAL REVENUE	32,020	1,244	<u>4</u> %		32,020	4,745	<u>15</u> %	
EXPENDITURES	32,020	32,401	101%		32,020	4,745	<u>15%</u>	

QUARTERLY BUDGET REPORT

TRIANGLE DISTRICT CORRIDOR IMPROVEMENT AUTHORITY QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019				2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED		BUDGET	ACTUAL	USED	
REVENUES: USE OF FUND BALANCE PROPERTY TAXES INTEREST AND RENT	- - 290	- - - 60	0% 0% 21%	•	- - 100	- - - 28	0% 0% 28%	
TOTAL REVENUES	290	60	21%		100	28	28%	
EXPENDITURES	-	-	<u>0%</u>		-	-	<u>0%</u>	

QUARTERLY BUDGET REPORT

LAW & DRUG ENFORCEMENT FUND

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019				2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED		BUDGET	ACTUAL	USED	
REVENUES:								
USE OF FUND BALANCE	26,200	-	0%		-	-	0%	
FINES & FORFEITURES	35,000	-	0%		35,000	-	0%	
INTEREST AND RENT	1,620	368	23%		-	-	0%	
OTHER REVENUE		2,750	0%		1,020	176	17%	
TOTAL REVENUES	62,820	3,118	<u>5</u> %		36,020	176	<u>0</u> %	
EXPENDITURES:								
PUBLIC SAFETY	-	-	0%		-	-	0%	
CAPITAL OUTLAY	62,820	59,594	95%		5,950		0%	
TOTAL EXPENDITURES	62,820	59,594	<u>95</u> %		5,950		<u>0</u> %	

QUARTERLY BUDGET REPORT

BALDWIN LIBRARY

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019			_	2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET	
	BUDGET	ACTUAL	USED		BUDGET	ACTUAL	USED	
		•	•				•	
REVENUES:								
USE OF FUND BALANCE	-	-	0%		-	-	0%	
TAXES	3,234,870	3,249,944	100%		3,103,390	3,118,336	100%	
INTERGOVERNMENTAL	1,001,380	-	0%		978,610	-	0%	
CHARGES FOR SERVICES	82,600	22,485	27%		95,350	22,017	23%	
INTEREST AND RENT	36,920	6,773	18%		11,000	1,873	17%	
OTHER REVENUE			0%				0%	
TOTAL REVENUES	4,355,770	3,279,202	<u>75</u> %		4,188,350	3,142,226	<u>75</u> %	
			_				<u>—</u>	
EXPENDITURES	3,729,790	883,030	<u>24%</u>		3,483,320	788,692	<u>23%</u>	

QUARTERLY BUDGET REPORT

DEBT SERVICE FUND

QUARTER ENDED: SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2017

	2018-2019				2017-2018			
	AMENDED	YEAR-TO-DATE	% OF BUDGET		AMENDED	YEAR-TO-DATE	% OF BUDGET	
INTERGOVERNMENTAL	BUDGET	ACTUAL	USED] [BUDGET	ACTUAL	USED	
REVENUES:								
USE OF FUND BALANCE	-	-	0%		-	-	0%	
TAXES	1,579,260	1,579,299	100%		1,648,700	1,648,668	100%	
INTERGOVERNMENTAL	3,950	-	0%		4,000	-	0%	
INTEREST AND RENT	4,290	277	6%		2,990	1,179	39%	
TOTAL REVENUES	1,587,500	1,579,576	100%		1,655,690	1,649,847	100%	
EXPENDITURES	1,584,000	1,451,500	92%		1,650,950	1,492,950	90%	