MULTI-MODAL TRANSPORTATION BOARD THURSDAY, JUNE 6, 2019 6:00 PM CITY COMMISSION ROOM 151 MARTIN STREET, BIRMINGHAM

- 1. Roll Call
- 2. Introductions
- 3. Review of the Agenda
- 4. Approval of Minutes, Meeting of May 2, 2019
- 5. Smith and Cummings Stop Sign Request
- 6. Willits / Oakland and N. Old Woodward Pedestrian Improvements
- 7. Maple Road and Southfield Pedestrian Improvements
- 8. Meeting Open to the Public for items not on the Agenda
- 9. Miscellaneous Communications
- 10. Next Meeting July 11, 2019
- 11. Adjournment

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CITY OF BIRMINGHAM MULTI-MODAL TRANSPORTATION BOARD THURSDAY, MAY 2, 2019 City Commission Room 151 Martin Street, Birmingham, Michigan

Minutes of the regular meeting of the City of Birmingham Multi-Modal Transportation Board held Thursday, May 2, 2019.

Chairwoman Johanna Slanga convened the meeting at 6:03 p.m.

1. ROLL CALL

Present: Chairwoman Johanna Slanga, Vice-Chairwoman Lara Edwards; Board Members Daniel Rontal, Doug White; Alternate Board Member Daniel Isaksen; Student Representatives Chris Capone, Bennett Pompi

Absent: Board Members Amy Folberg, Katie Schafer, Joe Zane

Administration:	Jana Ecker, Planning Director
	Scott Grewe, Police Commander
	Paul O'Meara, City Engineer
	Laura Eichenhorn, Transcriptionist

Fleis & Vanderbrink ("F&V"):

Julie Kroll

Regional Transit Authority: Ben Stupka

SMART:

Robert Kramer

MKSK:

Brad Strader

- 2. Introductions (none)
- 3. Review Agenda (no change)
- 4. Approval of MMTB Minutes of March 7, 2019

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Motion by Mr. White Seconded by Dr. Rontal to approve the MMTB Minutes of March 7, 2019 as presented.

Motion carried, 5-0.

VOICE VOTE Yeas: White, Rontal, Slanga, Edwards, Isaksen Nays: None

5. Willits / Oakland and S. Old Woodward – Pedestrian Improvements

Assistant Planner Lauren Chapman presented the item.

City Engineer O'Meara stated that the Commission wanted the MMTB to study this intersection in terms of potential pedestrian improvements that could be made.

Vice-Chairwoman Edwards asked about potential changes in signal timing.

Ms. Kroll explained:

- There are leading pedestrian intervals (LPI) at this intersection, with a 10 second leading pedestrian interval for east-west crossing and a seven second leading pedestrian interval for north-south.
- The permissive protected left turn at this intersection is different from other Birmingham intersections. If a driver is trying to make a left turn on Willits to go north on Old Woodward, the driver would proceed with a protected green arrow requiring pedestrians to yield to the vehicle. When this light goes to red, the east-west LPI begins.
- At this point, there are often cars in the intersection because they expected the signal to turn into a flashing yellow arrow while it actually turns to a solid red. This leads to east-west pedestrian hesitation because they both see cars in the middle of the road and have a walk signal.
- There were some pedestrian-vehicle conflicts on the north side of the intersection, but the majority of pedestrians cross this intersection on the south side.
- A lagging left turn was evaluated as a possible solution, which would have had the 10 second LPI, followed by a flashing yellow, followed by a solid green. This configuration would have caused longer back-ups in the intersection.
- The F&V team then decided to focus on altering signal timing to make the biggest improvement, with the intention of improving specific parts of the intersection even further after that.
- This intersection is most challenging between 5:00 p.m. and 5:30 p.m. on weekdays. The rest of the time it works well. At this time the team is considering altering the signal timing

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during the peak 4:00 p.m.-6:00 p.m. timeframe, while leaving the LPIs intact other hours of the day.

- The various options available for improving the intersection are still being studied.
- When the bus stops at the stop adjacent the intersection, its latter half will remain in the intersection, effectively blocking part of the intersection.

City Engineer O'Meara concurred. He said that they are currently considering removing 10 feet from the northbound lane in order to provide enough room for the bus to sit and for traffic to pass. He said recommendations for how to update the signal timing would be available for the June 2019 meeting.

Mr. Isaksen suggested taking the hashed triangular wedge divider on southbound Old Woodward between the right turn lane and the straight traffic, removing ten feet, and creating a 60 foot crossing, which would be more tenable.

Dr. Rontal spoke in favor of that suggestion.

Mr. Isaksen said bump-outs are a great idea here.

Chairwoman Slanga noted that these were ideas for the future.

Vice-Chairwoman Edwards noted there was a lot of room on Oakland due to the current hashing as well, said she saw a lot of room for future improvements, and said she looked forward to hearing the signal timing recommendations.

6. 2019 Asphalt Resurfacing Program

City Engineer O'Meara presented the item.

Vice-Chairwoman Edwards said it would be good to have a survey regarding the bicycle connector route on the City website.

Dr. Rontal said increased signage designating the bicycle connector route would be beneficial. He also said he would like to see further plans for encouraging use and implementation of the bicycle connector route. He said he lives near the route as it passes through Emmonds, Catalpa, and Southlawn, and that there is no signage encouraging use of the route and notifying cyclists to its existence.

Planning Director Ecker said the improvements Dr. Rontal was talking about are part of phase two of the multi-modal plan, and that it will be addressed towards the beginning of that phase. For the building, painting, and signage, that would need to be included in the budget, the opportunity for which occurs annually. She said it would go in the Engineering budget.

City Engineer O'Meara said the budget request would be better phased over a few years, as opposed to in one year.

Chairwoman Slanga, summarizing the Board's views and concerns, asked Staff to come up with a recommended plan for implementation of all the bicycle information in the Multi-Modal Plan, and possibly a loose schedule.

City Engineer O'Meara emphasizes that Staff would want the Board's feedback on the pending bicycle recommendations as well in order to determine where the priorities are.

7. Board Training – Transit Oriented Development

Brad Strader from MKSK, Ben Stupka from the Regional Transit Authority (RTA), and Robert Kramer from SMART spoke to the Board. Mr. Kramer spoke on SMART service, the regular routes, and the FAST service. Mr. Strader spoke about transit-oriented development (TOD), some examples of TOD, and how it relates to Birmingham such as how development, design, and density effect the viability of different types of transit. Mr. Stupka talked about the change from TOD to mobility-oriented development.

Mr. Kramer, Deputy General Manager at SMART, reviewed the routes that pass through Birmingham. He explained that the FAST bus serves communities with more use and investment in the service, and skips other communities that have not invested in the service in order to provide a higher quality of service overall. Birmingham will be getting enhanced FAST bus shelters that will have 'Next Bus Arrival' screens, and more substantial financial investment in those stops. Focusing investment along nodes that are transit supportive has been successful, with the utilization of the FAST Woodward line up 50% over the year prior. Some of the ways SMART would alter its service in order to be more supportive of TOD are:

- Altering the routes in small ways in order to pass through more densely populated areas with more walkable amenities, which will generate increased ridership and in turn generate more walkable, dense development.
- Increasing the comfort provided at the stops, including the example of the 'Next Bus Arrival' screens at the FAST shelters.
- Expanding or shortening routes in order to better accommodate the locations of higher demand.

Mr. Kramer continued:

- SMART is currently undergoing operations analysis to determine how best to connect riders to the major routes.
- The service quality of some of the minor routes may not be ideal, he also noted that sometimes those minor routes are the only ways people in those areas have to get around, so route changes are being considered with great caution.
- Increasing the accessibility and rider volume of the major routes can be an engine of economic and walkable development in the areas those routes pass through.
- The aim is to redeploy SMART's resources to increase bus frequency on more heavily used routes, and to use other resources to keep bus accessibility open for people who rely significantly on what were previously lower-quality routes.
- Adding more frequent buses to the most commonly used routes will also be supportive of TOD.
- SMART is working with MDOT to develop signal priority implementation which would include connected vehicle infrastructure. This would allow green lights to stay green longer

or turn green earlier if a bus is running behind schedule.

- SMART is looking at constructing Park-and-Ride facilities along the FAST corridors, which he conceded is somewhat opposite to TOD but still supports a better level of service.
- SMART is also looking for ways to collaborate with other transit businesses and models in the area, such as ride-sharing, as well.
- It takes about 40 minutes to get from Birmingham to Hart Plaza in downtown Detroit. The FAST service is about 15% faster than the local service. It ends up being about 5-7 minutes longer than driving.
- SMART and DDOT unveiled a unified payment system called DART on May 1, 2019, allowing for passes of 4-hour, 24-hour, 7-day and 31-day increments which would eliminate transfer charges and streamline fare options.
- SMART has found Birmingham is very responsive to bus-related suggestions, and that there is an open line to the City. SMART works on demarcating bus stops clearly and locating them in locations that are as safe for pedestrians as possible.

Planning Director Ecker noted that SMART has also been very responsive to Birmingham's requests about topics such as bus shelter customization or similar matters.

Brad Strader from MKSK defined TOD as development that typically is very pedestrian-, transit-, and bicycle-oriented, and less car oriented. It is typically mixed-use and higher density so that the local transit is used throughout the day, instead of only during rush hour, for instance. He continued:

- Maintaining a mixture of uses along the transit line is good in addition to maintaining mixed-use developments in single spots along the transit line.
- Reduction in parking needs have been more subtle than some planners anticipated because people prefer the flexibility of having a car, but TOD does yield some reduction in parking necessity.
- Some of the benefits include more transit options for younger individuals and independent seniors looking for alternatives to single occupant vehicles and development closer to high-quality transit has a higher value. While the tendency towards higher property values near TOD is more true in larger urban areas, the trend is also starting to appear in parts of Michigan as well.
- TOD depends on a municipality's transit-oriented goals. Some of the possible reasons for TOD include building ridership, economic development, creating higher density living which can reduce both housing and transportation costs, getting people healthier through walking and bicycling, and shifting the primary transit modalities used.
- TOD can vary depending on the type of roadway, type of development, and type of community.
- TOD requires many stakeholders to be involved from both the public and private sectors. Developers need to see that there is a return on investment, and might be hesitant to do TOD if they anticipate a stop or station might move in a year. Birmingham would need to work with MDOT to make changes in the MDOT right of way and with transit agencies like the RTA and SMART to create viable TOD.
- Mr. Stupka has been able to meet with developers in his RTA capacity to explain, for instance, how developments can meet the needs of major employers and make using transit more convenient for the employees.
- Factors which influence transit usage include proximity, convenience, quality of the bus stop and amenities, travel time reliability, and the permanence of a stop or station.

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- Fast bus services encourage more TOD than a regular bus line, bus rapid transit or exclusive bus lanes encourage more TOD than fast bus services, street car encourages more TOD than bus rapid transit. Commuter rail can vary from a purely park-and-ride situation to the impetus for a lot of development.
- One way of approaching TOD is determining objectives, coming up with a plan to be implemented over a period of time, looking at code and development issues, and continuing to enhance transit as density and quality of development increases.
- The Woodward Avenue Action Association (WA3) has been an advocate in the local area towards encouraging TOD along Woodward.

Mr. Strader then reviewed a number of case studies, and advised the Board that Planning Director Ecker had the presentation should Board Members want to review those examples further.

Planning Director Ecker said that Cleveland's TOD was a particularly compelling example to compare to Birmingham, and that in some areas along its recent transit development it looked strikingly like the Woodward Corridor.

Ben Stupka from RTA explained that mobility-oriented development (MOD) explores how different modes of transportation access the major transit corridors and how development fits into that. The RTA is currently developing a study looking at MOD along Woodward and along the Ann Arbor-Detroit Rail Corridor. He continued that the RTA is also looking at some potential pilots to parlay some of its resources into an Uber- or Lyft-style on-demand service for individuals living in the lower density areas.

In reply to Planning Director Ecker's question, Mr. Stupka explained that the RTA is working on regional transit via considering another ballot initiative in 2020 and renewing its master plan to determine what the values and priorities are around regional transit. Determining the ideals and values around regional transit allows the RTA to inspire people, maintain flexibility, accommodate different funding outcomes, and better incorporate stakeholders' objectives. The RTA is also working on its coordinated service plan for seniors and people with disabilities, which would allow on-demand services for qualifying people under the ADA. There are over 100 non-profits, community services, and other providers in the region offering similar resources to seniors and disabled people, and the RTA is trying to figure out how to better coordinate those efforts. Newer technologies for fare-paying across transit are also being explored. MDOT also gave the RTA a grant to work on centralizing booking for ADA services.

Chairwoman Slanga said she looked forward to further hearing about how Birmingham's planning decisions could better connect the City with the surrounding communities. She then thanked Mr. Kramer, Mr. Strader, and Mr. Stupka for their presentations.

Planning Director Ecker thanked Mr. Kramer, Mr. Strader, and Mr. Stupka as well.

8. Meeting Open to the Public for items not on the Agenda

9. Miscellaneous Communications

City Engineer O'Meara explained a resident in the West Maple-Chesterfield area would like to see a crossing area in front of the First United Methodist Church, which previously went unendorsed Multi-Modal Transportation Board Proceedings May 2, 2019

by the MMTB and the Commission due to residents' comments at the public hearing requesting it not be installed.

City Engineer O'Meara said he was inclined to ask the resident in support of the crossing area for more positive feedback from residents before the MMTB would pursue the issue further.

10. Next Meeting – June 6, 2019

11. Adjournment

No further business being evident, the board members adjourned at 7:32 p.m.

Jana Ecker, Planning Director

Paul O'Meara, City Engineer

City of	Birmingham	MEMORANDUM
DATE:	March 25, 2019	
то:	Multi-Model Transportation Board	
FROM:	Jana L. Ecker, Planning Director Cmdr. Scott Grewe, Police Departmen Paul T. O'Meara, City Engineer	t
SUBJECT:	Smith and Cummings Stop Sign Reque	est

The City has received a complaint from Anthony Long (1080 Smith) regarding the intersection of Smith and Cummings. Mr. Long has requested this intersection become a four way stop due to many close calls.

Mr. Long referenced (Picture attached) an accident that took place on December 13th and expressed concern over the location of the bus stop. His concern was over what could have happened had this accident happened while children where at the location waiting for the bus (See attached accident report). This accident was the result of a driver failing to yield to opposing traffic after stopping at a stop sign already in place.

Traffic count studies were reviewed (attached) as well as accident data. The last 10 years of accident data was reviewed and two reports were located (attached).

Based on the information obtained and the complaints received the City's engineering traffic consultants, Fleis and Vandenbrink, were contacted and asked to review the intersection. See their attached report. F&V stated the results of their study indicated a Multi-Way Stop Control was not warranted or recommended at this time.

Suggested Recommendation:

To deny the request to add a Multi-Way Stop at the intersection of Smith and Cummings.



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		VIA EMAIL
То:	Cmdr. Scott Grewe, Operations Commander Birmingham Police	
From:	Julie M. Kroll, PE, PTOE Jacob J. Swanson, EIT Fleis & VandenBrink Engineering	
Date:	March 20, 2019	
Re:	Smith Ave. and Cummings Ave. Multi-Way Stop Evaluation	

Fleis & VandenBrink (F&V) staff is pleased to present this memorandum to the City Birmingham for your use evaluating the recommended signing for the intersection of Smith Avenue and Cummings Avenue. This study was performed to determine what intersection control should be provided at the study intersection.

The guidance regarding regulatory traffic measures is provided in the *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)* Sections 2B.04, 2B.06, and 2B.07. Additional information is provided in the American Association of State Highway and Transportation Officials (AASHTO) *Geometric Design of Highway and Streets (Green Book)*. F&V referenced the *MMUTCD* and additional documents to evaluate the existing intersection conditions and develop a recommendation. The results of the analysis and the recommendations are included herein.

INTERSECTION CONTROL ANALYSIS

The study intersection of Smith Avenue and Cummings Avenue is a four-leg intersection with stop-control on the Cummings Avenue approaches. Due to a recent crash occurring at this intersection, residents have requested that the intersection be converted to an all-way stop control. Section 2B.07 of the *MMUTCD* provides a set of criteria to evaluate in order to determine when the installation of multi-way stop should be considered at an intersection. The criterion encompassed in this section includes the evaluation of the following: Crash History, Traffic Volumes, and Sight Distance. The analysis is summarized below.

CRASH HISTORY

Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions. Not met.

The Birmingham Police Department (BPD) performed a crash analysis for the study intersection and collected the most recent 10-years of available data. The results of the analysis showed two crashes in 10 years; 2009 and 2018. Both crashes were angle type crashes, which resulted from vehicles on Cummings Avenue (stop-controlled) "failing to yield right-of-way" to the vehicle on the Smith Avenue. Essentially, vehicles not stopping at the existing stop signs.

TRAFFIC VOLUMES

- A. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour, for any 8 hours of an average day.
- B. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but

C. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

When no single criterion is satisfied, but where Criteria A, B, and the Crash Criteria are all satisfied to 80 percent of the minimum values. Criterion C is excluded from this condition. Not met.

The BPD collected traffic volume data in 2016 along Smith Avenue, with a maximum of 301 vehicles per day; therefore, the traffic volumes for **Criterion A** fall well below the given thresholds. There is no available vehicular/pedestrian volume data for Cummings Avenue; however, based upon the observed volumes for the major street (Smith Avenue), it was assumed that the volumes for **Criterion B** would fall below the thresholds.

SPEED DATA

The speed limit for Smith Avenue and Cummings Avenue is 25 mph; however, people will drive the speed that they feel is "comfortable" for the roadway and is dependent on several factors (road condition, width, set-back, lane width, etc.). Therefore, engineers use the 85th percentile speed as a guide to set the speed limit to provide a safe speed and to promote uniform traffic flow along a corridor. The 85th percentile speed is the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions past a monitored point.

Existing speed data was collected by the Birmingham Police Department, on Tuesday-Friday, August 30, 2016 – September 2, 2016 along Smith Avenue between Grant Street and Cummings Avenue. The speed data is summarized below, and the detailed speed data are attached.

85TH PERCENTILE SPE	EDS (MPH)		
Count Location	EB	WB	Combined
Smith Avenue (Grant Street to Cummings Avenue)	21	22	22

The results of the analyses show that the 85th percentile speeds are lower than the posted speed limit and are within the typical range for a residential neighborhood. The evaluation was completed assuming a conservative 85th percentile speed of 25 mph; therefore, the 70% volume evaluation for **Criterion C** was not applied.

SIGHT DISTANCE

Other criteria that may be considered in an engineering study:

Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop. Not met.

To evaluate the sight distance criterion, F&V conducted an evaluation of the corner clearance for the intersection of Smith Avenue and Cummings Avenue, and compared existing conditions to the requirements for corner clearance outlined in the AASHTO *Green Book*.

The intersection sight distance evaluation was completed assuming an 85th percentile speed of 25 mph and the sight distance triangles are shown on the attached figure. The evaluation indicates that the study intersection of Smith Avenue and Cummings Avenue has the necessary intersection corner clearance to operate as a minor stop-controlled intersection.



SUMMARY

The results of the analysis show that multi-way stop intersection control is not warranted for the intersection of Smith Avenue and Cummings Avenue. The analysis results are summarized below.

Multi-Way Stop	Sign Criterion (MMUTCD Section 2B.07)	Met?
Crashes	Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.	No
Traffic Volumes	 A. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day. B. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but C. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2. When no single criterion is satisfied, but where Criteria A, B, and the Crash Criteria are all satisfied to 80 percent of the minimum values. Criterion C is excluded from this condition. 	No
Other Criteria	Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.	No
Multi-Way Stop	Control Recommended	No

RECOMMENDATIONS

- 1. Based on the results of this study, Multi-Way Stop Control is <u>not warranted or recommended</u> at the intersection of Smith Avenue and Cummings Avenue.
- 2. If the conditions and crash patterns at the study intersection changes, the City should consider reevaluating the intersection to determine if changes to the traffic control measures are warranted and recommended.

If you have any questions or concerns regarding this engineering analysis, please contact our office.

JJS2:jmk



3/25/2019

On Fri, Dec 14, 2018 at 7:49 AM Long, Anthony J. along@howardandhoward.com> wrote: Dear Mayor Bordman and Mr. Valentine,

I am a 20+ year Birmingham resident. I built a home at the corner of Smith & Cummings six years ago. Since that time I have witnessed or heard many close calls of accidents at this intersection. Even the carpenters who were building my house in 2012 commented that a 4-way stop sign was needed after witnessing what was going on at the intersection.

Over the past 5 years I have asked the City Government of Birmingham, MI to put a four way stop at this intersection. Despite many close calls, horns and screeching tires, the City has consistently denied my numerous requests saying their "traffic study" showed a four way stop was not needed.

See picture below. This accident happened yesterday morning at the intersection. Where the BMW is sitting is the exact spot where the neighborhood kids, including mine, wait for the school bus. 30 mins earlier and the car would have plowed into the group of 8-10 kids.

Can we please get a four way stop at this intersection (or do we actually need to have a group of children waiting for the school bus hit by a car first)? I sincerely hope not!

Thank you for your consideration.

Anthony Long (1080 Smith Ave., Birmingham, MI) 3/25/2019

On Sun, Dec 16, 2018 at 8:56 PM Long, Anthony J. <<u>along@howardandhoward.com</u>> wrote: Mr. Valentine,

Thank you for your email and prompt response. Last Thursday could have had a much different outcome if the accident had occurred 30 mins earlier, while the kids were waiting for the school bus. I think we have the luxury of a warning without injuries.

My two cents.....

We have way too many cars cutting through from 14 mile to Woodward and vice versa. That being said, I have had more than a handful of close calls at this intersection and I live there! Too many cars parked on Smithmask a fast moving car, or the car appears parked, only to then be right on you as you start to proceed through the intersection.

Some suggestions:

1. Four way stop sign at Smith & Cummings, as requested.

2. Move the bus pickup to the middle of Cummings rather than the corner.

3. Parking on only one side of Smith near the intersection (and I say this as a potential imposition to me personally, as I live on the corner. But I would happily trade convenience for safety).

4. Post no thru traffic signs at Cummings and 14 mile and Woodward and Smith.....add some enforcement and perhaps we can curb the cut through problem.

Just some suggestions.

Thanks again for your attention to this matter.

Regards

Anthony Long



From: Scott Grewe <<u>Sgrewe@bhamgov.org</u>> Sent: Monday, February 25, 2019 11:03 AM To: Long, Anthony J. <along@HowardandHoward.com> Subject: Re: Simth & Cummings

Mr. Long,

Just following up with you as I have not heard from you since my email on February 1st regarding Smith and Cummings. If you have any questions regarding this intersection please contact me at your earliest convenience.

Thank you, Cmdr. Scott Grewe

On Fri, Feb 1, 2019 at 10:20 AM Scott Grewe <<u>Sgrewe@bhamgov.org</u>> wrote:

Mr. Long,

I am Scott Grewe, the Operations Commander with the Birmingham Police Department. I would like to follow up with you regarding your email and concerns you have relayed to the City regarding this intersection.

First, this intersection has been reviewed in the past and has never met the requirements that the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) requires for the installation of a multi-way stop. For instance, it requires a volume of vehicles or crashes in a time span that this intersection has not met in the past.

I reviewed the accident report that you have referenced. In this situation a vehicle that had stopped for the stop sign failed to yield to an oncoming vehicle and pulled out in front of the right of way vehicle causing an accident. I reviewed our records for the last three years and found there were no other reported accidents. I then went back to 2010 and still did not find another report. One of the MMUTCD criteria for a multi-way stop is five or more reported crashes in a 12 month period that are susceptible to correction by the installation of a multi-way stop.

I would be happy to speak with you regarding some of the other issues you have noted and what options we may have in bringing this topic to the Multi-Model Transportation Board. Please contact me at the phone number listed below.

Thank you, Cmdr. Grewe

Matt Warsh <mattw@getkig.com>

to Jeff, Anthony, Scott, chadweinbaum1@gmail.com, Patty, Joe, Justin, chinadoberman260@gmail.com

Anthony, thanks for CC ing me and I'll chime in since it seems we need additional lobbying towards the individuals in charge.

Commander Grewe

Do we have to be so formal as to reference the michigan manual on traffic control? If I'm not mistaken, there is currently a 4 way stop just 2 blocks away at emmons and cummings. Is that because it passed the test of 5 accidents in a 12 month period? Lets not be reactive to accidents. Lets be proactive to make sure they don't happen. There are A LOT of children in this neighborhood. The fact it's a bus stop gives all the reason. Lets just use some common sense and make it happen. No reason to gamble on the safety of the residents (kids!), as well as the drivers.

-Matt Warsh 1042 Smith

On Feb 27, 2019, at 8:10 PM, Long, Anthony J. along@howardandhoward.com wrote:

Cmdr. Grewe,

Thank you for your email below and follow-up on this issue. I apologize for the delay in responding, however, I have been traveling extensively the last couple of months for work.

I think there are a number of residents in my neighborhood that would like the opportunity to meet with you, the Mayor and the rest of the traffic board regarding this intersection. I have carbon copied those individuals on this email. Perhaps we can circulate some dates and times to discuss this matter. While I appreciate your studies and reports, you do not live on or near this intersection. I have for the last 6 years. I hear the close calls, tire squealing and horns daily, as near miss after near miss goes by. The accident that occurred in the attached picture was inevitable. The BMW is sitting on the portion of the city property where each of our children wait for the school bus. If this accident would have occurred 20 minutes earlier, our children would have been hit by this car. If that had occurred, I am not sure your studies or the Michigan Manual you reference would mean much to the parents of the children hit and/or injured by this car (who are carbon copied on this email). I have crossed Smith on both North and South bound Cummings daily. It is very difficult sometimes to see around parked cars on Smith and/or to determine if those cars are parked or moving. I have had a number of close calls myself over the past 6 years, despite my being aware of the situation.

Bottom line, if there was a four way stop sign at this intersection.....this accident would either: (a) not have occurred at all or (b) would have occurred at such a slow speed that the BMW would not have ended up on the grass/city property or endangered the kids waiting for the school bus.

The accident in the picture was a warning call to all of us. And the City is on notice. I hope you all do the right thing.

I look forward to our meeting.

Anthony

Scott Grewe <Sgrewe@bhamgov.org>

to Matt, Anthony, Jeff, chadweinbaum1@gmail.com, Patty, Joe, Justin, chinadoberman260@gmail.com

Mr. Warsh and Mr. Long,

Thank you for following up with me and providing your input on this intersection. We will continue to move forward in our process of reviewing this intersection. How that works, I will request our traffic engineering consultants to review the intersection and provide a recommendation. Once that is complete it will be taken to the Multi-Model Transportation Board (MMTB) for their review. I will make sure you are contacted with the date that this will take place. The MMTB meets the first Thursday of the month at 6pm in the City Commission room. Once the review is complete and on the agenda I will advise you so anyone interested may attend and voice their concern. Any and all changes to traffic control of intersections must go through this process and requires this review to ensure any changes are applied correctly.

The MMTB will ultimately make a recommendation for this intersection which will then go to the City Commission.

In the meantime, if you have any questions please contact me.

Regards, Cmdr. Grewe

BIRMINGHAM POLICE DEPARTMENT 151 MARTIN ST. BIRMINGHAM, MI 48009

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Smith Grant/Cummings

DatalCanad	10	0.40	44.45	40.00	04.05										Lane
(MPH)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	>65	Total
8/30/2016	0	1	17	65	37	3	1	0	0	0	0	0	0	0	124
8/31/2016	0	5	26	60	42	0	0	0	0	0	0	0	0	ň	133
9/1/2016	0	2	31	63	29	1	0	0	0	0	0	0	0	0	126
9/2/2016	0	0	1	2	3	0	0	0	Ō	0	0	0	0	0	6
Lane1 Total	0	8	75	190	111	4	1	0	0	Ō	0	0	Ő	Ő	389
													8	5 percer	itile = 21
															Lane2
Date\Speed (MPH)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	>65	Total
8/30/2016	0	4	34	67	51	10	1	0	1	0	0	0	0	0	168
8/31/2016	0	4	38	82	56	10	0	0	0	0	0	0	0	n	100
9/1/2016	0	2	37	85	43	7	0	1	0	0	0	0	0	Ő	175
9/2/2016	0	0	2	6	3	1	0	0	0	0	0	0	ő	0	12
Lane2 Total	0	10	111	240	153	28	1	1	1	0	0	0	0	õ	545
													8	5 nercer	tile = 22
														o poroor	
DatalCasad	4.5	0.40	44.45	40.00	04.05									Co	ombined
(MPH)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	>65	Total
8/30/2016	0	5	51	132	88	13	2	0	1	0	0	0	0	0	202
8/31/2016	0	9	64	142	98	10	0	0	0	0	0	0	Ő	0	323
9/1/2016	0	4	68	148	72	8	0	1	0	0	0	0	0	0	301
9/2/2016	0	0	3	8	6	1	0	0	0	0	0	0	0	0	18
Combined Total	0	18	186	430	264	32	2	1	1	0	0	0	0	Ő	934

85 percentile = 22

Speed/Volume Traffic Count Summary Smith East of Cummings

JUNE 26, 27, 2007

Street	85 th Percentile	Average Speed	Total Vehicles
Eastbound			
1000 – 2400	26.7	21.9	190
0100 - 1000	27.2	22.3	51
EASTBOUND TOTAL			241
Westbound			
1100 - 2400	25.8	21.3	259
0100 - 1000	24.0	18.5	33
WESTBOUND TOTAL			292
TOTAL			533

Authority: 1949 PA 300), Sec 257.0	322				_	Externa	al #			¢	rash ID					Page 1	of 1		
Penalty: \$100 and/or 9	0 daya	(Rev 01/201	6)				0095	52731			9	52731					File Cla	93001		
<u>STATE (</u>	OF I	MICH	IG/	4Ν.	TRAF	FF	IC C	RA	S	HI	RE	PO	RT			ĺ	Incident 18002	18		
DRI MI632590	0				Department I BIRMIN	Name GHA	MPD										Review	n D (00016)	-	
Crish Date 12/13/2018	C	rash Time 18-48	No. of U	nits Cr	nsh Type			Special C	ircuma	lances	бн	t and Run	C s	chool Bus		Special C	Checks		. 0.00	
County		Traffic Cont			o gra		Relation to	C Fier	ing Poli ly	lice	C 01	Weather	0	Animal	A		- 0	AGONE FRANKS AND		snown
City/Twsp		Contributing	jn Circum	tances			On Ro	ad 		- 10	iaht	Cloudy		Roart Sur	lace Con	NTR W	ithin I	Intersectio	D Speed Limit	Bost
80 - Birmingha	m	None				2nd					Dayli	ght		Snowy				2	25	Yes
Vork Zone (if applicabl Type	le)	Work	ers Pres	mt	Ac	tivity					£	ocation								
- Bunda	Dele	Dest Ma			_	_														
	SI	NITH						AV	Е						Suffix			Divided Ro	adway	
Distance / Direc AT	ction						Trafficwa 01-No	y t phys	icall	v div	idad	1					_			
Prefix	Inte	necting Road	Name				_	Road	Type	*				:	Suffix			Divided Ro	adway	
Unit Number Unit K	Known St	ate Driver Lic	ense Nu	mber		De	te of Birth (AV (Age)		Licen	A TYP	• E	ndorsem	ente	Set	Total O	coupada	I Mananimus A	cline	-
01 Yes										60	Operati Chauffe	or (r (O Cycle O Farm			01		Failed to	yield	
Unit Type Driver	r Informatio	n,		_		-		-	Driv	er is O	Noped wner	(Injury	C Recrei Position	etion 1			Re	istraint		
M		[-			_		י	Yes		0	Fron	it-Left			s	houlder and	lap belt	
Driver Condition at T	Time of Cra	h		204				Drive	Pr Distr	acted f	By				Ejected	Ттарр	nd Air	bag Deployed	-	
Appeared	Normal					_		No	Distr	racted	4				No	No	N	ot Deployed		
NONE										Amb		1	19		123					
Alcohol Suspected	Contributa NO	ng Factor Alc	ohol Tes 9 Breath	C Bloc	d C Urine	,		Alc	ohol Te Pend	est Res ling	kults	Test Resul	tta:	_	Interio	ck Device	- 65		-	75
Drug Suspected	Contributo	ig Factor Dr.) Field 13 Test T	C PBT	Ó Refu	bed (R Not Offer	red Dru	g Tesl	Result	8	- 212			Citatio	n lasued	12	_	-	_
No Vahida Registration	No	Inte Mahin	> Blood) Field	O Urin O Refu	e med (© Not C	Offered	1		Pendi	ing	_	Tesi Resul	its:		6н С0	atardous ther				
		Descr	iption			Ì							Nodel					Color		
VIN		Vehicle Passe	Type nger C	ar, SUV,	Van	S,	vecial Vehic	des licable	,			Private 1	frailer Ty	/pe		٢	etide D	efect		
Insurance Company	2	1.11		Insuranc	e Policy #		0			Town	d By	TE I			-	Tow	ed To	-	_	-
Location of	Firs	Impact Exte	int of Da	mage (Por	wer Unit and/o	it Trail	lers) Veha	de Direc	ion V	/ehide	Use	16	_			Action	Prior		_	-
Sequence of	2 02	First	saplir	ig Dam	230	Se	S	-		Priva	ate	Third				Go	ing Si	traight Ahe	ad	-
Eventa (# indicates MOST h	° 17 Iarmful ever	-Motor ve	h in ti	anspo	rt.		_													
Passenger Informatic	an .			_			Date of E	Birth (Age	0	Sex	Por	ubon	-			1	Restain			-
							Injury	Ejecter	d Ta	apped	Airbi	ig Deployed	1			-				
Hospital				-						Ambi	Mance									
Passancer Information		_					Data of 6	1		10	10									
							Date of t	ount (vBe	,	Sex	PO	LIDON				1	Riestrieins			
							Injury	Ejecter	i Tra	apped	Airbi	ig Deployed	I							
Hospital								<u> </u>		Ambu	ilance									
Passenger Informatio	n						Date of B	lirth (Àge	,	Sea.	Poe	ibon			_	1	testent			_
							lnju/y	Ejected	nT L	apped	Airba	g Deployed								
Hospital										Amn	44000-		_							
											one Part									
Carner Information					25.2					USDO	T		-		MC		M	PSC		
										Driver	's CDI	Туре	Endorse	ments	CO	L Exempt	_			
GVWR/GCWR			-			Vahor	la Canforni	abor			10	- Bad - T	G N C	SCX	6	Other				
© 10,000 lbs. or Let	66 G 10,0)01 - 28,000 lb	4. O G	reater the	1 26,000 lbs.	4-911IC	a sanafu	-891			Carg	o oouy typ	ľ	wearchi Ca	un)	C P	ndows Ma lacard	orenal O Cargo Spill	10 #	Clease
Owner Information			-					_	-	Owne	r infor	netion		_		_				
naged Property								Public	0	hwner 8	l Phon									

Unit Number Unit Known State	Driver License Nur	mber	Date of Birth (Age	F)	License Ty	De E	Endomements	Sex	Total Do	cumente.	Hazardous Action	
02 Yes					C Chauf	tor fer 1	C Cycle C Farm C Recreation		01		None	
Unit Type Driver Information M					river is Owner Yes	Injury C	Position Front-Left			Res	houlder and lap be	lit
Driver Condition at Time of Crash Ist Appeared Normal		2nd		Driver Dr Not D	stracted By			Ejected No	Trappe No	d Airbi De	ag Deployed Iployed-Combination	a a a a a a a a a a a a a a a a a a a
Hospital					Ambulanc	a INGHAM	I FIRE DEPT			-		
Alcohol Suspected Contributing Fe	Alcohol Test	C Blood C Urine	ed E Not Offered	Alcohol C Pe	Test Results inding	Test Res.	dta:	Interlock No	Device	_		
Drug Suspected Contributing Fa	C Blood	C Urine	Navad	Drug Tr C Pe	est Results inding	Test Ree.	alta:	Citation C Haz	leaued audous			
Vehicle Registration State	Vehicle Description	Year	Make	-			Model	C On	er		Calor	
VIN	Vehicle Type Passenger	Car, SUV, Van	Special Vehicles Not Applic	able		Private	Trailer Type		V	ehicle De	fect	
Insurance Company		Insurance Policy #			Towed By BOB	ADAMS -	TOWING		Town	ed To		
Location of First Imp Greatest Damage 08 08	Extent of Dar Disablin	mage (Power Unit and/or ng Damage	Trailers) Vehicle (E	Direction	Vehicle Use Private				Action	Prior ing Str	aight Ahead	
Sequence of Fir Events * 17-M (# Indicates MOST termbul event)	si lotor veh in ti	ransport	Second 34-Curb			nutT	đ			Fou	ită)	
Passenger Information			Date of Birth	(Age)	Sex Po	sition			F	lestraint		_
			Injury E	jected	Trapped Airt	ag Deploye	d					
Hospital (7)					Ambulance							
12 Passanger Information			Date of Birth	(Age)	Sex Po	notion				lestraint	<u> </u>	
2 2 2			injury E,	jected	Trapped Airt	ag Deploye	d					
					Ambulance							
D. Passenger Information			Date of Birth	(Age)	Sex Ро	notia			R	lestraint		
Hospital				190390	Inapped Airb	eg Deploye	d 					
					Ambulance							
Camer Information					USDOT			MC		MP	SC	
×					Driver's CD	L Туре	CH CP CT CN CS CX	CDL	Exempt Farm Other			
C 10,000 lbs. or Less C 10,001 -	26,000 lbs. C G	mater than 26,000 lbs.	/ehicle Configuratio	n	Car	go Body Typ	Pe Medical Ce	nd	Hazan C Pt	dous Mas acard C	erial ID # "Cargo Spill	Class #
Owner Information					Ownet lato	mation			-			
Witness Information					Witness Inf	ormation				_		_
			Age:								A	
avestigated Reported Date (Time) at Scene Yes 12/13/2018 (08) 1st investig 3:48) SYTS (ator Name (Badge) 66)		2	nd Investigator	Neme (Bad	ge)	_	Phot	tos	Age:	
Variative					Diagram							
THE RIGHT OF WAY.	JB ON SMITH	APPROACHING	CUMMINGS	WITH				F	1		A	
UNIT 1 WAS S/B ON CUMM STOP SIGN AND PROCEED	IINGS AT SM	ITH. UNIT 1 WAS	STOPPED A	T THE					1		Ň	
TO UNIT 2 AND STRUCK U INCURRED HEAVY DISABL	NIT 2 ON THI	E FRONT DRIVE# iE.	R-SIDE. UNIT	2					į.		NOT TO SCAL	Ē
UNIT 1 INCURRED MODER -SIDE FRONT.	ATE DISABL	ING DAMAGE TO	THE PASSE	NGER	-				Init 1	\square		—
THE DRIVER OF UNIT 1 WA	AS ISSUED A	VIOLATIONG FC	DR FTY.		-			Unit2 '.	0			-
THE DRIVER OF UNIT 2 WA PREGNANCY CONCERNS	S TAKEN TO		DU	UE TO	-						SMITH	
								MINGS				
								CUM	1			
			-					F	1	1		

	Authority: 1949 PA 300, Sec.257.6 Compliance: Required MSP Penalty: \$100 and/or 90 days (Rev	22 UD-10E / 11/2006}			_	Exte 0000	mat# 01983		Crast 19	a ID 83					Page 1 Incident	of 1 # 090011	146 File Cla	H 9300-1
Mill Discussion Discussion <td>STATE OF M</td> <td>MICH</td> <td>IGAN</td> <td>TRAI</td> <td>FFiC</td> <td>0 0</td> <td>RA</td> <td>SH</td> <td>RE</td> <td>POF</td> <td>RT</td> <td></td> <td></td> <td>•</td> <td>Incident CLO</td> <td>Disposition SED</td> <td></td> <td></td>	STATE OF M	MICH	IGAN	TRAI	FFiC	0 0	RA	SH	RE	POF	RT			•	Incident CLO	Disposition SED		
Cath. Bar. Cont. This Data String Cont. String	ORI: MI6325900			Department BIRMIN	Name IGHAM	PD									Reviewe	r NAN (OC	200)	
Carl Control Part of Section Part of Secti	Crash Date C 09/02/2009 1	rash Time 17:52	No. of Units 2	Crash Type 4-ANGLE			Special Circ	umstanci Bus	None O Hit a	nd Run	0	Deer Fleeing Polk	20	Special C O Fata	hecks ON	on-Traffic A		DRV/Snowmo
Order Source Less Cover Activ Less Cover Activ Less Cover Name Dest Turn Name Test Turn Name Name <td>63 - OAKLAND</td> <td>STOP S</td> <td>rol IGN</td> <td>Relation to Roa ON ROAD</td> <td>dway</td> <td></td> <td>Spec</td> <td>ial Study</td> <td></td> <td>CLEA</td> <td>R</td> <td></td> <td></td> <td>Area 07-NO</td> <td>N-FRW</td> <td>Y IN INT</td> <td>ERSECT</td> <td>ION</td>	63 - OAKLAND	STOP S	rol IGN	Relation to Roa ON ROAD	dway		Spec	ial Study		CLEA	R			Area 07-NO	N-FRW	Y IN INT	ERSECT	ION
Print Baset Tage Barrier Baset Tage Barrier	City/Twsp 80 - BIRMINGHAM	Construction	1 Zona (if applica Type	ible]	Lane C	losed	Activit	Y	DAYLIC	HT		Rond Con DRY	1400		Total Land 2	ina Spi 2:	Hed Limit 5	Posted YES
Database DFT_INTERSECTION Type Type Added Floating Type Added Floating Type Added Floating Type Database Science Added Floating Type Driver Diff Diff<	C Prefix Ros	id Name MITH					Road T	/pe				S	Suffix			Divided E	Rosdway	81°
Print. Literatoring Rad CultiMinitions Data August Species Buffs Data / Data / Report Data / Data / Report Unit Nome No Rad Data / Report Calibrations Same / Species <		ION			T	natic W	'ey T PHYSI	CALLI	Y DIVID	ËD				Acci 1-1	es Control	ESS CO	NTROL	
Duit Hunt Value Base Diver Lemma Hammer Open of Sim U/QU Lears Type Exceeder Corport C C Cycle C Cycle C Cycle C Cycle C Research C Resear	O Prefix Inte	meeting Road					Road T	/pe				5	kuffix			Divided	Rosdway	
Unit Frage One Mide Parado P	Unit Number Unit Known St 1 Y	ate Driver Lic	anse Number		Date	of Birth	(Age)		nse Type Operator Chauffer Moped	En	Cycle Cycle Farm Recre	nents Halion	Sex	Total	Occupanta	Hazardou 03-FA	Action	YIELD
Drive Condition Marka Exceed Topole Association NO	Unit Type Driver Infor M				_			0	Position 01	Restr 4	raund	NONE		_				
Markade Verse Constraint Constraint (and constraint) Constraint (constraint) Constraint (constraint) Constraint (constraint) Constraint) Constraint) <td>Driver Condition 1 C 2 C 3 C 4 C 5 C</td> <td>06 07 08</td> <td>09099</td> <td></td> <td>Inter NC</td> <td>lock)</td> <td>Ejected NO</td> <td>Trapped NO</td> <td>Airbag I NO</td> <td>Deployed</td> <td></td> <td>Ambulance NONE</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Driver Condition 1 C 2 C 3 C 4 C 5 C	06 07 08	09099		Inter NC	lock)	Ejected NO	Trapped NO	Airbag I NO	Deployed		Ambulance NONE						
Vector Registration Late Description Control Contro Control Control <td>Alconol O Yes E No O F Tant Tune O Field O F</td> <td>latured C Ne</td> <td>ol offered</td> <td>Ollina</td> <td>Tesi</td> <td>Reade</td> <td></td> <td>C Yes</td> <td>G N</td> <td></td> <td></td> <td>Test</td> <td>Result</td> <td></td> <td>Citation © Ha</td> <td>tssued rardous</td> <td>C Othe</td> <td>r</td>	Alconol O Yes E No O F Tant Tune O Field O F	latured C Ne	ol offered	Ollina	Tesi	Reade		C Yes	G N			Test	Result		Citation © Ha	tssued rardous	C Othe	r
Mail Mail Clear Yea Variad Type 24 Decision Second Variad Data Variad Varia Variad Variad Varia Variad Var	Velucie Registration State	Insurance /	Palicy #	C/ Grane			To	wed To/B	ly ly	000 0	Urme			S	Citation pecial Vehi }	cles Privet	Tribler Type	Vehicle Del
Lection of 1 Performance Categories of a second YES Vector Director Vector In TRANSPORT Second Second YES Cond Second Second Trad Second Second Trad Second Second Trad Second Trad Fail Second	VIN 3	4 Vehicle Descript	ion I	Make			Model			Col	toi		-	Yes	V	ehicle Type 01-PASS	ENGER	CAR
Segund of 17.4070R VEH IN TRANSPORT Second Torreation (a indicates UCST number vent) Pessanger information Pessanger information Dete of Brith (Age) Sea Pessang	Location of Greatest Damage 1 1	t Impact	Extent of 1 Damage 1	Driveabl	•	Vehic	de Direction	Vehici 01-	PRIVA	re	_			Acta 10	on Prior	TING UP	ON RO	DWAY
Passanger Information Passanger Information Passanger Information Passanger Information Passanger Information Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Inputy Antrag Deployed Exceed Trapped Antbulance Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Inputy Antrag Deployed Exceed Trapped Antbulance Passanger Information Date of Birth (Age) Sex PousDon Restrant Heapoid Inputy Antrag Deployed Exceed Trapped Antbulance Camer Information Date of Birth (Age) Sex PousDon Restrant Heapoid Inputy Antrag Deployed Exceed Trapped Antbulance Camer Information Date of Birth (Age) Sex PousDon Restrant Heapoid Inputy Antrag Deployed Exceed Trapped Antbulance Camer Information Date of Birth (Age) Sex PousDon Restrant Heapoid Date of Birth (Age) Sex PousDon Restrant Heapoid Date of Birth (Age) Sex PousDon Restrant Heapoid Date of Birth (Age) Sex PousDon Restrant Heapoid Date of Birth (Age) Sex PousDon Restrant Heapoid Date of Birth (Age) Sex PousDon Restrant Heapoid Date of Birth (Age) Sex PousDon Camer Information Date of Birth (Age) Sex PousDon Camer Information Date of Birth (Age) Sex PousDon Camer Information Date of Birth (Age) Da	Sequence of Events * 17	-MOTOR	VEH IN TRA	NSPORT	Seco	ind		-		Third	-				Fo	urith.		
Hypery Altring Deployed Epiced Trapped Anbulance Pessenger Information Date of Briti (Age) Sei Penboli Restraint Neaplail Passenger Information Date of Briti (Age) Sei Penboli Restraint Neaplail Passenger Information Date of Briti (Age) Sei Penboli Restraint Heapfail Passenger Information Date of Briti (Age) Sei Penboli Antbulance Image Antbulance Passenger Information Date of Briti (Age) Sei Penbolin Restraint Heapfail Passenger Information Date of Briti (Age) Sei Penbolin Restraint Heapfail Passenger Information Date of Briti (Age) Sei Penbolin Restraint Heapfail Passenger Information Date of Briti (Age) Sei Penbolin Restraint Heapfail Passenger Information Date of Briti (Age) Sei Penbolin Restraint Heapfail Passenger Information Date of Briti (Age) Sei Penbolin	Passanger Information		_		_	Date of	Birth (Age)	S	и Розф	on Restri	nant ()	Hospital	_					
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Injury Autoag Deployed Ejected Trapped Antoxance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Pasanger information Date of Brith (Age) Set Peaton Restruct Houstance Camer information Date of Brith (Age) Set Peaton Restruct Houstance Camer information Camer Source GVWR ICCMC USDOT MPSC Diver information Camer Source GLag Dogy Type Medical Cerl Heardo	Passenger Information					Date of	Birth (Age)	Se	нх Ровф	on Restri	aint (Hospital						
Passanger Information Delta of Exht (Age) Sex Poston Restrant Hospital Injury Antbalance Ejected Trapped Antbulance Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Passanger Information Date of Birth (Age) Sex Poston Restrant Hospital Injury Antog Deployed Ejected Trapped Ambutance Columer Carmer Information Date of Birth (Age) Sex Poston Restrant Columer Endormation Carmer Information Carmer Source Cittage Birth Columer Endormation </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>injury</td> <td>Airbag De</td> <td>sloyed</td> <td>Ejected</td> <td>1 Trapp</td> <td>ed /</td> <td>Ambulance</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>					-	injury	Airbag De	sloyed	Ejected	1 Trapp	ed /	Ambulance						
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City of	${oldsymbol{\mathcal{B}}}$ irmingham
	A Walkable Community

MEMORANDUM

Planning Division

DATE:	May 28, 2019
то:	Multi-Modal Transportation Board
FROM:	Lauren Chapman- Assistant Planner
APPROVED:	Jana Ecker, Planning Director Scott Grewe, Police Commander Paul T. O'Meara, City Engineer
SUBJECT:	Old Woodward Avenue & Willits Street/ Oakland Avenue Pedestrian Improvements Cover Memo

INTRODUCTION:

This memo summarizes considered pedestrian improvements for the intersection of Old Woodward Avenue & Willits Street. There is a possibility for pedestrian/vehicle conflicts within the E/W crosswalk on the north side of the intersection. The purpose of this analysis is to evaluate alternatives to improve pedestrian safety at this intersection. Included herein is project background information, improvements previously evaluated, and new improvements for consideration.

BACKGROUND:

Fleis and VandenBrink previously prepared a report regarding a Leading Pedestrian Interval (LPI) program at several intersections throughout the downtown. An LPI provides pedestrians with an opportunity to enter an intersection and establish their place in the crosswalk before the vehicles in the same direction of travel have the green indication. The benefits of an LPI are the increased visibility of pedestrians in the crosswalk, additional time for slower pedestrians, and decreased potential for pedestrian/vehicle conflicts. While LPIs are beneficial to pedestrian safety, they also reduce the available green time for vehicles and can cause additional delay at an intersection. The following LPIs are currently implemented at the Old Woodward and Willits intersection:

- East/West crossing: 10 second LPI
- North/South crossing: 7 second LPI

However, since the East/West crosswalk length is approximately 75 feet on the north leg, the implemented LPI only provides pedestrians enough time to travel less than halfway across the street before left-turning vehicles are permitted to enter the intersection. F&V further evaluated this intersection to develop several alternatives for consideration. The analysis for each alternative evaluated is summarized herein.

1. CURB EXTENSIONS (NE CORNER)

A bumpout extends the line of the curb out into the road, reducing the amount of street space pedestrians have to cross. This pedestrian improvement increases safety for slower pedestrians and improves pedestrian visibility to drivers; while also reducing the turning speed of vehicles. The northeast corner of the intersection of Old Woodward & Willits currently has a painted curb extension; this however, does not physically reduce the crosswalk distance. This curb extension would reduce the east-west crosswalk distance and could be expanded into the hatched-out area along the east leg of the intersection to reduce that crosswalk length.

The segment of Oakland from this point east to Woodward was originally scheduled for resurfacing in 2019, given the pavement's poor condition. However, this street will be a part of the designated Maple Road detour for westbound traffic when that project is underway in 2020. To ensure appropriate traffic flows, two lanes of westbound traffic will be provided through this intersection, during which time the existing width of the street will be needed.

Key Findings

- The total crosswalk distance is reduced from 75-feet to 67-feet.
- The curb extension would be expanded to the hatched-out portion of the east leg of the intersection, in order to reduce the total N/S crosswalk distance for the east leg.
- A permanent bumpout improvement cannot be implemented until the completion of the Maple paving project.

2. CURB EXTENSION (NW CORNER)

On southbound Old Woodward at Willits Street there is a hatched taper that is approximately 64 feet long and 7 feet wide at the widest. This alternative considered the elimination of this taper and the construction of a paved bumpout on Old Woodward for the northwest corner of this intersection. F & V also evaluated a potential extension of the paved bumpout onto Willits; however, there are significant utility conflicts on Willits at this intersection.

Key findings

- The total crosswalk distance is reduced from 75 feet to 68 feet.
- The bumpout should not extend onto Willits, due to utility conflicts.

3. LANE REDUCTION & CURB EXTENSIONS (NW CORNER)

This alternative considered a lane reduction for southbound Old Woodward at the intersection, in combination with a curb extension on the NW corner. The southbound Old Woodward approach with Willits currently provides three lanes (left-turn, through, and right-turn lanes). This alternative evaluated eliminating the southbound right-turn lane and converting the southbound through lane into a shared through/right lane. By eliminating the right-turn lane, the NW curb could be extended through the existing right-turn lane in order to reduce the existing crosswalk distance. The primary concern with this alternative is the operational impacts of removing the exclusive right-turn movement and associated overlap phasing. An analysis showed that eliminating the exclusive right-turn lane will significantly increase both the Level of Service (LOS) and the vehicle queueing for the eastbound left-turn movements, especially during the PM peak hour.

Key Findings

- The total crosswalk distance will be reduced from 75-feet to approximately 60-feet.
- The vehicle delay (LOS) and vehicle queueing will increase significantly.
- The southbound right turn overlap phase will be eliminated.
- Would result in three additional parking spaces.

4. PROTECTED LEFT TURNS (E/W APPROACH)

One of the most common conflicts at signalized intersections is the competition between vehicles permissively turning left and pedestrians crossing during the concurrent parallel pedestrian signal phase. Drivers typically focus on opposing traffic to identify gaps for left turns and may not pay due attention to pedestrians approaching or in the parallel crosswalk. Additionally, permissive left turns at congested intersections contribute to drivers accepting smaller gaps, turning at higher speeds, and "sneaking" through the intersection during the yellow or all-red signal intervals. Protected left-turn phasing provides a green arrow for left-turning vehicles while stopping both on-coming traffic and parallel pedestrians' crossings, therefore eliminating all potential conflict.

Currently, the intersection of Old Woodward & Willits provides protective/permissive phasing for E/W left-turns from Willits and provides permissive only phasing for the N/S left-turns from Old Woodward. This alternative considered providing protected-only phasing for the E/W left-turn movements from Willits; removing the permissive phase in order to eliminate vehicle-pedestrians conflicts for the E/W pedestrian crossings. By eliminating the potential vehicle-pedestrian conflicts during the E/W crossings, there is no longer the need to provide an LPI along the E/W crossings; therefore, the allotted all-red time (currently 10 seconds) is available for additional green time elsewhere. This additional green time within the cycle helps to minimize the impact of removing the E/W permissive phase. The primary concern with this alternative is the operational impacts of eliminating the permissive phase.

Key Findings

- The LPI phase for the E/W crossings will be available as additional green time for other movements, by eliminating the potential vehicle-pedestrian conflicts for E/W crossings.
- The LOS will slightly increase for the E/W left turn movements; however, it will decrease for the E/W through movements.
- All potential vehicle-pedestrian conflicts will be eliminated for pedestrians crossing in the E/W directions
 - Vehicle-pedestrian conflicts will still exist for N/S crossing pedestrians
- The existing 4-section signal heads on the east and west approaches would need to be modified to provide 3–section signal heads and operate as protected only.

5. PERMISSIVE/ PROTECTED LEFT-TURN (LAGGING LEFT)

Currently, the intersection of Old Woodward and Willits provides permissive/ protected phasing for left-turns and has a leading protective phase for left-turns. The existing left-turn and pedestrian signal timing with the LPI is as follows:

Left Turn Signal	←Green	←Yellow	←Red	←Red	~	←←Flashing Yellow			
Pedestrian	Don't	Don't	Don't	Walk	Walk	Walk Flash Don't			
Signal	Walk	Walk	Walk	(LPI)		Don't Walk Walk			

F & V observed confusion for both vehicles and pedestrian during the LPI phase (highlighted in red). Left-turning vehicles have a green arrow and vehicles are expecting the protected green to continue into a permissive (flashing yellow) left-turn. However, before the flashing left-turn movement, the LPI turns on the WALK sign for pedestrians. Vehicles are waiting in the intersection for the flashing yellow arrow, while pedestrians are waiting for the vehicle to turn or vehicles are running the red light during the all-red phase. In the end, the LPI time is wasted because pedestrians are uncertain of who has the ROW and vehicles are unsure if the light will change for them to complete their movement.

This alternative looked at switching the signal phasing to eliminate the confusion currently experienced by both pedestrians and drivers. This signal phasing modification will create a smoother transition by starting the LPI phase after the north/south phase rather than in between the east/west through and left-turn phases. The proposed left-turn and pedestrian signal phasing for this alternative are summarized below.

Left Turn Signal	←Red	(←Flashing Ye	llow	←Green	←Yellow	←Red
Pedestrian	Walk	Walk	Flash	Don't	Don't	Don't	Don't
Signal	(LPI)		Don't Walk	Walk	Walk	Walk	Walk

Key Findings

- This alternative would eliminate the existing pedestrian and driver confusion with the use of the LPI.
- The eastbound left-turn vehicle queues during the mid-day peak period showed a significant increase in delay and queue lengths as a result of conflicting westbound movements and only having 6 seconds of green time for the protected left-turn movements.

4. BARNES DANCE (PEDESTRIAN SCRAMBLE)

This pedestrian improvement restricts all vehicular movements at an intersection and provides a pedestrian only walking phase. This type of treatment allows pedestrians to travel without any potential for vehicle-pedestrian conflicts. Implementation of this option would result in unacceptable service levels for vehicles. Such delays would result in queues that would impact other nearby intersections and valet operations in the immediate area.



Key Findings

- Pedestrian movements will be fully separated from vehicular movements.
- This treatment would require a reduction in green time for all movements; resulting in the LOS and vehicle queuing increasing along all approaches and movements.
- Push-buttons or other pedestrian detection is recommended in order to minimize vehicle delays when pedestrians are not present.

7. ADDITIONAL SIGNAGE

The effectiveness that additional signage has on driver yielding compliance is influenced by several factors, including vehicular speed, traffic volume, and whether the driver perceives yielding as a courtesy or the law. This option would be the lowest cost alternative; however, it would rely on driver compliance and attentiveness.

Key Findings

- A "Left turns yield to pedestrians" sign would provide advanced warning for drivers making left-turns, ideally increasing their attention to crossing pedestrians.
- Additional signage will only be effective when motorists observe and obey the signage.
- Overuse of signs may breed noncompliance and disrespect.
- Visibility of signs will be of difficult due to on-street parking.
- Additional signage could be paired with any other options or used alone.

8. COMBINATION OF IMPROVEMENTS

This alternative considered implementation of several of the alternatives together for a combined effect on the pedestrian safety and operations. This alternative includes:

- 1) Bumpout (NE Corner)
- 2) Bumpout (NW Corner)
- 3) Protected Left-turns (Willits St.)

The proposed design for the combination of improvements is shown in the attached memo on Figure 5. The total crosswalk distance would be reduced from 75 feet to 60 feet.

SUMMARY & RECOMMENDATIONS

	Alternative	Acceptable LOS	Crosswalk Length	Signal Change	Cost	Recommended
	Existing	Yes	75 ft.	-	-	-
1	NE Corner Bumpout	Yes	67 ft.	No	\$2,000-\$20,000	Yes
2	NW Corner Bumpout	Yes	68 ft.	No	\$2,000-\$20,000	Yes
3	Lane Reduction & NW Corner Bumpouts	No	60 ft.	Yes	\$2,000-\$20,000	No
4	Protected Left Turns	Yes	No change	Yes	~\$17,000	Yes

5	Permissive/ Protected Left- turns	No	No change	Yes	Minimal	No
6	Pedestrian Scramble	No	No change	Yes	~\$2,500	No
7	Additional signs	Yes	No change	No	\$200-\$600 ea. sign	With reservations
8	Combination of Improvements (1,2,4)	Yes	60	Yes	\$19,000- \$40,000	Yes

SUGGESTED RESOLUTION:

To recommend approval of Alternative 8 – Combination of Improvements (1, 2, and 4) as depicted in F & V's report dated May 22, 2019: to add bumpouts at both the NE and NW corners of the Old Woodward and Willits/ Oakland intersection (after the completion of the Maple Road reconstruction project) and provide protected-only phasing for the E/W left-turn movements from Willits, at an approximate cost of \$57,000.



May 31, 2019

DRAFT VIA EMAIL

Mr. Paul O'Meara City Engineer City of Birmingham 151 Martin Street Birmingham, MI 48012

RE: Old Woodward Avenue & Willits Street Pedestrian Improvements Summary

Dear Mr.O'Meara:

The purpose of this letter is to provide a summary of the pedestrian improvements for consideration at the intersection of Old Woodward Avenue & Willits Street. It is our understanding that there are have been observed pedestrian/vehicle conflicts within the E/W crosswalk on the northside of the intersection as illustrated in **Figure 1** below. The purpose of this analysis is to evaluate mitigation alternatives to improve pedestrian safety at this intersection. Included herein is project background information, improvements previously evaluated, and new improvements for consideration.





PROJECT BACKGROUND

Fleis and VandenBrink previously prepared a report (dated February 2018) regarding a Leading Pedestrian Interval (LPI) program at several intersections throughout downtown Birmingham. An LPI provides pedestrians with an opportunity to enter an intersection and establish their place in the crosswalk before the vehicles in the same direction of travel are given the green indication. The benefits of an LPI are the increased visibility of pedestrians in the crosswalk, additional time for slower pedestrians, and decreased potential for conflicts between pedestrians and vehicles. While LPIs are beneficial to pedestrian safety, they also reduce the available green time for vehicles and can cause additional delay at an intersection. Based on the recommendations from the LPI study, the following LPIs are currently implemented at the Old Woodward Avenue and Willits Street intersection:

- East/West crossing: 10 second LPI
- North/South crossing: 7 second LPI

However, since the East/West crosswalk length is approximately 75 feet on the north leg, the implemented LPI only provides pedestrians enough time to travel less than halfway across the street before left-turning vehicles are permitted to enter the intersection. F&V further evaluated this intersection to develop several other alternatives that were also evaluated for consideration. The analysis for each alternative evaluated is summarized herein.

ALTERNATIVES ANALYSIS

F&V developed several potential pedestrian improvements that were evaluated for consideration. The analysis for each improvement evaluated is summarized herein.

1. BUMPOUT (NE CORNER)

A bumpout extends the line of the curb out into the traveled way, reducing the amount of street space pedestrians have to cross. This pedestrian improvement increases safety for slower pedestrians (children and the elderly) and improves pedestrian visibility to drivers; while also reducing the turning speed of vehicles, as a result of smaller curb radii.

Currently, the northeast corner of the intersection of Old Woodward Avenue & Willits Street has a painted bumpout. However, since the bumpout is painted, it does not physically reduce the crosswalk distance, in order to provide a raised, safe waiting, area for the pedestrian. Additionally, there is an existing bus stop located along Old Woodward within the painted bumpout area.

Therefore, a paved bumpout was evaluated for the northeast corner of this intersection. In order to accommodate bus operations, it is recommended to stripe an exclusive bus lane in conjunction with the proposed bumpout. This bumpout would also be expanded into the hatched-out area along the east leg of the intersection to reduce that crosswalk length. At this intersection, westbound right-turns are channelized to the north; therefore, this curb radius can be minimized, as the eastbound left-turn movement for trucks is the only turning movement that needs to be considered. A bumpout at this location may also reduce the turning speeds for eastbound left-turning wehicles, by shrinking the available pavement to complete their turning movements.

This bumpout would reduce the existing 75-foot crosswalk distance on the north leg to approximately 67 feet. The proposed design for this bumpout is shown on the attached **Figure 2**.

Key Findings

- The total crosswalk distance is reduced from 75-feet to 67-feet.
- The bumpout would also be expanded to the hatched-out portion of the east leg of the intersection, in order to reduce the total N/S crosswalk distance for the east leg.
- The striping of an exclusive bus lane should be included in conjunction with the proposed bumpout
- Structure and fire hydrant relocation should be taken into consideration when designing the bumpout.

2. BUMPOUT (NW CORNER)

On southbound Old Woodward at Willits Street there is a hatched taper that is approximately 64-ft long and 7-ft at the widest. This alternative considered the elimination of this taper and the construction of a paved bumpout on Old Woodward for the northwest corner of this intersection. A potential extension of the paved bumpout onto Willits Street was evaluated as well; however, there are significant utility conflicts on Willits Street at this intersection. Therefore, it is not recommended to extend the bumpout onto Willits Street.

In leiu of expanding the sidewalk width along the west side of Old Woodward to match the proposed bumpout, the existing lane widths may be reduced to 11-ft each; increasing the available pavement width enough to provide a few additional parking spaces.

The proposed bumpout would reduce the existing 75-foot crosswalk distance on the north leg to approximately 68

feet. The proposed design for this bumpout is shown on the attached Figure 3.

Key Findings

- The total crosswalk distance is reduced from 75-feet to 68-feet.
- The bumpout should be limited to Old Woodward due to significant utility conflicts at this intersection on Willits Street.
- The addition of a few parking spaces along the west side of Old Woodward could be provided by reducing the existing lane widths to 11-ft each.

3. LANE REDUCTION & BUMPOUT (NW CORNER)

This alternative considered a lane reduction for southbound Old Woodward Avenue at the intersection, in combination with a bumpout on the NW corner. The southbound Old Woodward approach with Willits Street currently provides three lanes (left-turn, through, and right-turn lanes). This alternative evaluated eliminating the southbound right-turn lane and converting the southbound through lane into a shared through/right lane. By eliminating the right-turn lane, the NW curb could be extended through the existing right-turn lane in order to reduce the existing 75-foot crosswalk distance to approximately 60 feet. The proposed design for this bumpout is shown on the attached **Figure 4**.

The primary concern with this alternative is the operational impacts of removing the exclusive right-turn movement and associated overlap phasing. An analysis was performed to determine the measure-of-effectiveness (MOE) of this alternative as compared to existing operations. The MOE summary is provided in **Table 1**. The results of the analysis show that eliminating the exclusive right-turn lane will increase both the vehicle delay (LOS) and the vehicle queueing. The network simulations indicate that eliminating the southbound right-turn lane will result in longer vehicle queues for southbound traffic; resulting in the southbound left-turn lane becoming blocked for a portion of each peak hour. Furthermore, the increased vehicle queues for the southbound traffic will reduce the number of acceptable gaps available for northbound vehicles attempting to make permissive left-turns. Additionally, with signal timing modifications necessary to accommodate the lane reduction; the eastbound left-turn movement will experience significant increases in delay and queue length.





Interception	Peak	Approach	Existing C (Exclusiv	Conditions re SB RT)	Proposed (Shared SB	Conditions Thru/Right)	Differ	ence
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		EBTR	22.7	С	32.3	С	9.6	-
	АМ	WBL	16.6	В	23.4	С	6.8	B > C
		WBTR	32.9	С	42.3	D	9.4	C > D
		NB	24.5	С	7.8	А	-16.7	C > A
		SB	25.6	С	43.4	D	17.8	C > D
		Overall	22.2	С	31.1	С	8.9	-
Old Woodward Avenue		EBL	23.3	С	23.7	С	0.4	-
		EBTR	48.9	D	54.0	D	5.1	-
		WBL	22.1	С	26.8	С	4.7	-
	Mid-day	WBTR	38.4	D	46.2	D	7.8	-
&		NB	26.1	С	19.6	В	-6.5	C > B
Willits Street		SB	24.2	С	38.1	D	13.9	C > D
		Overall	27.1	С	31.7	С	4.6	-
		EBL	26.6	С	54.2	D	27.6	C > D
		EBTR	42.5	D	51.5	D	9.0	-
	РМ	WBL	22.6	С	24.1	С	1.5	-
		WBTR	40.8	D	44.6	D	3.8	-
		NB	23.7	С	19.7	В	-4.0	C > B
		SB	26.5	С	73.2	E	46.7	C > E
		Overall	27.9	С	49.0	D	21.1	C > D
Intersection	Peak Period	Approach	Average (ft)	95th % (ft)	Average (ft)	95th % (ft)	Average (ft)	95th % (ft)
		EBL	78	147	106	190	28	43
	A 1.4	WBL	10	33	13	62	3	29
	AIVI	NBTR	38	82	23	59	-15	-23
		SBT	100	194	157	299	57	105
Old		EBL	107	204	117	217	10	13
Woodward	Mid dov	WBL	36	79	36	75	0	-4
Avenue &	Mid-day	NBTR	99	191	90	175	-9	-16
Willits Street		SBT	144	312	187	336	43	24
		EBL	162	283	263	488	101	205
		WBL	28	88	49	145	21	57
	PIVI	NBTR	62	127	71	181	9	54
		SBT	125	251	211	369	86	118

Table 1: Lane Reduction MOE Summary

Key Findings

- The total crosswalk distance will be reduced from 75-feet to approximately 60-feet.
- The vehicle delay (LOS) and vehicle queueing will increase.
 - Significant increases in delay and queuing were observed for the eastbound left-turn movement during the PM peak hour.
- The southbound right turn overlap phase will be eliminated.
- Fire hydrant relocation should be taken into consideration when designing this bumpout.

4. PROTECTED LEFT TURNS (WILLITS ST.)

One of the most common conflicts at signalized intersections is the competition between vehicles permissively turning left and pedestrians crossing during the concurrent parallel pedestrian signal phase. Drivers typically focus on opposing traffic to identify gaps for left turns and may not pay due attention to pedestrians approaching or in the parallel crosswalk. Additionally, permissive left turns at congested intersections contribute to drivers accepting smaller gaps, turning at higher speeds, and "sneaking" through the intersection during the yellow or all-red signal intervals. Protected left-turn phasing provides a green arrow for left-turning vehicles while stopping both on-coming traffic and parallel pedestrians' crossings, therefore eliminating all potential conflict.

Currently, the intersection of Old Woodward Avenue & Willits Street provides permissive/protected phasing for E/W left-turns from Willits Street and provides permissive only phasing for the N/S left-turns from Old Woodward Avenue.

This alternative considered providing protected-only phasing for the E/W left-turn movements from Willits Street; removing the permissive phase in order to eliminate vehicle-pedestrians conflicts for the E/W pedestrian crossings. By eliminating the potential vehicle-pedestrian conflicts during the E/W crossings, there is no longer the need to provide an LPI along the E/W crossings; therefore, the allotted all-red time (10 seconds) is available for additional green time elsewhere. This additional green time within the cycle helps to minimize the impact of removing the E/W permissive phase. The primary concern with this alternative is the operational impacts of eliminating the permissive phase. An analysis was performed to determine the measure-of-effectiveness (MOE) of this alternative as compared to existing operations. The MOE summary is provided in **Table 2**. The results of the analysis shows that eliminating the permissive movement will increase the vehicle delay (LOS) at the intersection.

Interception	Peak	Approach	Exist Perm/	ing Prot	E/W Pro Only Le	tected ft-turn	Difference	
Intersection	Period	Approach	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
		EBL	13.7	В	47.0	D	33.3	B > D
		EBTR	22.7	С	15.8	В	-6.9	C > B
		WBL	16.6	В	38.7	D	22.1	B > D
	AM	WBTR	32.9	С	25.2	С	-7.7	-
		NB	24.5	С	22.2	С	-2.3	-
		SB	25.6	С	22.2	С	-3.4	-
		Overall	22.2	С	22.9	С	0.7	-
	Mid-day	EBL	23.3	С	44.1	D	20.8	C > D
Old		EBTR	48.9	D	24.1	С	-24.8	D > C
Woodward		WBL	22.1	С	39.6	D	17.5	C > D
Avenue		WBTR	38.4	D	25.9	С	-12.5	D > C
& Willits Street		NB	26.1	С	29.5	С	3.4	-
		SB	24.2	С	24.4	С	0.2	-
		Overall	27.1	С	27.2	С	0.1	-
		EBL	26.6	С	46.0	D	19.4	C > D
		EBTR	42.5	D	16.5	В	-26.0	D > B
		WBL	22.6	С	49.0	D	26.4	C > D
	PM	WBTR	40.8	D	29.0	С	-11.8	D > C
		NB	23.7	С	31.8	С	8.1	-
		SB	26.5	С	28.2	С	1.7	-
		Overall	27.9	С	28.6	С	0.7	-

Table 2: Protected E/W Left-Turn MOE Summary



Intersection	Peak Period	Approach	Average (ft)	95th % (ft)	Average (ft)	95th % (ft)	Average (ft)	95th % (ft)
		EBL	78	147	96	186	18	39
	A N /	WBL	10	33	11	37	1	4
	Aivi	NBTR	38	82	34	75	-4	-7
		SBT	100	194	84	181	-16	-13
Old	Mid-day	EBL	107	204	110	192	3	-12
Woodward		WBL	36	79	40	81	4	2
Avenue &		NBTR	99	191	114	200	15	9
Willits Street		SBT	144	312	134	245	-10	-67
		EBL	162	283	156	297	-6	14
	РМ	WBL	28	88	32	80	4	-8
		NBTR	62	127	77	148	15	21
		SBT	125	251	134	266	9	15

Key Findings

- The LPI phase for the E/W crossings will be available as additional green time for other movements, due to eliminating the potential vehicle-pedestrian conflicts along the E/W crossings.
- The vehicle delay (LOS) will increase for the E/W left turn movements; however, it will decrease for the E/W through movements.
- All potential vehicle-pedestrian conflicts will be eliminated for pedestrians crossing in the E/W directions
 - o Vehicle-pedestrian conflicts will still exist for N/S crossing pedestrians
- The existing 4-section signal heads on the east and west approaches would need to be modified to provide 3-section signal heads and operate as protected only.

5. PERMISSIVE / PROTECTED LEFT-TURN (LAGGING LEFT)

Currently, the intersection of Old Woodward Avenue & Willits Street provides permissive/protected phasing for E/W left-turns from Willits Street. The permissive/protected phasing for left-turns provided has a leading protective phase for left-turns. The existing left-turn and pedestrian signal timing with the LPI is as follows.

Left Turn	(÷	÷	÷		$\leftarrow \leftarrow$			
Signal	Green	Yellow	Red	Red	1	Red			
Pedestrian	Don't	Don't	Don't	Walk	Wolk	Flash	Don't	Don't	
Signal	Walk	Walk	Walk	(LPI)	vvalk	Don't Walk	Walk	Walk	

F&V observed confusion for both vehicles and pedestrian during the LPI phase (highlighted in red). Left-turning vehicles have a green arrow and vehicles are expecting the protected green to continue into a permissive (flashing yellow) left-turn. However, before the flashing left-turn movement, the LPI turns on the WALK sign for pedestrians. Vehicles are waiting in the intersection for the flashing yellow arrow, while pedestrians are waiting for the vehicle to turn or vehicles are running the red light during the all red and LPI phase. In the end, the LPI time is wasted because pedestrians are uncertain of who has the ROW and vehicles are unsure if the light will change for them to complete their movement.

This alternative looked at switching the signal phasing to eliminate the confusion currently experienced by both pedestrians and drivers. This signal phasing modification will create a smoother transition by starting the LPI phase after the north/south phase rather than in between the east/west through and left-turn phases. The proposed left-turn and pedestrian signal phasing for this alternative are summarized below.

Left Turn Signal	← Red	F	←← Tashing Yellov	N	← Green	← Yellow	← Red
Pedestrian Signal	Walk (LPI)	Walk	Flash Don't Walk	Don't Walk	Don't Walk	Don't Walk	Don't Walk

Intersection	Peak Period	Approach	Existing (Leading) Perm/Prot		Proposed (Lagging) Perm/Prot		Difference	
		Approach	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
	АМ	EBL	13.7	В	15.8	В	2.1	-
		EBTR	22.7	С	34.0	С	11.3	-
		WBL	16.6	В	21.1	С	4.5	B > C
		WBTR	32.9	С	34.4	С	1.5	-
		NB	24.5	С	22.6	С	-1.9	-
		SB	25.6	С	22.7	С	-2.9	-
		Overall	22.2	С	22.8	С	0.6	-
	Mid-day	EBL	23.3	С	22.9	С	-0.4	-
01.1		EBTR	48.9	D	39.5	D	-9.4	-
UID Woodward		WBL	22.1	С	23.5	С	1.4	-
Avenue &		WBTR	38.4	D	35.0	D	-3.4	-
		NB	26.1	С	25.9	С	-0.2	-
winns Street		SB	24.2	С	23.9	С	-0.3	-
		Overall	27.1	С	25.6	С	-1.5	-
	РМ	EBL	26.6	С	22.2	С	-4.4	-
		EBTR	42.5	D	38.7	D	-3.8	-
		WBL	22.6	С	24.5	С	1.9	-
		WBTR	40.8	D	61.9	E	21.1	D > E
		NB	23.7	С	21.6	С	-2.1	-
		SB	26.5	С	23.9	С	-2.6	-
		Overall	27.9	С	29.0	С	1.1	-
Intersection	Peak Period	Approach	Average (ft)	95th % (ft)	Average (ft)	95th % (ft)	Average (ft)	95th % (ft)
	АМ	EBL	78	147	81	146	3	-1
		WBL	10	33	13	43	3	10
		NBTR	38	82	39	83	1	1
		SBT	100	194	98	191	-2	-3
Old	Mid-day	EBL	107	204	241	439	134	235
Woodward Avenue & Willits Street		WBL	36	79	60	133	24	54
		NBTR	99	191	89	179	-10	-12
		SBT	144	312	109	222	-35	-90
	PM	EBL	162	283	150	280	-12	-3
		WBL	28	88	30	100	2	12
		NBTR	62	127	63	126	1	-1
		SBT	125	251	130	245	5	-6

Table 3: Permissive/Protected E/W Lagging Left-Turn MOE Summary

Key Findings

- This alternative would eliminate the existing pedestrian and driver confusion with the use of the LPI.
- The eastbound left-turn vehicle queues during the mid-day peak period showed a significant increase in delay and queue lengths as a result of conflicting westbound movements and only having 6 seconds of green time for the protected left-turn movements.

6. PEDESTRIAN SCRAMBLE

This pedestrian improvement restricts all vehicular movements at an intersection and provides a pedestrian only walking phase. At intersections with this type of pedestrian treatment, an "X" crosswalk through the middle of the intersection is often implemented, in addition to the four typical crossings connecting each corner. This type of treatment allows pedestrians to travel without any potential for vehicle-pedestrian conflicts; however, this is typically implemented at intersection locations in dense urban areas with high pedestrian volumes.

		Approach	Existing LPI		Pedestrian Phase		Difference	
Intersection	Peak Period		Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
	АМ	EBL	13.7	В	25.8	С	12.1	B > C
		EBTR	22.7	С	30.7	С	8.0	-
		WBL	16.6	В	30.6	С	14.0	B > C
		WBTR	32.9	С	47.0	D	14.1	C > D
		NB	24.5	С	24.9	С	0.4	-
		SB	25.6	С	37.6	D	12.0	C > D
		Overall	22.2	С	31.6	С	9.4	-
	Mid-day	EBL	23.3	С	49.1	D	25.8	C > D
Old Woodward Avenue & Willits Street		EBTR	48.9	D	73.8	Е	24.9	D > E
		WBL	22.1	С	42.3	D	20.2	C > D
		WBTR	38.4	D	57.0	Е	18.6	D > E
		NB	26.1	С	63.0	E	36.9	C > E
		SB	24.2	С	44.1	D	19.9	C > D
		Overall	27.1	С	51.0	D	23.9	C > D
	РМ	EBL	26.6	С	116.9	F	90.3	C > F
		EBTR	42.5	D	49.5	D	7.0	-
		WBL	22.6	С	28.3	С	5.7	-
		WBTR	40.8	D	68.1	E	27.3	D > E
		NB	23.7	С	62.2	E	38.5	C > E
		SB	26.5	С	81.8	F	55.3	C > F
		Overall	27.9	С	70.9	Е	43.0	C > E
Intersection	Peak Period	Approach	Average	95th %	Average	95th %	Average	95th %
	АМ	EBL	78	147	94	173	16	26
		WBL	10	33	13	63	3	30
		NBTR	38	82	61	110	23	28
		SBT	100	194	114	219	14	25
UI0 Woodword	Mid-day	EBL	107	204	138	248	31	44
		WBL	36	79	39	88	3	9
& Willits Street		NBTR	99	191	189	290	90	99
		SBT	144	312	236	444	92	132
	РМ	EBL	162	283	179	305	17	22
		WBL	28	88	51	156	23	68
		NBTR	62	127	110	212	48	85
		SBT	125	251	245	478	120	227

Table 3: Pedestrian Scramble MOE Summary



Key Findings

- Pedestrian movements will be fully separated from vehicular movements.
- This treatment would require a reduction in green time for all movements; resulting in the vehicle delay (LOS) and vehicle queuing increasing along all approaches and movements.
- Since a pedestrian phase would not be required at all times, push-buttons or other pedestrian detection is recommended in order to minimize vehicle delays when pedestrians are not present.

7. ADDITIONAL SIGNAGE

The effectiveness that additional signage has on driver yielding compliance is influenced by several factors, including vehicular speed, traffic volume, and whether the driver perceives yielding as a courtesy or the law. Enhancing signage with pedestrian activated lights or flashing beacons has been shown to be more effective than those signs that flash/blink continuously. Pedestrian signage placed in advance of the crosswalk location has been shown to be effective at reducing vehicle-pedestrian conflicts.

Key Findings

- A "Left turns yield to pedestrians" sign would provide advanced warning for drivers making left-turns, ideally increasing their attention to crossing pedestrians.
- Additional signage will only be effective for those motorists who observe and obey the signage.
- Overuse of signs may breed noncompliance and disrespect.
- Visibility of signs will be of difficulty due to on-street parking.

8. COMBINATION OF IMPROVEMENTS

This alternative considered implementation of several of the alternatives together for a combined effect on the pedestrian safety and operations. This alternative includes:

- 1) Bumpout (NE Corner)
- 2) Bumpout (NW Corner)
- 4) Protected Left-turns (Willits St.)

The proposed design for the combination of improvements is shown on the attached **Figure 5**. The MOE for this alternative is the same as presented in Alternative 4 and shown in Table 2.

Key Findings

- The total crosswalk distance is reduced from 75-feet to 60-feet.
- The addition of a few parking spaces along the west side of Old Woodward could be provided by reducing the existing lane widths to 11-ft each.





SUMMARY & RECOMMENDATIONS

The results of the alternative analysis are summarized in Table 5. The recommended mitigation measures improve the pedestrian facilities and provide acceptable intersection operations.

	Alternative	Crosswalk Length (ft)	Safety Enhancement	Acceptable LOS	Signal Change	Recommended
1.	Bumpout (NE Corner)	67	YES	YES	NO	YES
2.	Bumpout (NW Corner)	68	YES	YES	NO	YES
3.	Lane Reduction with Bumpout (NW Corner)	60	YES	NO	YES	NO
4.	Protected Left-Turns	75 (No change)	YES	YES	YES	YES
5.	Permissive/Protected Lagging Left-turns	75 (No change)	YES	NO	YES	NO
6.	Pedestrian Scramble	75 (No change)	YES	NO	YES	NO
7.	Signage	75 (No change)	YES	YES	NO	w/ Reservations
8.	Combination of Improvements (1,2,4)	60	YES	YES	YES	YES

Table 5: Alternative Analysis Summary

If you have any questions or concerns, please contact our office.

Sincerely, FLEIS & VANDENBRINK

hall

[/] Julie M. Kroll, PE, PTOE Sr. Project Manager

JJS2:maa:jmk



FIGURE 2 **NORTHEAST CORNER BUMPOUT**

WILLITS ST. & WOODWARD AVE.

FLEIS&VANDENBRINK Design. Build. Operate.



FIGURE 3 NORTHWEST CORNER BUMPOUT

OAKLAND COUNTY, MICHIGAN WILLITS ST. & WOODWARD AVE.

FIGURE 4 LANE REDUCTION & NW CORNER BUMPOUT

OAKLAND COUNTY, MICHIGAN WILLITS ST. & WOODWARD AVE. CONCEPT PLAN

FIGURE 5 **COMBINED IMPROVEMENTS**

CITY OF BIRMINGHAM OAKLAND COUNTY, MICHIGAN WILLITS ST. & WOODWARD AVE.

FIGURE 2 **NORTHEAST CORNER BUMPOUT**

FIGURE 3 NORTHWEST CORNER BUMPOUT

FIGURE 4

FIGURE 5 **COMBINED IMPROVEMENTS**

WILLITS ST. & WOODWARD AVE.

MEMORANDUM

Engineering Dept. Planning Dept. Police Dept.

DATE:	May 30, 2019	

TO: Multi-Modal Transportation Board

FROM: Jana Ecker, Planning Director Scott Grewe, Police Commander Paul T. O'Meara, City Engineer

SUBJECT: Pedestrian Improvements at Maple Rd. & Southfield Rd.

The City has received a grant to relocate the south leg of the above intersection. The federal funding was authorized due to the expected safety benefits that the work would provide. The intersection is now being designed for bidding as a part of the larger Maple Rd. Paving Project planned for construction in the spring of 2020.

In the interim, the City has received another complaint about the bad conditions that currently exist for pedestrians at this intersection, particularly for those attempting to cross Maple Rd. Based on the comments (attached), we asked F&V to consider any low cost improvements that could be made while we await to reconstruct this area. Two low cost ideas were provided:

- Modify the timing of the traffic signal to provide a 4 second LPI for the north/south crosswalk on the east leg of the intersection. The LPI would provide a 4 second period each cycle where all vehicles would be stopped to allow time for pedestrians to get out into the intersection before vehicles start moving, allowing them to have the right-of-way. The additional four seconds would be provided at a time so as to not impact the Level of Service.
- Replace the current sign for the northbound right turn lane with a higher visibility sign stating "WATCH FOR PEDESTRIANS WHILE TURNING." The sign would have a fluorescent green background to command more attention than the current sign does.

Staff endorses these changes as being simple ways to make an effort to improve the current conditions until the road can be reconstructed less than a year from now. A suggested resolution is provided below.

SUGGESTED RECOMMENDATION:

To recommend to the City Commission the following improvements at the Maple Rd. and Southfield Rd. intersection, as an interim measure to improve pedestrian safety prior to the reconstruction of the intersection in 2020:

1. Modification of the traffic signal timing to add a 4 second LPI for those using the north/south crosswalk located on the east leg of the intersection.

2. Installation of an R10-15(R) sign stating TURNING VEHICLES YIELD TO PEDS sign for the northbound right turn lane.

RE: Pedestrian Safety

3 messages

Julie M. Kroll <jkroll@fveng.com> To: Paul O'Meara <Pomeara@bhamgov.org> Cc: Austin Fletcher <afletcher@bhamgov.org>

Fri, May 3, 2019 at 12:09 PM

Paul,

We have reviewed the intersection signing and operations and there are few items that could be implemented at low cost to improve safety in the interim before the intersection reconfiguration is completed.

- 1. Add a 4 sec LPI for N/S crosswalk (east leg of intersection)
 - This would be the "pedestrian override" that would provide an all red for 4 sec to allow peds to enter the intersection.
 - An LPI of 4 secs will not impact the LOS at the intersection. The 4 secs would be applied to Southfield traffic and the splits on Maple Road would not change.
- 2. Replace existing "Watch for Pedestrians While Turning" sign with a R10-15 " (Right) Turning Vehicles Yield to Peds" -See attached exhibit.
 - This sign has high visibility sheeting and may help make drivers more aware of pedestrian crossing.

Both of these options are very low cost, but will help improve the pedestrian safety without impacting the intersection operations.

Please let me know if you need anything additional regarding this request.

Thanks,

Julie

Julie M. Kroll, PE, PTOE

Sr. Project Manager | Associate

FLEIS & VANDENBRINK

27725 Stansbury Blvd., Suite 195 | Farmington Hills | MI | 48334

O: 248.536.0080 | D: 248.536.1998 | C: 248.342.5786 | F: 248.536.0079

www.fveng.com

From: Paul O'Meara <Pomeara@bhamgov.org> Sent: Thursday, April 25, 2019 5:03 PM To: Julie M. Kroll <jkroll@fveng.com> Cc: Austin Fletcher <afletcher@bhamgov.org> Subject: Fwd: Pedestrian Safety

Please review the conversation below, and lets discuss next week off line when we are meeting with the MMTB. Thanks.

------ Forwarded message ------From: Joe Valentine <Jvalentine@bhamgov.org> Date: Thu, Apr 25, 2019 at 4:57 PM Subject: Re: Pedestrian Safety To: DShare <DShare@bsdd.com> Cc: Paul O'Meara <Pomeara@bhamgov.org>, Austin Fletcher <afletcher@bhamgov.org>, Mark Clemence <Mclemence@bhamgov.org>

Dan,

Nice to hear from you and thank you for sharing your concerns regarding the Maple and Southfield intersection. This specific intersection has been reviewed extensively as part of the plans to reconstruction Maple Road next year. As you've suggested, the angle of the intersection will be changed to improve this condition as a result. Given the vehicles would technically have the right of way until you are in the crosswalk, I will pass along your suggestion regarding the signal override for right turns to our Engineering Department to see if this or other accommodations can be implemented in the interim.

Thanks again for sharing your experience and ideas for improvement of this intersection. Work is expected to begin next Spring for the physical improvements.

Should you have any further questions, please let me know.

Best regards,

Joe

On Tue, Apr 16, 2019 at 2:23 PM DShare <DShare@bsdd.com> wrote:

Hi Joe. Twice in the last week I have had to cross Maple at Southfield, from the southeast corner where the traffic light is to the north side of the street in front of the Museum. On both occasions I was clearly in danger. The first time, last Saturday, I was unable to cross the first time the pedestrian crossing light went white. The line of cars came around the corner from Southfield onto eastbound

Maple so fast that had I stepped into the intersection I would have been hit. Either the turning cars didn't see me until they were already at the crosswalk and with a head of steam or they saw me but didn't care, perhaps thinking they have the right of way. I had to wait until halfway through the second traffic light cycle to cross. Then I was able to do so only because there were no more cars heading from northbound Southfield to eastbound Maple. The second time was this morning. Again, until all the traffic that wanted to head east had turned, I was unable to enter the street.

When I crossed back this morning from the north to the south side of Maple, I had no difficulty. I entered the crosswalk with the light. The eastbound cars stopped and let me pass. I realized that was because the angle of the intersection allows cars turning east on Maple to look directly at the crosswalk on the north side of Maple, but the same angle seems to prevent them from seeing the northbound pedestrians at the edge of the crosswalk until they are well into their turn and building up speed.

Can something be done about this? One thought that occurs to me is a pedestrian override of the right turn green arrow for the northbound Southfield cars.

As I am not sure who the correct person in your administration is to address this situation, I am sending it to you.

Thanks for any help you can give.

BARRIS | SOTT | DENN | DRIKER | PLLC

Daniel M. Share

333 W. Fort St.

Suite 1200 Detroit, MI 48226 Tel: (313) 965-9725 Fax: (313) 983-3324 Direct: (313) 596-9306 e-mail: dshare@bsdd.com Web: www.bsdd.com

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Joseph A. Valentine City Manager City of Birmingham 151 Martin Street Birmingham, MI 48009 (248) 530-1809 Office Direct (248) 530-1109 Fax jvalentine@bhamgov.org Twitter: @JoeValentine151

To get the latest information regarding the City of Birmingham, please sign up for our communication tools by clicking here www.bit.ly/bhamnews.

Paul T. O'Meara City of Birmingham, MI City Engineer

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pomeara@bhamgov.org

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Maple & Southfield.pdf

Cc: "Ecker, Jana" <Jecker@bhamgov.org>, "Grewe, Scott" <Sgrewe@bhamgov.org>, Austin Fletcher <afletcher@bhamgov.org>, Lauren Chapman <lchapman@bhamgov.org>

Joe -

I asked F&V to look at the Maple & Southfield intersection in response to the comments from Daniel Share about his concerns as a pedestrian. There are two minor tweaks that we can implement right now at low cost, as described below. We would generally go through the MMTB and City Commission to do this. However, since this intersection is being reconstructed starting next March, and we may be able to bring some benefit to the public quicker, we could just move forward and make these modifications now, unless you think it is best to go through normal channels. [Quoted text hidden]

Maple & Southfield.pdf

Paul O'Meara <Pomeara@bhamgov.org> To: "Julie M. Kroll" <jkroll@fveng.com> Mon, May 6, 2019 at 10:34 AM

Thanks for these suggestions Julie. I have passed them on to Joe to see if we should move forward quickly, or discuss first with the board.

[Quoted text hidden]

Suzanne Lasser Hought you might Want to shore Jus

Vision Zero, a 'Road Diet' Fad, Is Proving to Be Deadly

Renee Khoury was in the kitchen when she heard a scream. She ran outside and found 65-year-old her mother, Rebecca. sprawled on the sidewalk with a compound fracture in her left leg. Renee called 911 then ed her mom as best she

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hourys live five blocks from ion 62 in West Los Angeles's a neighborhood. They heard right away, but something ong. It wasn't moving. "It minutes," says Renee's husff. "Becky was in pain. They ar help but it couldn't reach

ingeles, like cities nationtransforming its streets. In 7 the city installed a "road a 0.8-mile stretch of Venice 'd in Mar Vista, reducing es to two and adding bike parated from traffic by parkers. The project is part of ic Garcetti's Vision Zero inithich aims to eliminate trafities in the city by 2025. 1 in 2015, Vision Zero is the lical transformation of how nove through Los Angeles dawn of the freeway era 75

nost any metric it's been a Pedestrian deaths have publed, from 74 in 2015 to)17, the last year for which available. After years of imnt. Los Angeles again has I's worst traffic, according

to the transportation research firm Inrix. Miles of vehicles idling in gridlock have reduced air quality to 1980s levels.

The international Vision Zero movement began in the 1990s in Sweden, where it apparently worked well. The Swedish government claims a 50% reduction in traffic deaths since 2000. Hoping to achieve similar gains, U.S. mayors from New York City to North Pole, Alaska, have adopted Vision Zero. Projects range from multibillion-dollar light-rail lines to retiming traffic lights for slower traffic. Road diets are key.

In neighborhoods across New York City, residents, community boards and local businesses have done battle with city officials over "traffic calming" measures imposed by city hall. Lane reductions, bike

lanes, new meridians and other innovations designed to reduce vehicle speeds make it difficult for bulky ambulances and fire trucks to respond quickly to emergencies. And

Emergency vehicles get stuck on streets that have been narrowed to promote walking and bicycling.

while pedestrian deaths have plummeted in the Big Apple under Vision Zero, deaths of bicyclists, motorcyclists and people in vehicles have ticked up.

Around the country, officials have implemented projects on short notice, over local objections and without consulting first responders. Howard Holt, a fire captain in Oakland, Calif., said he found out about a road diet in front of his station when he arrived for a shift one morning. "I wasn't sure if I was supposed to drive in the new green lanes," he said recently. "Turns out they're bike lanes." He calls the city bureaucracy "The Wall,"

During the 2017 La Tuna Fire, the biggest in Los Angeles in half a century, a road diet on Foothill Boulevard the in Sunland-Tujunga neighborhood bottlenecked evacuations. After the fire a neighborhood association voted to go off the road diet. The city ignored the request and instead added another one to La Tuna Canvon Road.

The story isn't confined to big cit-

ies. In Waverly, Iowa (pop. 9.837). Fire Chief Dennis Happel and Bremer County Sheriff Dan Pickett say the city has ignored their concerns over a road diet plan. In Fairbanks, Alaska, Fire Battalion Chief Brian Davis says the city installed traffic controls to mitigate the impact of new bike lanes in front of his fire house. In January the average high temperature in Fairbanks is zero Fahrenheit-much too cold to ride a bike.

It's noble to want to make America's streets as safe as they can be. But government officials shouldn't impose projects on communities that don't work, inconvenience residents, hurt businesses and impede emergency responders in the process.

Mr. LeGras is an attorney and writer in Los Angeles.

For Sanity's Sake, Delete Your Account

By Barton Swaim

ne Saturday morning last fall, I sat down at my desk and deleted my Twitter account. I did it for a variety of reasons. Privacy, for one: The thought of people unknown to me prowling around my account made me uneasy. It was also a distraction. Most Twitter regulars will confess to wasting hours following the idiotic spats and tirades for which the medium has become famous.

That leads me to the primary reason for deleting my account: I am not God.

Twitter-and I gather this applies to a lesser degree to other social media-gives one an awareness, or at least the impression of an awareness, of what hundreds or even thousands of people are thinking at the moment. If you follow more than a small number of accounts, you're likely to find, in addition to some fine wit and the occasional useful link, an immense quantity of material that's by turns obtuse, absurd, mean and mendacious. Yet such tweets will arouse your ire or curiosity. You'll look further into the exchanges in which they occur, and after a short time vou will have considered a vast array of vicious, defamatory and inane utterances.

Complaints that too many people

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are publishing their ill-formed thoughts are not new. In 1802 the Scottish critic Francis Jeffrey groused in the Edinburgh Review that "hairdressers and valets write amatory verses: coffeehouse waiters publish political pamphlets; and shoemakers and tailors astonish the world with plans for reforming the constitution." That sounds hopelessly elitist in our egalitarian era, but Twitter is the ludicrous conclusion of the propensity Jeffrev lamented.

The instantaneous awareness of so much folly is not. I now think, healthy for the human mind. Spending time on Twitter became, for me, a deeply demoralizing experience.

Often, especially when some controversy of national importance provoked large numbers of users into tweeting their opinions about it. I would come away from Twitter exasperated almost to the point of madness.

I thought of a verse from the 94th Psalm: "The Lord knoweth the thoughts of man, that they are vanity." After an hour or so of watching humanity's stupidities scroll across my screen, I felt I had peeked into some dreadful abyss into which only God can safely look. It was not for me to know the thoughts of man.

Mr. Swaim writes a politicalbooks column for the Journal.