LINK TRANSIT COMPREHENSIVE SYSTEM ANALYSIS

Final Report

June 2021

NELSON
NYGAARD

Table of Contents

1 INTRODUCTION

The Link Transit Comprehensive Service Analysis (CSA) Final Report documents the current conditions of transit service in Chelan and Douglas counties, analyzes the results of outreach conducted during the study, and describes recommended changes to the Link Transit system.

Early chapters in the report review the existing transportation and land use planning context in the area, review historic operating data for Link Transit, and assess potential transit demand in the region. Later chapters describe public outreach, the initial service scenarios that were shared with the public, and the recommended Preferred Scenario for Link Transit. Other chapters of the report document long-term strategic issues for the agency, make recommendations for fare changes, and outline a roadmap for implementation of the Preferred Scenario.

LINK TRANSIT COMPREHENSIVE SERVICE ANALYSIS

The Link Transit CSA was initiated to review and evaluate the effectiveness and efficiency of Link Transit's fixed-route service and to develop alternative future service plans.[1] The study was conducted from Spring 2020 through Summer 2021.

COVID-19

The Link Transit CSA started as the 2020 COVID-19 pandemic began drastically changing daily life for people throughout the world and in Chelan and Douglas counties. The pandemic caused Link Transit to make unplanned service changes in March 2020 and alter planned service changes in July 2020. It also eliminated the possibility of in-person outreach that was planned as a part of the study. In response to these changes, the study evaluated pre-COVID-19 service under the assumption that the underlying travel patterns and markets in place before COVID-19 will remain relatively constant after widespread COVID-19 vaccination is achieved. The CSA Existing Conditions Report also includes a COVID-19 impact analysis, which identifies systemwide, route-level, and stop-level impacts to ridership caused by COVID-19.

[1] Link Transit. January 20, 2020. RFP 2020-02. p. 11

Final Report Organization

This document is organized in seven chapters. The beginning of each chapter highlights key findings, when prudent. The remainder of each chapter includes more detailed documentation and discussion of findings. Sources, abbreviations, and technical terms are noted and/or defined throughout the document.

- **Chapter 1: Introduction** introduces the document and describes the chapters included.
- **Chapter 2: Existing Conditions Key Findings** summarizes key findings from this study's Existing Conditions Report, which is included in full as Appendix A.
- **Chapter 3: Outreach** describes the key findings from outreach conducted with the Link Transit Board of Directors and operators. This chapter also includes an in-depth analysis of Winter/Spring 2021 service scenario survey results.
- **Chapter 4: Long-Term Strategic Issues** explores several of the key long-term strategic issues facing Link Transit, such as new real estate development, park-and-rides, and approaches to improving rural transit service.
- **Chapter 5: Fare Recommendations** reviews Link Transit's fare structure and makes recommendations to improve agency-wide fares.
- **Chapter 6: Recommendations** describes the process by which the recommended Preferred Scenario was developed and provides detailed information on the Preferred Scenario, including route-level frequencies and spans, as well as maps. This chapter also includes the financial implications of the Preferred Scenario and some long-term strategic issues elements.
- **Chapter 7: Implementation** describes the next steps Link Transit must take to implement the Preferred Scenario.
- **Appendix A: Existing Conditions Report** includes the full, 300-page Existing Conditions Report completed as part of the Comprehensive Service Analysis.
- **Appendix B: Service Scenario Maps** includes the detailed scenario maps shared with the public as a part of the Winter/Spring 2021 scenario survey.
- **Appendix C: Outreach Materials** includes the outreach materials used to interview and survey Link Transit board members and operators, as well as materials used to drive respondents to the Winter/Spring 2021 scenario survey.
- **Appendix D: Scenario Survey Open-Ended Comments** includes all the comments submitted by respondents to the Winter/Spring 2021 scenario survey.

2 EXISTING CONDITIONS KEY FINDINGS

INTRODUCTION

The first analytical portion of the CSA was an in-depth review of Link Transit's existing conditions and operating context. This document, called an Existing Conditions Report, is 300 pages long and is attached to this report as Appendix A. Key findings from the Existing Conditions Report are highlighted in this chapter, as they are important context for the final recommendations produced by this plan. The Existing Conditions Report assessed Link Transit's operating context in the following subject areas:

Plan and Development Review: Summarizes existing transportation and land use planning efforts related to Link Transit, as well as major development projects occurring in Link Transit's service area. This section also reviews recent Link Transit plans and outreach efforts and summarizes key findings.

Market and Travel Demand Analysis: Includes a market analysis and travel demand analysis. The market analysis identifies places in Chelan and Douglas counties that are likely to have the greatest demand for public transit. The travel demand analysis paints a high-level picture of commute flows.

Transit in Chelan and Douglas Counties: Includes four distinct assessments reviewing key Link Transit performance indicators over time, current vehicle assignment and passenger capacity, the impacts of COVID-19 on ridership, and connections between Link Transit and other transit services.

Organizational Assessment: Assesses Link Transit's current organizational structure and staff levels. This section compares Link Transit's organization to peer agencies and assesses planned staff expansion in the context of Vision 2020 service growth.

Fare Assessment: Reviews Link Transit's existing fare structure and policies. This section summarizes revenue trends, fare media usage, and rider demographics to identify opportunities for changes to fare policies and structure. The section also estimates the effects of implementing zero-fare service on ridership, revenue, and operating costs at a systemwide and route level.

Route Profiles: Describes each one of Link Transit's fixed-route and demand-response routes in detail, including alignment characteristics, service span, headway, destinations served, ridership, and on-time performance. Stop-level ridership maps and detailed statistical route profiles are at the end of the Existing Conditions Report.

Key findings from these Existing Conditions Report sections are below.

PLAN AND DEVELOPMENT REVIEW

Key findings from the plan and development review section of the Existing Conditions Report are separated into three categories:

Land Use and Transportation Plans

- Regional planning efforts seek to improve active transportation access to transit facilities and bus stops.
- Local land use planning for urban areas aspires to establish transit-oriented development in places with planned high-density land uses, as well as at Columbia Station.
- Local plans have identified expanded commuter service between Leavenworth and Wenatchee, as well as new service to Pangborn Airport, as potential Link Transit improvements.
- The North Wenatchee Transportation Master Plan calls for a second transit center in North Wenatchee, in the N Wenatchee Avenue and N Miller Street area.

Development Review

- Significant residential developments are occurring both within downtown Wenatchee and at the urbanized outskirts of East Wenatchee and Wenatchee.

Link Transit Planning and Outreach

- A 2008 park-and-ride study recommended the development of park-and-rides in Leavenworth, Peshastin, Rock Island, and Cashmere. To date, Rock Island and Cashmere do not have park-and-ride lots.
- Outreach revealed strong community support for Vision 2020 goals, with notably strong support for expanded weekend service, increased span of service, and rider-facing technology improvements. Expansion to Plain/Lake Wenatchee and Valley Hi were not overwhelmingly supported by survey respondents but a route serving Pangborn Airport was.
- Outreach in Leavenworth revealed demand for improved commuter service between Wenatchee and Leavenworth.
- Outreach in Chelan revealed some demand for transit that supports shopping and medical trips, although most respondents indicated they would use this service only a few days a week.
- About half of respondents to a 2019 onboard survey indicated they make at least one transfer when they ride Link Transit.

MARKET AND TRAVEL DEMAND ANALYSIS

Key findings from the market and travel demand analysis are:

- The portion of Link Transit's service area with the market most likely to support transit is downtown Wenatchee and neighborhoods immediately adjacent. Many people with the greatest need for transit—such as those without access to a vehicle or with disabilities—live most densely in this area.
- Most major trip-generating locations are in the Wenatchee urban area. Leavenworth, Cashmere, Chelan, Entiat, and Waterville are also home to some of these locations, while Malaga and Rock Island have few non-residential major trip-generating locations.
- Commute flows in the Link Transit service area are heavily centered on the Wenatchee urban area. Considerable commuting also occurs among Leavenworth, Cashmere, and Wenatchee, and from unincorporated portions of both Chelan and Douglas County. Outside of the Wenatchee urban area, the greatest amount of intra-zonal commuting occurs in the Chelan/Manson area.
- More commuters live in Wenatchee and work in Cashmere, Chelan, and Leavenworth than vice versa.
- The areas of Chelan and Douglas counties that are not currently served by Link Transit—as well as some that are—are extremely low-density and difficult to serve with efficient fixed-route transit service.

TRANSIT IN CHELAN AND DOUGLAS COUNTIES

Key findings from the 'Transit in Chelan and Douglas Counties' section of the Existing Conditions Report are separated into four categories:

Key Performance Indicators

- Since 2016, service hours for both demand-response and fixed-route systems have increased at a greater rate than ridership, resulting in dropping productivity for both service types.
- In the years following the Great Recession, Link Transit reduced fixed-route revenue hours by 15% and demand-response revenue hours by 35%. It took Link Transit approximately 10 years to restore these service cuts.
- The farebox recovery ratio for Link Transit's fixed-route service is low relative to peer Washington agencies, at 4.4%.

Bus Size Assessment

- Under a potential transition to systemwide zero-fare service, four routes would likely need to be served by a heavy-duty transit bus, and three routes would likely approach this threshold.

- Link Transit is recommended to continue operating a mixed fleet of cutaway and heavy-duty transit buses to allow for flexibility and satisfaction of Washington State zero-emissions vehicle procurement regulation.

COVID-19 Impacts to Service

- Ridership losses caused by COVID-19 began the week of March 9, 2020 and were most extreme the week of March 30, 2020.
- Ridership declines caused by COVID-19 were most extreme in Manson, Chelan, and Leavenworth. Ridership near downtown Wenatchee was the most resilient.
- Some of Link Transit's intercity routes saw a smaller percent decline in ridership than most urban routes, suggesting the market served by intercity routes has fewer travel options.

Connections to Other Transit Services

- Columbia Station is the hub for connections between Link Transit and intercity transit options, although connections can be made at other locations. There are opportunities to improve fare and marketing integration across these services.

ORGANIZATIONAL ASSESSMENT

Key findings from the organizational assessment are:

- Based on 2018 data, Link Transit is generally consistent with peer agencies in terms of productivity, service efficiency, and performance per full-time employee (FTE).
- Link Transit leads its peers in terms of passenger miles per FTE, primarily due to the long intercity routes operated throughout the two-county service area.
- Link Transit's organizational structure is unique among peers in that the agency has ambitious expansion plans but lacks dedicated planning and human resources divisions to help guide strategic direction for the agency.
- Overall, Link Transit's plans for staffing growth are within the bounds of reasonable and responsible transit management practices.
- Link Transit's planned operator and maintenance staff hiring would remain in line with peer performance, but annual revenue hours per operator FTE may be on the low end of peer efficiency. Link Transit's planned supervisor and administrative staff hiring would keep the agency in line with peer agency staffing levels and prepare it for future growth.

FARE ASSESSMENT

Key findings from the fare assessment section of the Existing Conditions Report are separated into two categories:

Existing Conditions

- Farebox recovery ratio for Link Transit is generally low, and operating costs per passenger trip have increased in recent years.
- Nearly half of Link Transit fixed-route passengers ride for free, either on a zero-fare shuttle route or as a LinkPlus-eligible rider on a fixed route.

Zero-Fare Analysis

- After implementing zero-fare service, fixed-route ridership and productivity increased significantly for peer agencies, ranging from approximately 40% to 60% in the first year.
- After implementing zero-fare service, peer agencies experienced greater staffing needs than anticipated, largely to manage ridership increases.
- Implementing zero-fare service systemwide on Link Transit would likely increase ridership between 40% (236,000 annual passenger trips) and 60% (354,000 trips) on routes that currently charge a fare. Ridership on shuttle routes that already charge zero fare was not assumed to increase. Additional trips would not be required to accommodate the increase in ridership, but additional FTEs and revenue hours may be required to accommodate increased paratransit demand.
- Systemwide zero-fare service on Link Transit could require up to two additional paratransit vehicles and one or two FTEs.
- Systemwide zero-fare service on Link Transit could increase annual operating costs by $1.29 to $1.46 million, primarily because of increased LinkPlus service.

ROUTE PROFILES

Key findings from the route profile section of the Existing Conditions Report are:

- Most fixed-route ridership activity occurs in the Wenatchee urban area. Among small urban areas, ridership is greatest in Leavenworth, Cashmere, Chelan, and Manson. In smaller communities, such as Waterville and Malaga, ridership is relatively low.
- Route A East Wenatchee, C Downtown Shuttle, and 1 South Wenatchee are the most productive fixed routes in the Link Transit system. The most productive intercity route is Route 21 Manson. The least productive routes are the intercity Waterville, Malaga, Chelan, and Ardenvoir. The least-productive urban route is Route 11 East Wenatchee.
- Most fixed routes meet the agency's On-Time Performance (OTP) standard; only Route A, Route 21, Route 25, and Route 26 do not. Fewer routes meet productivity standards; 86% of zero-fare shuttle routes, 71% of urban routes, and 38% of intercity routes meet their productivity standard. Route 25 and 26 meet neither OTP nor productivity standards.

- Congestion impacts Link Transit's operation the most severely on SR 150 between Manson and Chelan, on US 2 in Leavenworth, on N Wenatchee Avenue between N Miller Street and the Wenatchee River, and on the Sellar Bridge.

3 OUTREACH

This chapter summarizes outreach conducted as a part of the CSA. Most of the outreach conducted during this study can be separated into three distinct phases. These phases are listed below, along with the summary and analysis work for each phase that is found in this chapter.

- **Fall 2020 Board of Directors outreach:** This section of the chapter analyzes results of 2020 outreach conducted with the Link Transit Board of Directors. It summarizes one-on-one interviews with board members and board perspectives from a goals and visioning workshop.
- **Fall 2020 operator outreach:** This section analyzes results of outreach to Link Transit operators. This outreach was conducted via online and paper surveys, as well as through sticky-note operational comments placed on a Link Transit system map.
- **Winter/Spring 2021 scenario survey:** This section summarizes the preferences of survey respondents for the three service scenarios shared in an online survey. It also reviews respondent perspectives on Link Transit becoming a zero-fare system.

Feedback received during outreach informed initial scenario development and refinement of scenarios into a Preferred Scenario.

COVID-19 AND OUTREACH

Typically, comprehensive service analyses involve a significant amount of in-person public outreach conducted at transit centers, on buses, or various community spaces. Due to COVID-19, many of these in-person interactions were deemed not safely possible, so much of the outreach was conducted online. This change in outreach methods likely did not result in a significant drop in engagement, as online engagement throughout the COVID-19 pandemic was robust.

BOARD OF DIRECTORS OUTREACH

As a part of the outreach process for the CSA, a series of one-on-one interviews was conducted with the Link Transit Board of Directors to gather feedback about the agency's challenges, opportunities, and priorities for fulfilling the system's mission. This document summarizes the key findings, and Appendix C contains the interview guide used to conduct the interviews. The board members interviewed over a three-week period from October 30 to November 20, 2020 were:

- **Mia Bretz**, Leavenworth Councilmember
- **Jim Bailey**, Wenatchee Councilmember
- **Bob Bugert**, Chelan County Commissioner
- **Jim Fletcher**, Cashmere Mayor
- **Bob Goedde**, Chelan Mayor

- **Joyce Huber**, Waterville Councilmember
- **Kevin Overbay**, Chelan County Commissioner
- **Evelyn Quezada**, Entiat Councilmember
- **Marc Straub**, Douglas County Commissioner
- **Rob Tidd**, East Wenatchee Councilmember
- **Paul Parmley**, Union Representative (non-voting)

This summary also includes key takeaways and live polling results from the CSA goals and visioning workshop held with the Board of Directors on October 14, 2020. These polling results (Appendix C) are a quantitative complement to the one-on-one interviews. Both were important inputs for the CSA's next steps, including developing service planning scenarios and the Preferred Scenario.

Link Transit Board Priorities

The feedback provided by the Board of Directors during the goals and visioning workshop and one-on-one interviews was analyzed to develop a series of priorities for Link Transit service. These priorities guided the development of service scenarios and recommendations for how Link should allocate future resources to improve transit service. The priorities identified by the board were:

- **Increase ridership and productivity while balancing geographic coverage**. Link Transit should aim to attract more riders by strengthening service in areas with the highest demand. However, Link Transit should also ensure adequate service to communities in the region with sufficient levels of demand and demonstrated need to support transit service.
- **Provide lifeline service for those who need it most**. Link Transit should ensure service is available to those who depend on it the most, including low-income riders, seniors, and people with disabilities.
- **Offer high-quality service to connect the region's communities**. As a regional system, Link Transit should offer high-quality transit service to provide access to jobs and essential services such as health, food, and education throughout communities in the region.
- **Provide fast and direct service to make transit competitive with driving**. Improving travel times will benefit current riders and is essential to attract new riders, particularly choice commuters.
- **Explore service alternatives for locations difficult to serve with fixed-route transit**. Recognizing that demand in some communities can be too low to warrant fixed-route service, Link Transit should analyze appropriate alternatives in rural communities to serve riders who need it the most.
- **Encourage affordability of the transit system for guests**. Link Transit service is an important way for low-income people to access jobs and services, and fares should be affordable for these riders.
- **Evaluate and responsibly deliver what was promised to voters in Vision 2020**. Understanding the changing conditions in the region, Link Transit should analyze the most efficient way to use new resources and meet the commitments established in Vision 2020.

Summary of Findings

The one-on-one interviews and goals and visioning workshop produced several key findings that helped guide the CSA. These findings are described below and separated into thematic sections covering the purpose of transit, service trade-offs, fares, vision for the future, and specific service expansions.

Purpose of Transit

- **Transit is essential and should provide lifeline service.** Whether it is as an equalizer allowing people to reach jobs and service opportunities, as a lifeline service connecting rural communities, or merely enabling mobility for low-income riders and people without access to vehicles, nearly all board members stressed the importance of transit for vulnerable users.
- **Connecting communities in the region remains important**. Although a few board members indicated Link Transit should prioritize service and ridership in urban areas, there was a recognition of the system's regional nature. While board members see the value in strengthening main transit corridors in urban areas, they also stressed that the system's purpose should be linking the communities in the region and facilitating access to destinations for people living in rural areas.
- **Transit is critical for economic development**. Board members highlighted the importance of transit for economic competitiveness and attracting employers to the region. Some mentioned that improving travel times and ensuring reliability can help businesses maintain a stable workforce.
- **Transit has a key role to play in reducing congestion and mitigating climate change**. During the interviews, several board members pointed out Link Transit's impact on congestion. By providing a competitive alternative to driving and using zero-emission technologies, Link Transit can reduce congestion and help mitigate climate change.
- **Nearly all board members believe that whatever service is provided, it should be high-quality**. The board emphasized the importance of quality of service, including the following priorities:
  - *Minimize transfers and prioritize direct service when feasible.* This increases convenience and contributes to faster travel times. As an example, several board members highlighted the importance of direct service to Central Washington Hospital.
  - *Evaluate and strategically locate park-and-rides.* Board members believe park-and-rides offer drivers the opportunity to use transit for some part of their trip, and that park-and-rides serve as a visual reminder to people that Link Transit service is available.
  - *Review stop spacing*. Board members think fewer bus stops could help improve travel times. Too many stops make trips longer, particularly on express routes, reducing convenience for riders. Board members believe riders would be willing to walk a bit more if they know the bus ride will be faster.

Service Trade-Offs

- **A successful system attracts more riders but also serves those with high need.** During the visioning workshop live polling exercise, board members were asked to

rank options for what success looks like for area transit. Board members indicated that increasing ridership and focusing on more frequent service on key routes is the most important characteristic of a successful transit system. More service to those who need it most ranked as the second most important characteristic of a successful transit system.

This finding was reaffirmed during the interviews. Most board members recognized transit as a primary need for low-income populations, seniors, people with disabilities, and people without access to vehicles. At the same time, the board pointed out the need to efficiently use resources and improve productivity.

- **Board members expressed mixed opinions regarding more coverage or better service frequencies.** During the goals and visioning workshop live poll, board members were nearly split on whether Link Transit should provide more frequent service to fewer areas or less frequent service to more places. During the interviews, board members gave examples of areas where service should be provided or increased and areas where service could be eliminated or reduced. Some supported service increases in urban areas to increase ridership; in contrast, others suggested adding service to local rural communities. Balancing these competing goals is an ongoing challenge for Link Transit.
- **Span of service needs to be assessed according to the specific routes and destinations**. During the interviews, board members indicated Link Transit should adjust the span of service to balance productivity and rider needs. Several members mentioned that late evening service could be valuable for service industry workers or other employees with non-traditional work schedules, and Link Transit could improve commuting options by better matching service to employment shifts. Conversely, if the ridership is low, Link Transit should evaluate the potential for a reduction in service span.
- **When considering future investment, most board members prioritize improving weekday service over weekend service**. During the goals and visioning workshop live poll, most board members indicated Link Transit should provide more weekday service and less weekend service. One-on-one interviews provided more nuance to this position, however. In interviews, some members said that when considering how to best spend additional resources, Link Transit should emphasize service increases during weekdays because demand on those days is likely to be higher. The board acknowledged that Vision 2020 committed to additional weekend service, and even if it is not as productive, Link Transit needs to continue to assess how to best meet needs on weekends.
- **Openness to exploring service alternatives to fixed-route transit**. During interviews, board members indicated that some communities—mostly small and rural places—may not have enough ridership to justify fixed-route service. Board members believed Link Transit should explore transit alternatives to fixed-route service to ensure people who need it the most have a mobility option.
- **In the near-term, limited support for access to outdoor recreation via transit**. During the goals and visioning workshop, most board members said recreation-based service should not distract Link Transit from its core mission. To some board members, "recreation" has a broad meaning—it could include access to outdoor activities such as hiking or biking, or it could mean in-town entertainment like movies and sporting events. A few members highlighted that SkiLink works because it is a group-oriented activity with a common destination, but hiking and other outdoor recreation destinations are more scattered and solitary. During one-on-one interviews, several board members

emphasized that access to outdoor recreation is an important part of regional tourism, and transit connections could be further explored.

Fares

- **There is mixed support for zero-fare service**. While the board is aware that farebox recovery is minimal and there are costs to fare collection, some members were opposed to a zero-fare system, while other members were undecided or supported zero-fare options. Some members said they have come around to the idea of supporting zero-fare transit as they have learned more about the concept.
  - Members in favor see increases in ridership, increase in productivity, and improved equity as the main benefits. These members also believe the cost to collect fares will keep increasing, especially if Link Transit upgrades farebox technology.
  - Members were opposed to zero-fare service because they believe Link Transit should not encourage people to ride without a destination and that riders need to pay something, so they feel invested in the system. Some of these board members believed even a nominal fare could work, keeping the system affordable to riders.
- **Several members not in favor of zero-fare service were open to discussing the issue**. These members wanted to see a more in-depth analysis showing that the benefits outweigh the costs before they could be convinced zero-fare service is the right choice for Link Transit.
- **Members supporting zero-fare service stressed the importance of a comprehensive outreach process.** These board members indicated Link Transit should prepare an outreach plan if they implement zero-fare service. These board members wanted the outreach plan to include an articulation of the pros and cons of zero-fare service, as well as plans for rider and taxpayer education.
- **Opinions on fare zones were mixed**. In considering the existing fare structure, some board members believed fare zones can be confusing and discourage some riders from using the system. They believed that eliminating zones would help simplify the fare structure. Other board members thought zones still make sense because longer trips cost Link Transit more to provide than shorter trips.

Vision for the Future

- **Evaluate and responsibly deliver what was promised to voters in Vision 2020**. Several board members emphasized the new voter-approved sales tax to expand transit service. They believed Link Transit should evaluate how to meet the commitments established in Vision 2020 while ensuring resources are used efficiently. Meeting Vision 2020 commitments includes expanding weekend service, increasing weekday frequencies, and serving the areas indicated in the plan.
- **Efficient use of financial resources will be crucial**. The board highlighted that voters want their sales tax revenue to be spent responsibly. This will likely require evaluating and adjusting available service and frequency where it is needed most, which could help reduce the appearance of "running empty buses." Board members also believed additional public education may be necessary to explain that Link is a subsidized service.

- **It is a priority and opportunity to continue electrifying the fleet**. Link Transit has been a national leader in transit bus fleet electrification. In interviews, board members expressed continued support for this path.

Specific Service Expansion

Board members provided specific ideas for service expansion. Some of them were common among different members and others were unique, reflecting the needs of the communities that each member represents. The list below presents the most relevant ideas for service expansion with different levels of detail provided by board members.

- **Few board members see a need to serve Plain or Fancher Heights with fixed-route service.** Board members said Link Transit used to serve Plain but very few people used that route. Given past low ridership, it is hard to justify fixed-route service, but alternatives to fixed-route should be evaluated to align with Vision 2020 promises. In the case of Fancher Heights, some members said this is a higher-income residential area, often with multiple cars per household, and with very little commercial use planned, so fixed-route service might not have enough demand to be warranted.
- **Potential to serve growing development on Grant Road towards the airport.** Some board members believed that as development continues along the Grant Road corridor and more people move into that area, there may be a need to provide additional service.
- **Potential to better connect Wenatchee with Quincy.** Some board members believed workers at farms, processing plants, and data centers in Quincy might use transit between Quincy and Wenatchee if it was provided. Additionally, a Wenatchee-Quincy transit connection might provide an alternative to driving and alleviate some traffic during rush hour. Exploring alternative service options such as vanpools should also be considered.
- **Link should focus on providing service to the multifamily housing market in Leavenworth.** Leavenworth is encouraging more multifamily development, and the Leavenworth Haus Apartments adjacent to Link's Wilkommen Park-and-Ride were close to completion as of October 2020. A new parking plan aims to encourage workers to use outlying parking lots instead of downtown on-street parking, likely increasing demand for Link Transit's Leavenworth circulator service. Board members believed Link Transit plays a role in supporting these changes.
- **Consider connections that do not require a transfer in Wenatchee.** Board members supported routes that allow riders to travel between major destinations without transferring at Columbia Station. These routes could involve regional direct access from Waterville to Chelan without having to travel into Wenatchee to transfer. Other ideas for this type of service included cross-town trips in Wenatchee, such as from Wenatchee Valley Mall to Central Washington Hospital.
- **Offer express buses, particularly in the Wenatchee River Valley.** Several board members believed that providing faster and more direct service between Wenatchee and Leavenworth is an opportunity for future Link Transit service.
- **Better local service in Chelan.** Some board members discussed hearing that improved connections to the Chelan Walmart is an unmet need and should be evaluated for enhanced access.

OPERATOR OUTREACH

As a part of Comprehensive Service Analysis outreach, Link Transit bus operators were given two methods for submitting feedback on operational issues such as congestion, fare collection, the Comprehensive Service Analysis process in general, and other issues. These two methods were responding to a paper survey or placing comments on a poster-sized map. This document summarizes feedback received through operator outreach.

Methods

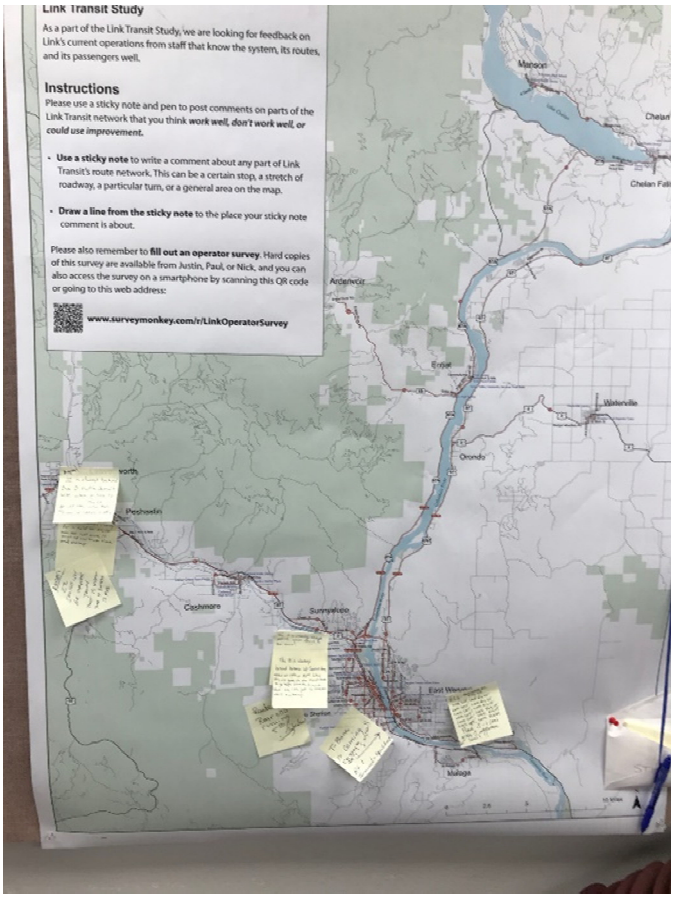
Operator Survey

Link Transit operators were given the opportunity to complete a paper survey from October 13 to October 30, 2020. The survey was anonymous by default, with an option for operators to include their name and contact information. A total of 13 operators completed the survey. The survey questions are in Appendix C of this report.

Poster Map

A 36-inch by 48-inch poster map of the Link Transit service area, including routes, stops, and key destinations, was placed on the wall in a shared operator space with pens and sticky notes. Operators were able to place comments on the map using the sticky notes. A total of eight comments were placed on the map. The poster map is in Appendix B of this document and an image of the marked-up poster is in Figure 3-1.

Figure 3-1 Operator Poster Map Responses



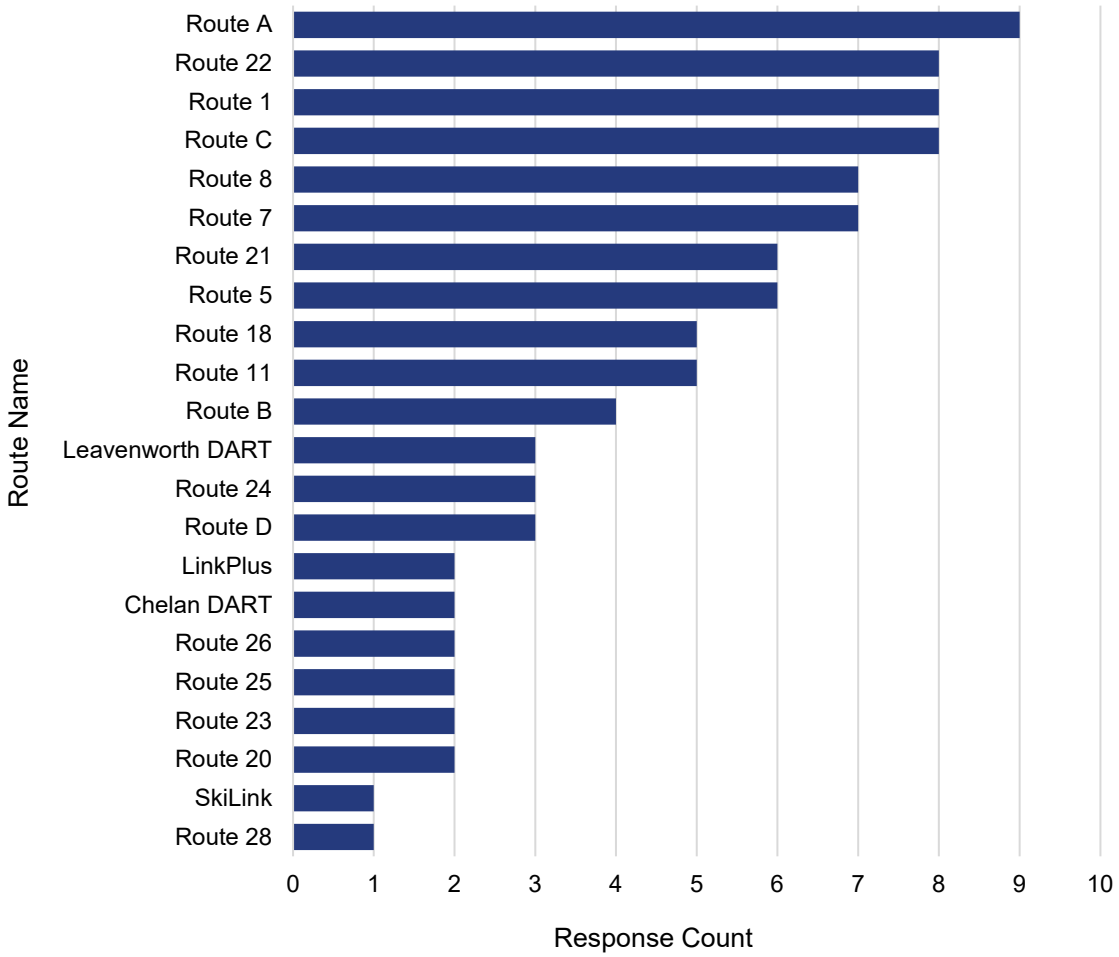
Feedback Summary

Feedback provided by operators via the survey and poster map is summarized below and separated by category of feedback.

Operational Challenges

Operators that responded to the survey all operated multiple routes, suggesting that any generalized feedback may hold true in different parts of the Link Transit network. Most respondents operated Route A, Route 22, Route C, and Route 1 (Figure 3-2).

Figure 3-2 What Link Transit fixed route(s) or service(s) do you regularly operate?



When asked to report on operational challenges, operators provided both general and route-specific feedback (Figure 3-3). Most route-specific feedback was provided for routes operating in Wenatchee, East Wenatchee, and Leavenworth. Routes serving communities outside of the Wenatchee urban area, such as Waterville, Entiat, Ardenvoir, Chelan, Malaga, and Rock Island were not identified as frequently for their operational challenges.

Route 22 was frequently mentioned for the heavy traffic and delay it encounters in downtown Leavenworth. Route 8/18 was also mentioned as challenging to keep on time. Three operators highlighted Route 1 because of a dangerous intersection at Squilchuck Road and Terminal Avenue.

Figure 3-3 Reported Operational Challenges by Route

Route	Reported Operational Challenge(s)
Route 1	▪ Intersection at Squilchuck Rd/Terminal Ave has poor visibility ▪ Intersection at Methow St/Crawford Ave is challenging
Route 5	▪ The westbound stop on 5th St at N Chelan Ave feels dangerous, as the bus may be rear-ended
Route 8	▪ Wenatchee Ave has a lot of traffic ▪ Intersection at Orondo Ave/Mission St is difficult ▪ Smaller sized bus feels unsafe ▪ Some bus stops feel unsafe for passengers ▪ The southbound stop on N Miller St at Taco Bell feels dangerous
Route 18	▪ Intersection at Sunset Hwy/19th St NW causes a lot of delay ▪ Intersection at Sunset Hwy/33rd St NE has a lot of traffic ▪ Route is often late ▪ The portion of the route on US 97A with the roundabout feels unnecessary ▪ Smaller sized bus feels unsafe ▪ Some bus stops feel unsafe for passengers
Route 22	▪ There is a lot of traffic in downtown Leavenworth ▪ Turnaround at Hwy 2/Icicle Rd is challenging ▪ Route should end at Wilkommen Park-and-Ride
Route 23	▪ Intersection at Rock Island Rd/Hwy 28 is dangerous headed southbound
Route A	▪ Fred Meyer and Wenatchee Valley Mall area has a lot of traffic ▪ The deviation this route makes to serve Wenatchee City Hall seems unnecessary
Route B	▪ There is a lot of traffic on Riverside Dr ▪ The westbound stop on 5th St at N Chelan Ave feels dangerous, as the bus may be rear-ended
Route C	▪ The parking lot at Valley North Shopping Center is difficult to navigate

General feedback included requests for more targeted stop placement, as well as reports of traffic congestion in several places within the Link Transit service area:

- Downtown Leavenworth (especially during holidays and festivals)
- In East Wenatchee near the Fred Meyer and Wenatchee Valley Mall
- N Wenatchee Avenue and near Valley North Shopping Center (especially during peak hours and between the Wenatchee River Bridge and N Miller Street)
- Near the Wenatchee Walmart
- Riverside Drive
- Sunset Highway
- The Grant Road at Rock Island Road intersection

Operators reported challenging and/or dangerous intersections at:

- Icicle Road at US 2
- Methow Street at Crawford Avenue
- Orondo Avenue at Mission Street
- Rock Island Road at SR 28
- Squilchuck Road at Terminal Avenue
- Sunset Highway at 19th Street and 33rd Street

Ways to Improve Service

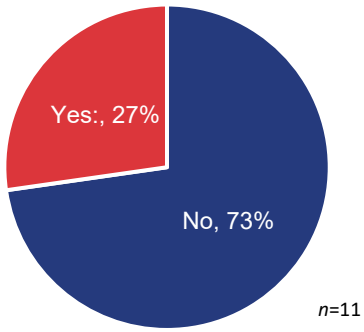
When asked if they had suggestions for ways to improve service, operators suggested changes to route alignments, stop locations, and vehicle type. Key responses to this question include:

- Route 22 should not drive into downtown Leavenworth because of high levels of traffic. Operators recommended Route 22 end at Wilkommen Park-and-Ride and that Route D alone serves downtown Leavenworth.
- Routes 8 and 18 should revert to Route 8W and 8E. Operators raised concerns about not being able to meet timepoints on these routes, especially at Olds Station. One operator suggested cutting Olds Station from Route 18.
- Returning most of Link Transit's service to full-sized buses.
- Operators have safety concerns with the new Wenatchee Valley Mall stop on Route A. They suggest changing the location of this stop or removing it.

Service to New Places

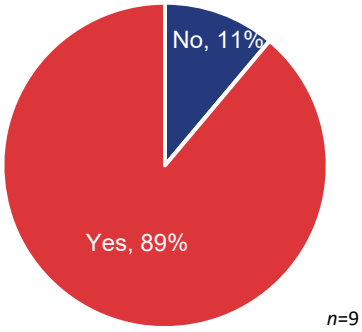
When asked on the survey if there were places that should or should not be served by Link Transit's fixed routes, operators generally responded that the service area could be expanded and should not be reduced. Approximately three quarters of operators reported there are no places where fixed-route service should be removed (Figure 3-4) and nearly 90% of operators reported there are places that aren't currently served that should be (Figure 3-5). Operators suggested that service could be expanded in East Wenatchee and Douglas County, in places like Fancher Heights and the Pangborn Memorial Airport area. Nile Avenue was also recommended. Operators also suggested bringing back service to the Plain area in Chelan County.

Figure 3-4 Are there places that Link Transit currently serves with fixed-route service that you think should not be?



n=11

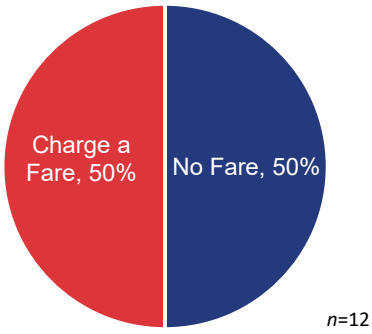
Figure 3-5 Are there places that Link Transit does not currently serve with fixed-route service that you think should be?



Zero-Fare Service

When asked if they supported zero-fare service, half of operators answered no and half answered yes (Figure 3-6). Operator comments in support of zero-fare service included enjoying not having to worry about keeping track of fare collections during Link Transit's current zero-fare period. They also noted that less interaction with passengers can speed overall trip times, as well.

Figure 3-6 Would you like Link to be fare-free or charge a fare?

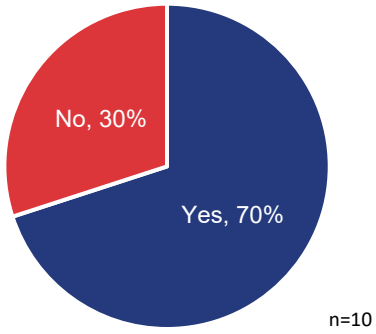


The operators that did not support zero-fare service were able to suggest a fare; they suggested a one-zone fare from $1.00 to $3.00, with most operators supporting a $1.00 fare (Figure 3-7).

Figure 3-7 If you prefer a fare, what would you charge for a base one-zone fare?

Most operators also reported wanting to keep routes A, B, and C zero-fare (Figure 3-8).

Figure 3-8 Would you keep routes A, B, and C fare-free?



Operators were also offered an open-response space on the survey to comment on fares in general. In this space, operators suggested ways to simplify fares and reduce the number of pass options. Key comments from operators were:

- It is difficult to decipher the different types of passes and check their validity.
- A single-fare system may be easier to operate.

A token-based fare system would eliminate cash payments on buses. This would help operators that find it difficult to count coins through plexiglass shields and with inadequate lighting on the bus.

SERVICE SCENARIO SURVEY

This section of the chapter summarizes analysis of the Winter/Spring 2021 CSA scenario survey. In this survey, respondents were shown three potential future service scenarios for Link Transit and allowed to comment on each scenario and proposed route. Questions about respondent demographics and opinions on Link Transit becoming a zero-fare system were also asked. Appendix D to this report includes all the open-ended responses received as part of the survey.

Key Findings

Key findings from this survey are:

- People **under age 34 were underrepresented** among survey respondents.
- Respondents generally supported the scenarios more than they opposed them, suggesting **general and widespread support for change** and improvement to Link Transit services.
- The most commonly-requested **locations for new service** were **Pangborn Airport**, **Plain**, and **Lake Wenatchee**.
- **Nearly half** of respondents **supported returning Link Transit to zero-fare operations**. People that rode Link Transit more recently were more likely to support a zero-fare system, and people that do not ride Link Transit were more likely to oppose a zero-fare system.
- Respondents that were **not sure if they supported zero-fare service described themselves as supportive if eliminating fares did not harm the financial sustainability** of Link Transit.

Methods

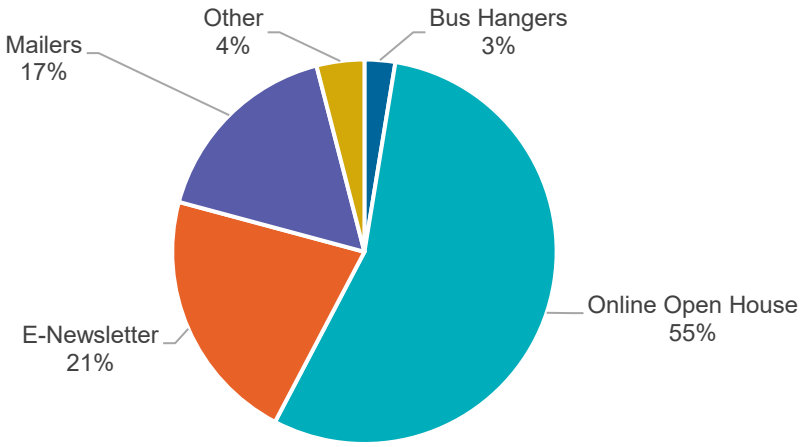
The survey was available to the public in an online format, in English and Spanish. The survey was open from March 8, 2021 through April 4, 2021.

Survey participation was solicited though social media posts, Link Transit e-newsletters, a Facebook Live event, the Link Transit website, radio, print, and television advertisements, bus hangers, mailers to all households in the Link Transit Public Transportation Benefit Area (PTBA), and through in-person outreach events. In-person events to make people aware of the survey were hosted at community destinations such as Latino grocery stores and Wenatchee City Hall. Materials used to drive respondents to the survey are included in Appendix C of this report.

Results

The survey received 773 total responses, although not every respondent answered each question (the number of respondents to each question is included in figure titles). Most respondents were directed to the survey from the online open house, followed by e-newsletters and mailers (Figure 3-9). Relatively few respondents were driven to the survey by bus hanger QR codes or links.

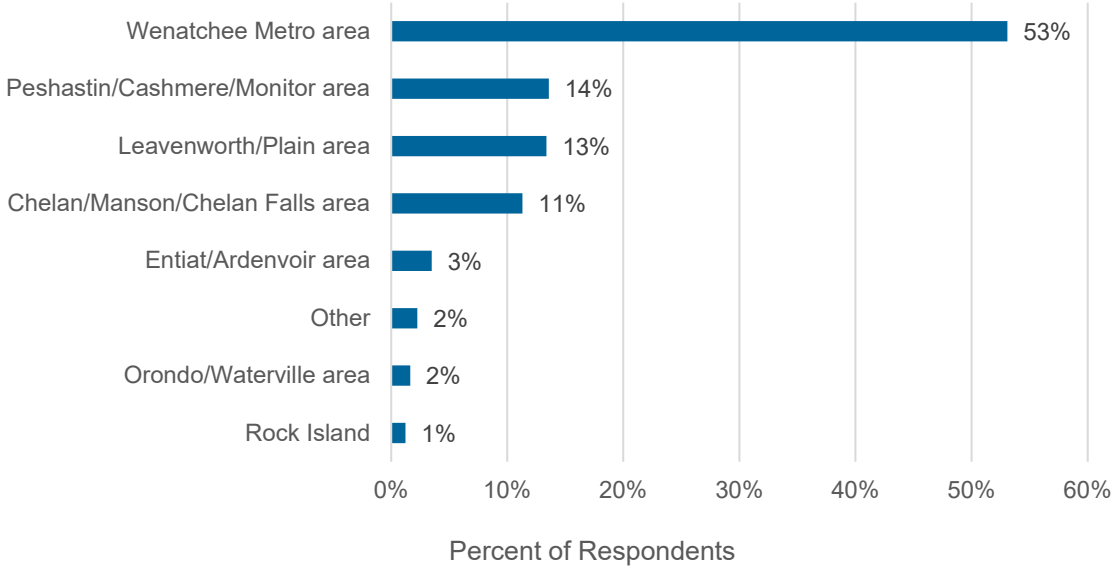
Figure 3-9 Responses by Collector (*n*=773)



Demographic Questions

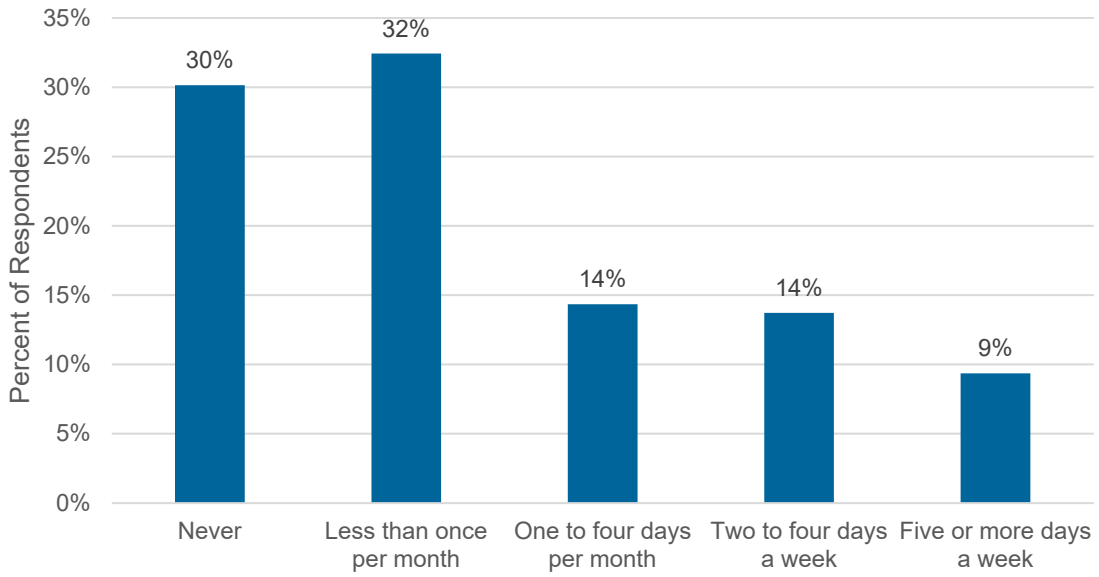
Most survey respondents lived in the Wenatchee metropolitan area (Figure 3-10). Relatively few respondents lived in the Rock Island, Waterville/Orondo, or Entiat/Ardenvoir areas, although these places have smaller populations, so this was expected. The "Other" home locations reported included Badger Mountain Road, Navarre Coulee, Coles Corner, and Lake Wenatchee.

Figure 3-10 What part of the Link Transit service area do you live in? (*n*=486)



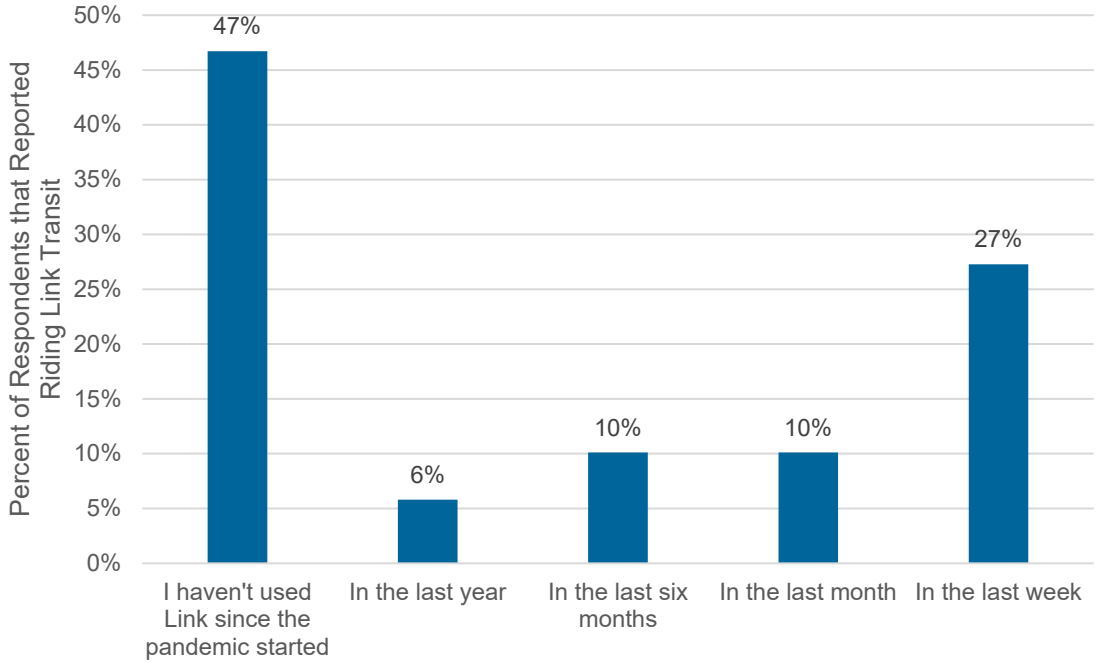
Just under one-third of survey respondents had never ridden Link Transit. Another third rode less than once per month, and the final third rode between once per month and five or more days per week (Figure 3-11).

Figure 3-11 How often do you ride Link Transit? (*n*=481)



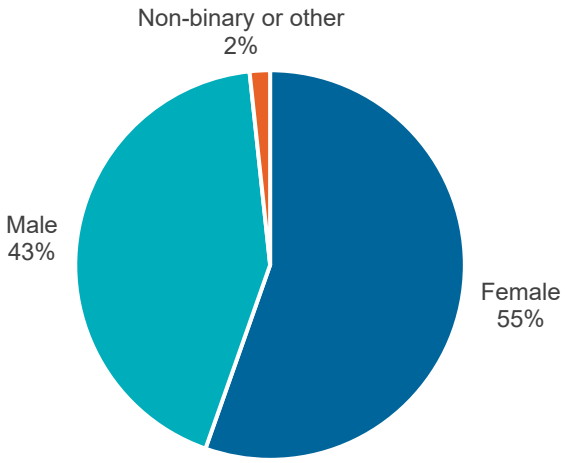
Just under half of respondents that reported riding Link Transit at some point had not used Link Transit in the last year or since the pandemic began. About a quarter of respondents had ridden transit in the last week (Figure 3-12).

Figure 3-12 When was the last time you rode any Link Transit service (bus, DART, or LinkPlus)? (*n*=396)



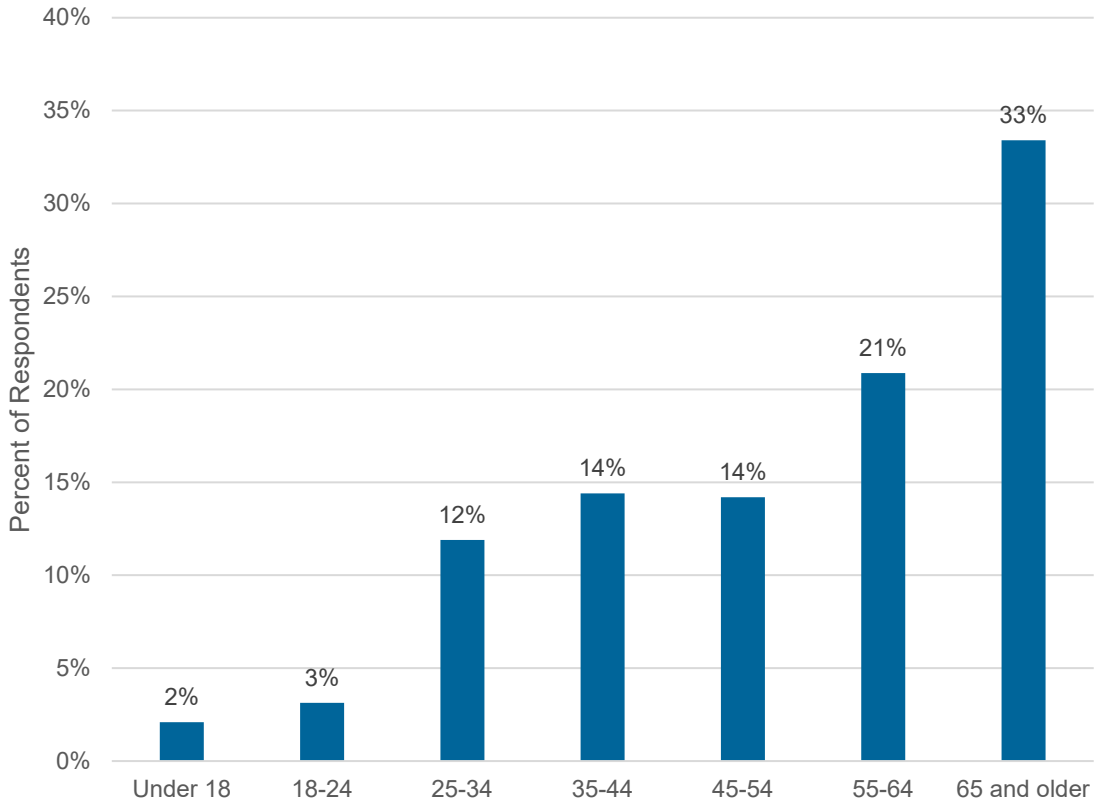
Slightly more than half of respondents identified as female (Figure 3-13).

Figure 3-13 What best describes your gender? (*n*=473)



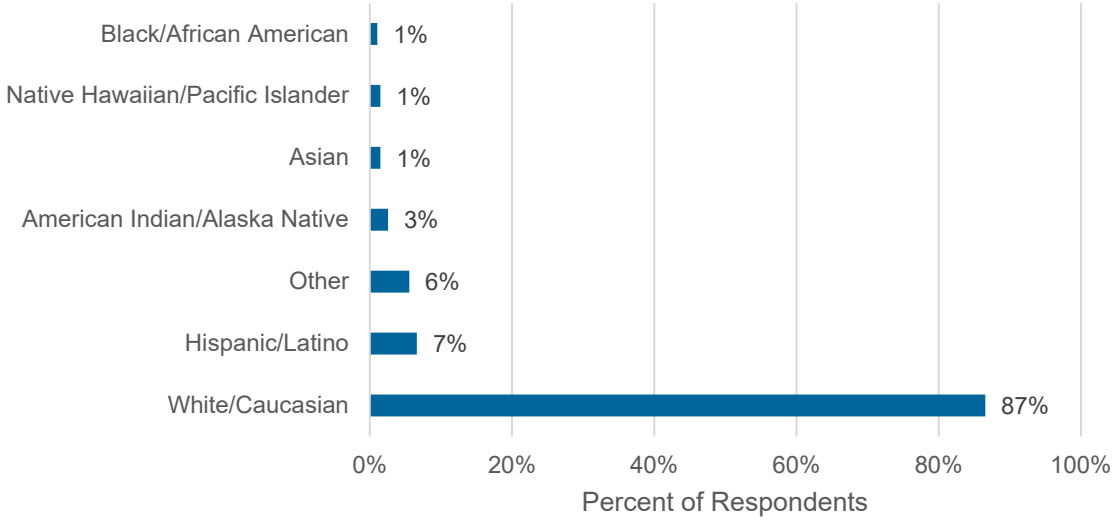
More than half of survey respondents were over age 55 (Figure 3-14). Only about a third of respondents were under age 44, with a particularly low turnout for people under 34.

Figure 3-14 What is your age? (*n*=479)



A large majority of survey respondents identified as White/Caucasian (Figure 3-15). The largest non-white demographic of respondents were Hispanic/Latino people, at 7% of all responses. The 6% of respondents who selected "Other" did not have any common ethnic backgrounds.

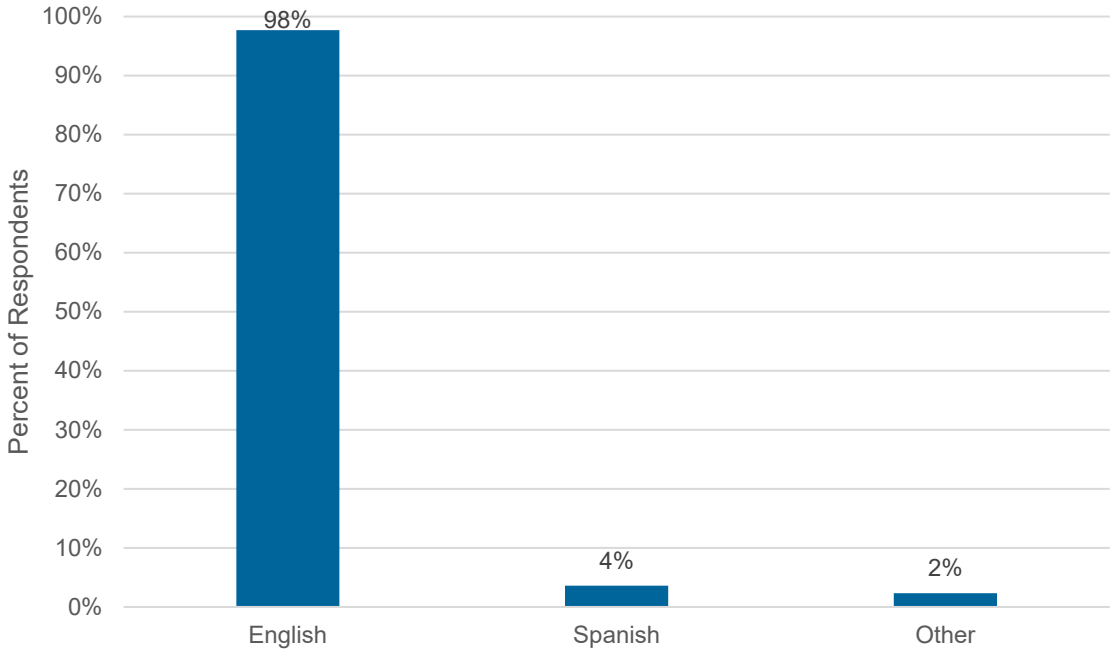
Figure 3-15 Which best describes your racial or ethnic background? (*n*=468)



Note: Respondents were able to select multiple responses, so the total percentage shown is greater than 100.

Most survey respondents primarily spoke English (Figure 3-16). Some of the languages identified in the "Other" category include Chinese and American Sign Language.

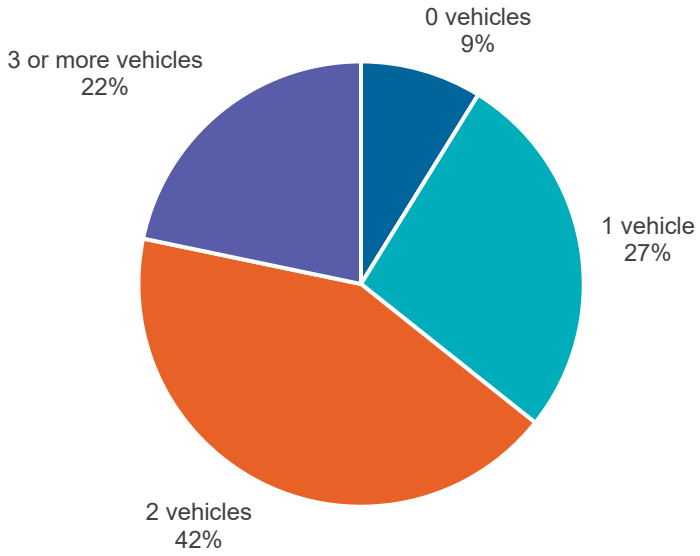
Figure 3-16 What language is primarily spoken in your household? (*n*=474)



Note: Respondents were able to select multiple responses, so the total percentage shown is greater than 100.

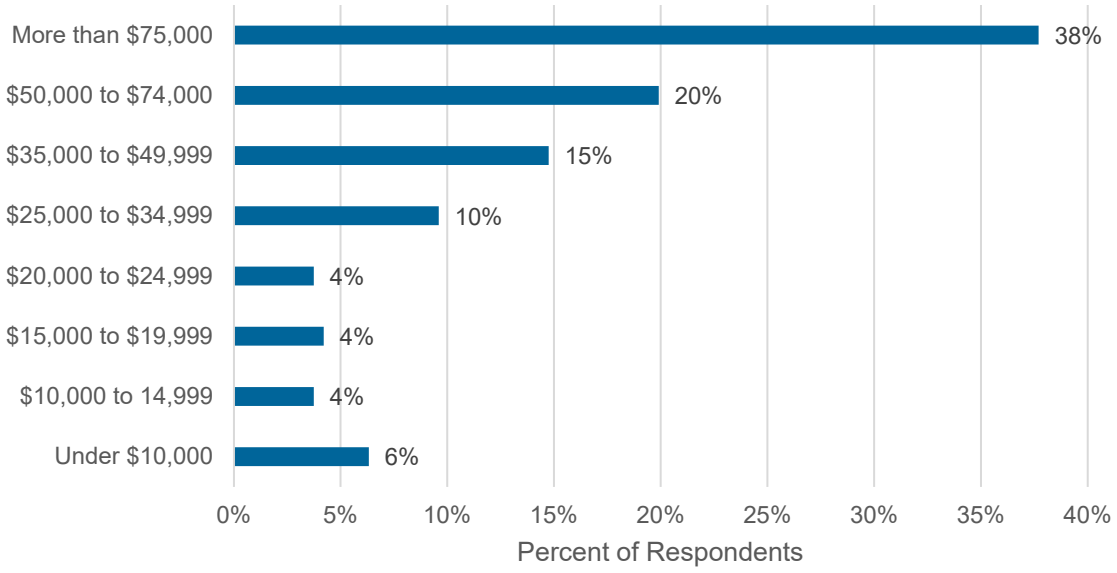
More than 90% of survey respondents reported having access to at least one working vehicle (Figure 3-17).

Figure 3-17 How many working vehicles are in your household? (*n*=465)



There was a range of annual household income levels among survey respondents, but most were above $50,000 (Figure 3-18). Nearly 20% of respondents lived in households earning under $25,000 each year.

Figure 3-18 What is your approximate annual household income? (*n*=427)



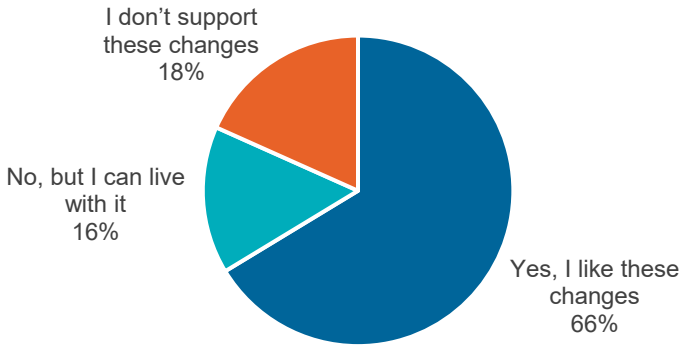
Service Options Questions

The largest section of the survey described each of the three potential service scenarios in detail, showed maps of the scenarios, and listed frequencies and spans of service for the proposed routes. Respondents were able to comment on the scenario as a whole or on individual proposed route changes.

Scenario 1

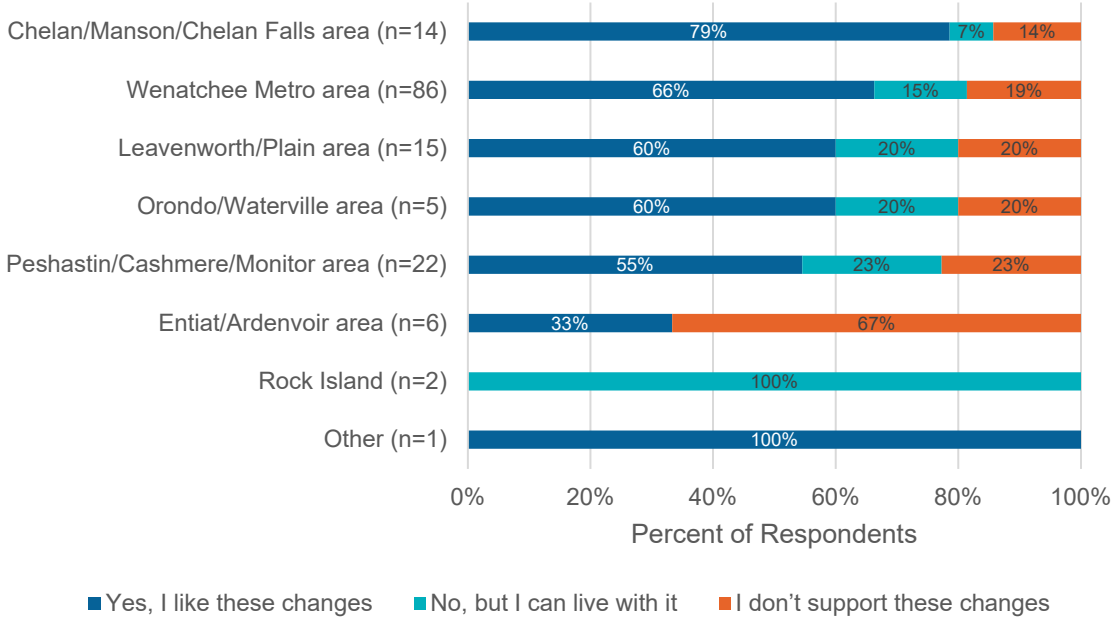
Two-thirds of survey respondents liked the changes proposed in Scenario 1. Just under 20% did not support Scenario 1 (Figure 3-19).

Figure 3-19 Respondent Opinion on Scenario 1 as a Whole (*n*=206)



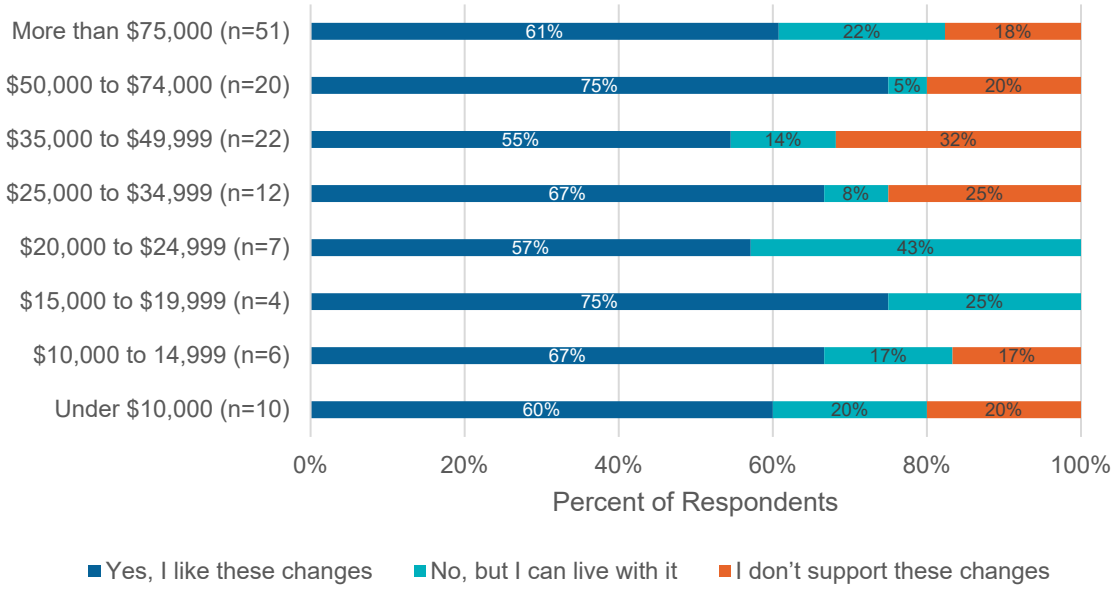
The proposed changes in Scenario 1 were most favorable among residents in Chelan/Manson/Chelan Falls area (Figure 3-20). The Entiat/Ardenvoir area is the only location where disapproval for the changes outweighed approval.

Figure 3-20 Respondent Opinion on Scenario 1 as a Whole, by Respondent Home Location (*n*=151)



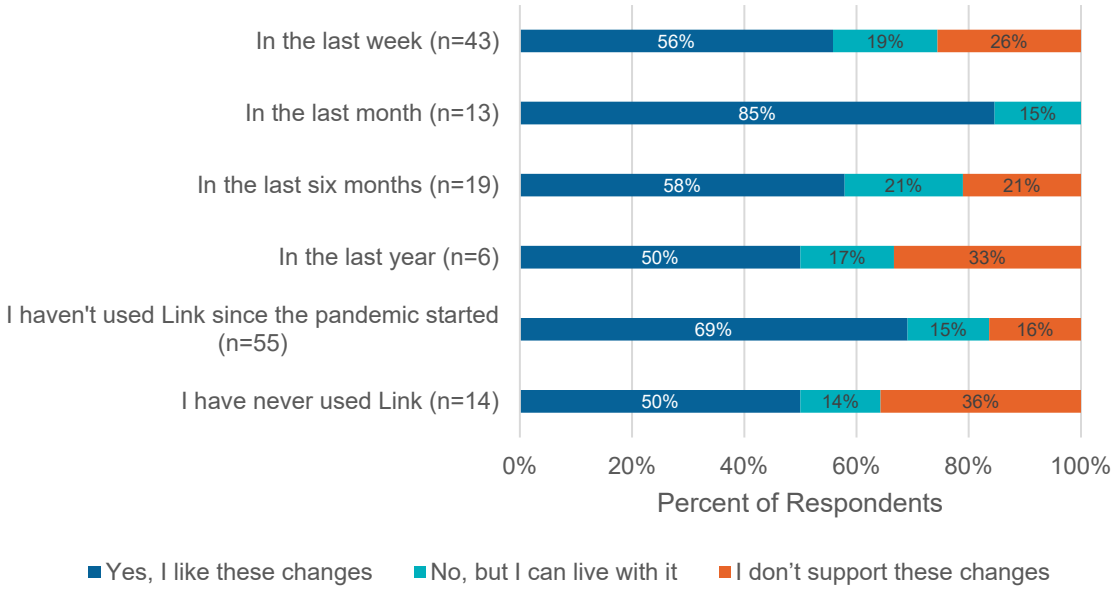
Support for the changes proposed in Scenario 1 did not appear to correlate with household income level (Figure 3-21).

Figure 3-21 Respondent Opinion on Scenario 1 as a Whole, by Respondent Household Income (*n*=132)



Support for the changes proposed in Scenario 1 did not appear to correlate with ridership frequency (Figure 3-22).

Figure 3-22 Respondent Opinion on Scenario 1 as a Whole, by Ridership Frequency (*n*=150)



Among all route changes proposed in Scenario 1, the proposed Route 13 to Pangborn Airport via Grant Road was the most popular (Figure 3-23). One of the most polarizing proposed routes was the Route 22 with direct service to Central Washington Hospital, which was the third-most popular but first-most disliked. Route changes that respondents were least supportive of were the 32 Malaga DART and Route 23 Rock Island.

Figure 3-23 Respondent Opinion on Proposed Route-Level Changes in Scenario 1

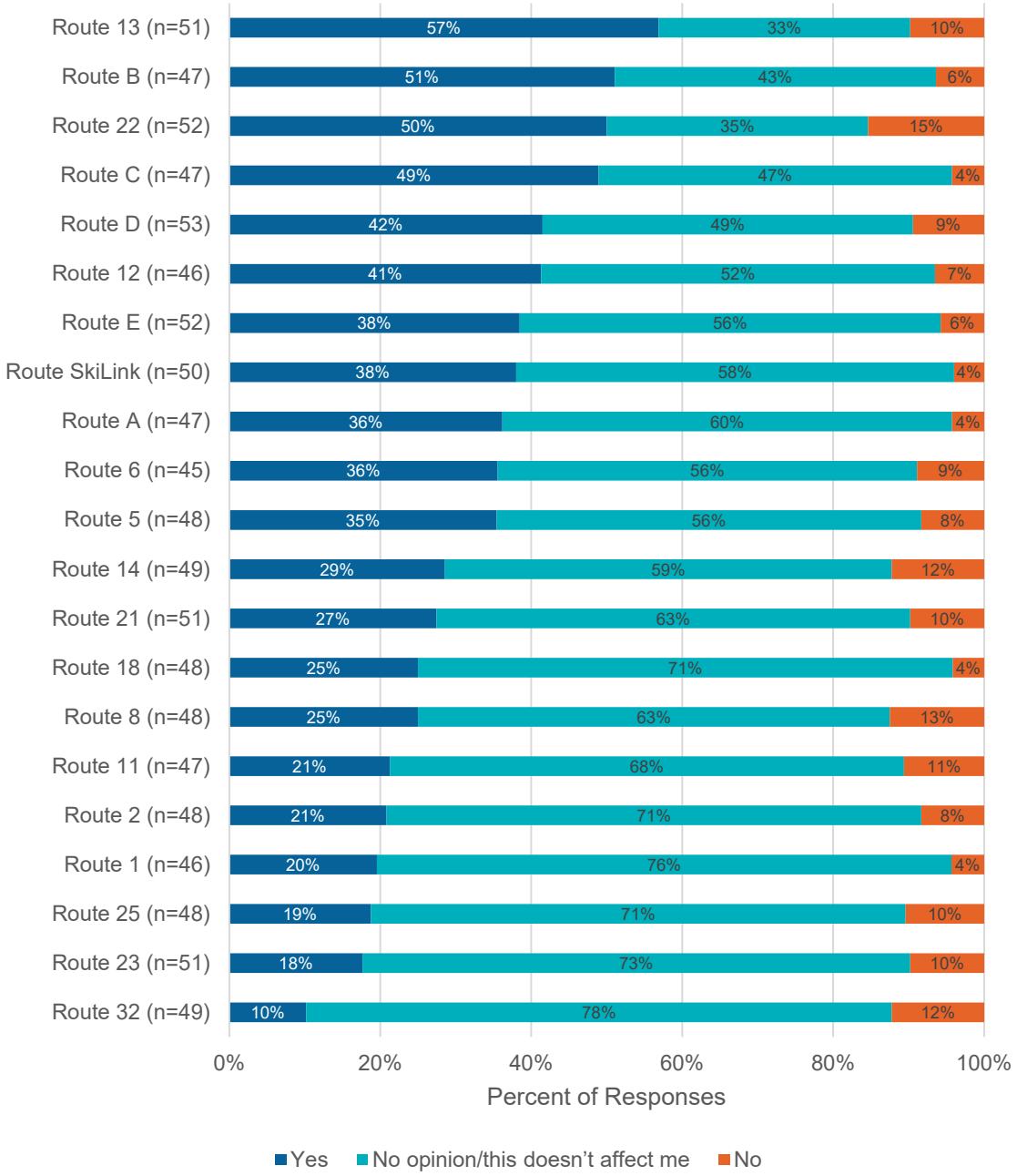


Figure 3-24 includes some of the open-ended comments from respondents that commented on individual proposed routes.

Figure 3-24 Respondent Comments on Proposed Route-Level Changes in Scenario 1

Route	Feedback
Route 6	▪ The proposed changes would require residents to transfer to get to Safeway, Walmart, post office, etc.
Route 8	▪ Central Washington Hospital is an important destination. Request to maintain access to CWH.
Route 13	▪ The first flight from Pangborn leaves at 6:25 a.m. An earlier bus than the proposed schedule would be much more helpful for those who catch that flight.
Route 18	▪ Would special needs residences on 11th be efficiently provided for?
Route 21	▪ Preference for higher frequency.
Route 22	▪ Concern around the elimination of the Fairgrounds stop. The area lacks sidewalks and there are people who are dependent on that stop. ▪ Concern around the elimination of the Peshastin stops. Route D does not get Peshastin riders to work down the valley. ▪ Shift changes at CWH occur at 7 a.m. and 7 p.m. on weekdays and weekends. Very important to have service options that arrive at CHW by 6:30 a.m. and depart CWH after 7:30 p.m.
Route 23	▪ This route should stay on Rock Island Road to serve higher density housing. Moving this route to the highway cuts service for a lot of people.
Route B	▪ The proposed changes cut service from Riverside Apartments to Safeway.
Route D	▪ Where will riders park when they come to Peshastin to get to Leavenworth/Icicle Creek? ▪ Service should begin at 8 a.m. to promote commuting to/from Leavenworth and relieve some of the Leavenworth parking/traffic problems.

Comments on the proposed elimination of Routes 20, 24, 26, 28, and the Chelan DART

Respondents were also able to provide open-ended comments on the proposed elimination of some routes in Scenario 1. Many respondents did not like the elimination of Leavenworth DART, explaining that seniors rely on DART for trips to the pharmacy, medical care, and grocery stores, and DART serves communities that do not have easy access to bus stops.

Concern was also expressed about the elimination of Route 26. Several respondents stated that the 26 is their only means of transportation and losing it would severely limit their mobility.

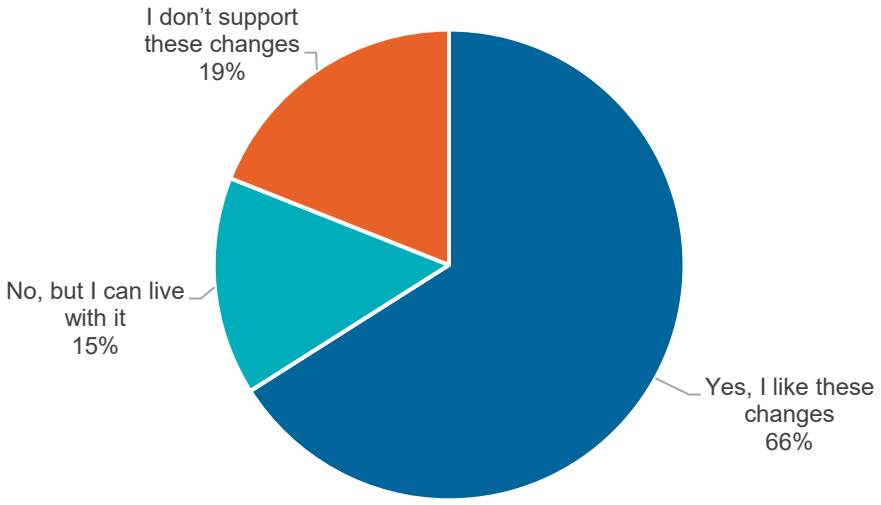
There was one respondent who said there are many riders who rely on the part of Route 28 that serves the Fairground.

No strong feelings were shared regarding the elimination of routes 20 or 24.

Scenario 2

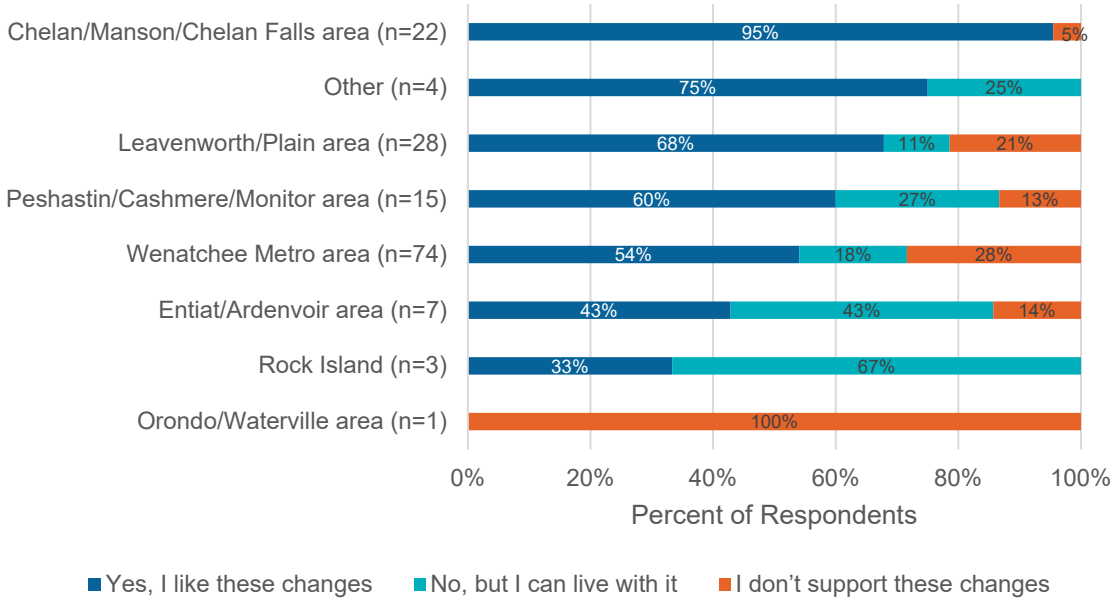
Two-thirds of survey respondents supported the changes proposed in Scenario 2. Almost 20% did not support the proposal (Figure 3-25).

Figure 3-25 Respondent Opinion on Scenario 2 as a Whole (*n*=200)



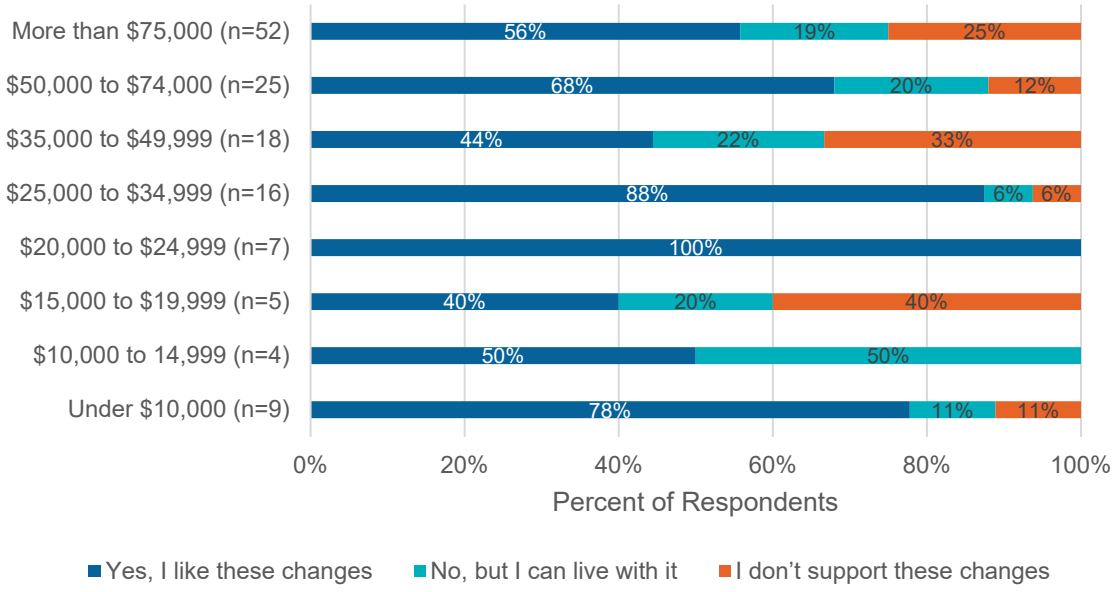
Almost every respondent from the Chelan/Manson/Chelan Falls area supported the changes proposed in Scenario 2 (Figure 3-26). The highest rate of disapproval came from the Orondo/Waterville area, where the single respondent did not support the changes.

Figure 3-26 Respondent Opinion on Scenario 2 as a Whole, by Respondent Home Location (*n*=154)



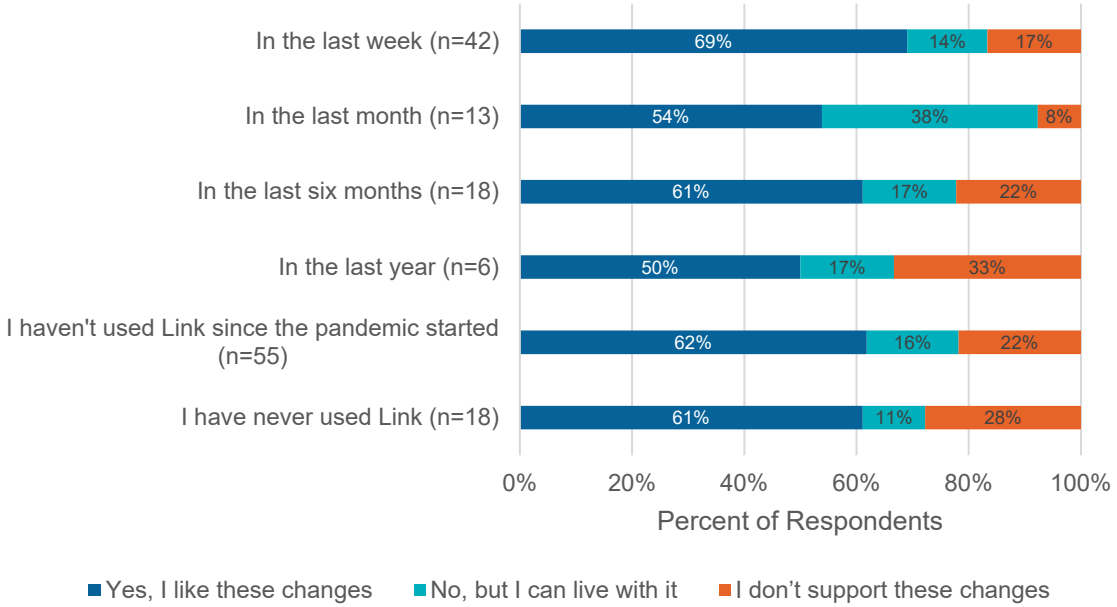
Support for the changes proposed in Scenario 2 did not appear to correlate with household income levels (Figure 3-27).

Figure 3-27 Respondent Opinion on Scenario 2 as a Whole, by Respondent Household Income (*n*=136)



Support for the changes proposed in Scenario 2 did not appear to correlate with ridership frequency, although it does appear that people riding Link Transit more often were less likely to oppose the proposed changes (Figure 3-28).

Figure 3-28 Respondent Opinion on Scenario 2 as a Whole, by Ridership Frequency (*n*= 152)



The proposed routes in Scenario 2 received significantly higher rates of support compared to disapproval. The proposed Fancher Heights Rideshare Partnership saw the highest rate of disapproval, with 15% of 46 respondents expressing opposition to the proposed program (Figure 3-29). The proposed routes E and 21, both of which operate in Chelan, saw the highest rates of support.

Figure 3-29 Respondent Opinion on Proposed Route-Level Changes in Scenario 2

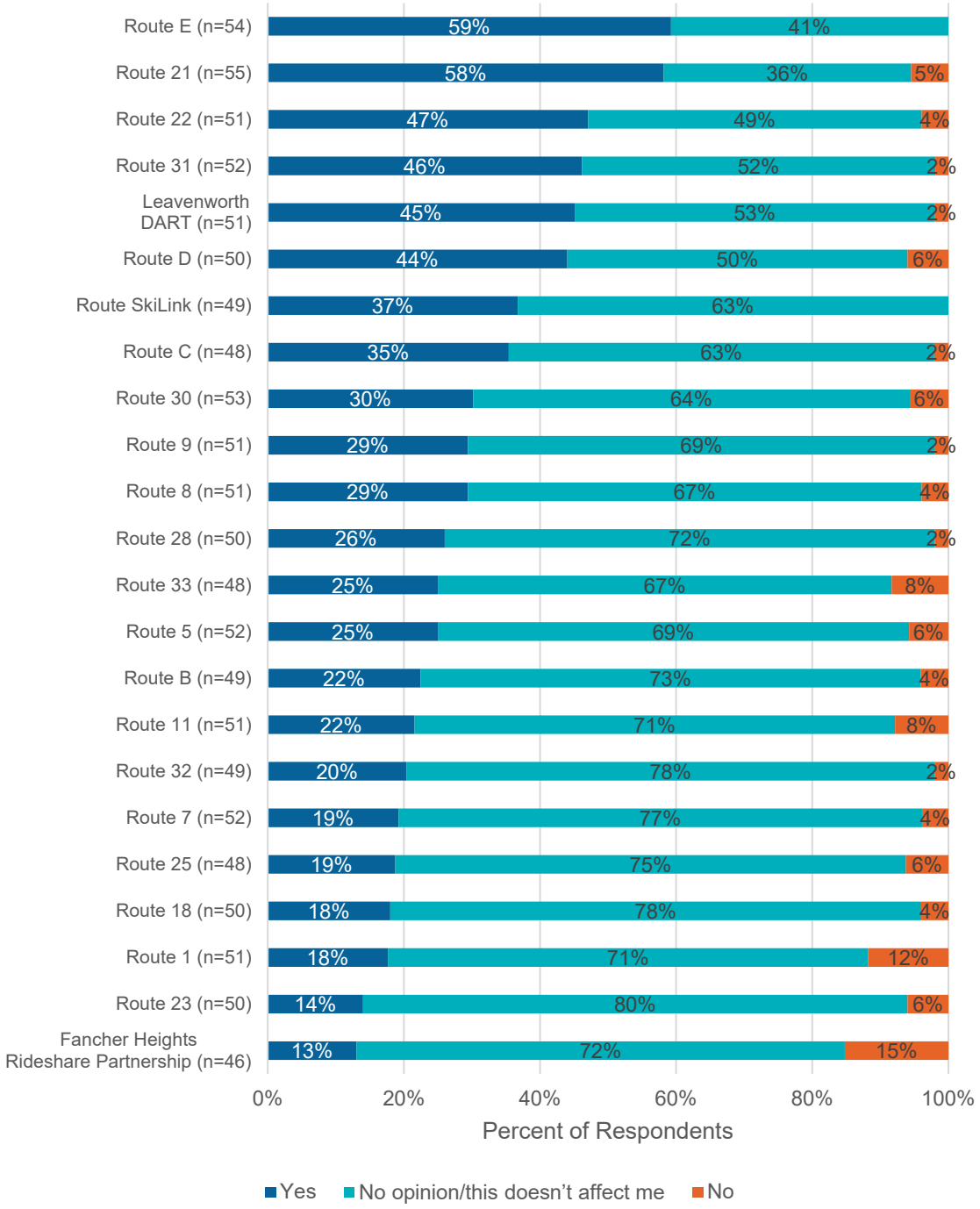


Figure 3-30 includes some open-ended comments from respondents that commented on individual proposed routes.

Figure 3-30 Respondent Comments on Proposed Route-Level Changes in Scenario 2

Route	Comments
Route 5	▪ The removal of the earliest bus makes it impossible to make it to the SkiLink when it runs.
Route 11	▪ Request to not cut service to 8th Street.
Route 21	▪ Having 9:00 p.m. service is great – later would be even better to allow greater access to Chelan summer nightlife on weekends.
Route 22	▪ There are few pedestrian routes to get from the Wenatchee area to Olds Station, so for PUD commuters—of which there are many—eliminating bus service from Leavenworth to Olds Station would render Link irrelevant and unusable.
Route 23	▪ Request to keep Route 23 on Rock Island Road. Using the highway would cut off service to the neighborhood.
Route 30	▪ Would prefer the 26 goes to Columbia Station rather than stop at the transfer center at Olds Station.
Route 31	▪ Request for Saturdays to be added for service from Plain. That is the busiest day.
Route D	▪ Tourists will have nowhere to park in Peshastin if they want to take Route D to get to parks.
Leavenworth DART	▪ Would also like to see service to Coles Corner. ▪ Would like service to operate year-round.
Fancher Heights Rideshare Partnership	▪ There are very few people in Fancher Heights and they have higher incomes that allow them to afford ride-hailing services. ▪ Opposed to subsidizing the "gated community" mindset of Fancher Heights.

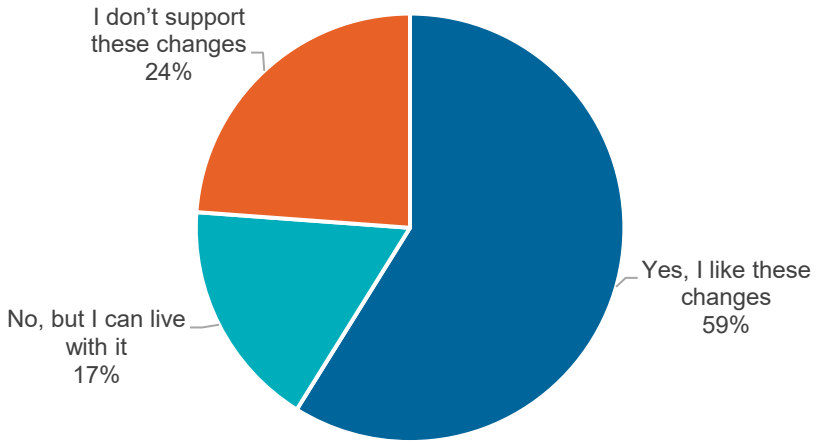
Comments on the proposed elimination of Routes 7, 20, 24, 26, A and the Chelan DART

Respondents were able to also provide open-ended comments on the proposed elimination of routes in Scenario 2. Respondents expressed concern with the elimination of Route 26 and Chelan DART. Respondents reported that for some residents, Route 26 is their only means of transportation and if it is removed, they will be without transit access. Several respondents stated that they enjoy Chelan DART and would be unhappy if it was eliminated. One respondent said the elimination of Chelan DART only makes sense if the local Route E is implemented with high frequency.

Scenario 3

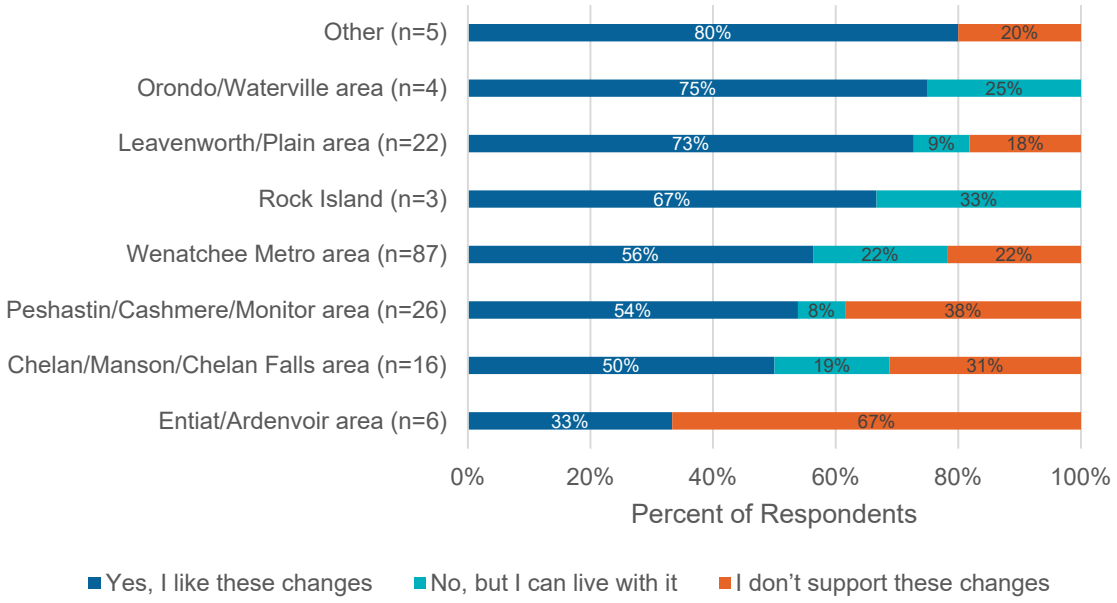
Nearly one-quarter of respondents did not support the changes proposed in Scenario 3 (Figure 3-31). Almost 60% supported the changes.

Figure 3-31 Respondent Opinion on Scenario 3 as a Whole (*n*=214)



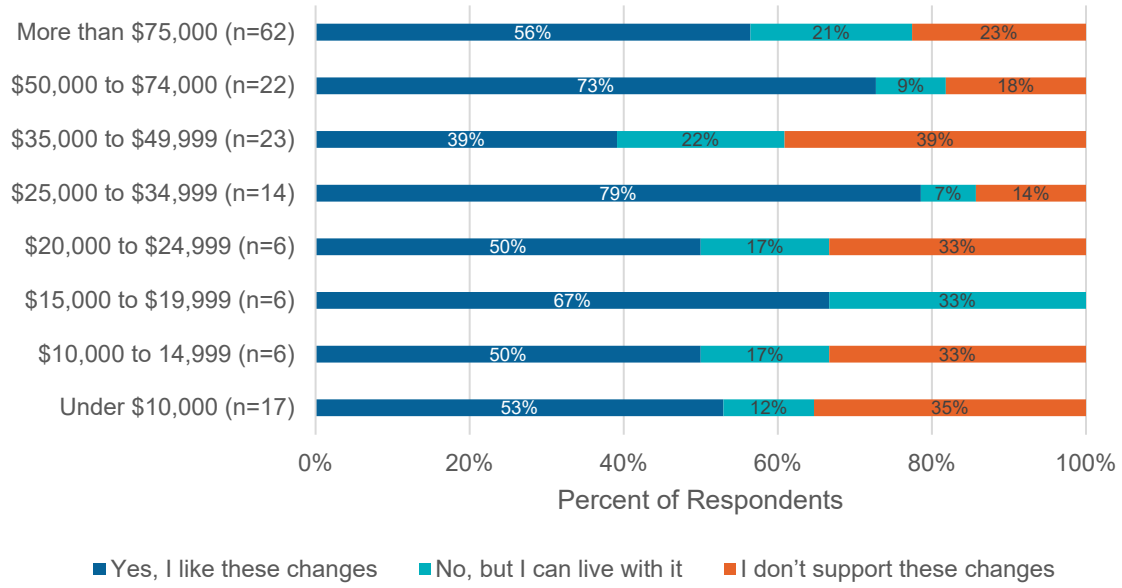
Some areas with the highest support for Scenario 3—Orondo/Waterville and Leavenworth/Plain—had some of the lowest numbers of respondents, so this support should not be interpreted as indicative of the population at large. The Entiat/Ardenvoir area had the highest rate of disapproval for Scenario 3, followed by the Peshatin/Cashmere/Monitor area (Figure 3-32).

Figure 3-32 Respondent Opinion on Scenario 3 as a Whole, by Respondent Home Location (*n*=169)



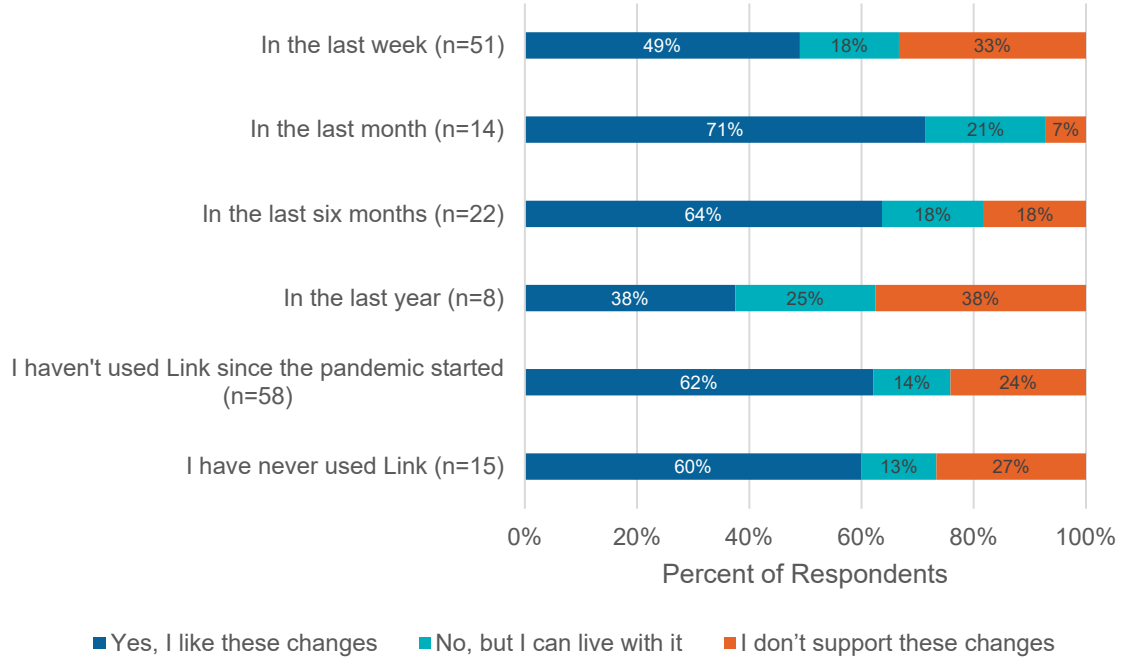
Support for the changes proposed in Scenario 3 did not appear to correlate with household income levels (Figure 3-33).

Figure 3-33 Respondent Opinion on Scenario 3 as a Whole, by Respondent Household Income (*n*=156)



Support for the changes proposed in Scenario 3 did not appear to correlate with ridership frequency (Figure 3-34).

Figure 3-34 Respondent Opinion on Scenario 3 as a Whole, by Ridership Frequency (*n*=168)



Among the routes proposed in Scenario 3, Route 22X and 22L had the highest rates of support (Figure 3-35). Route 22L also had the highest rate of disapproval, with almost one-quarter of respondents disliking the proposed change. Route 1 and Route 5 were among the least popular proposed route changes.

Figure 3-35 Respondent Opinion on Proposed Route-Level Changes in Scenario 3

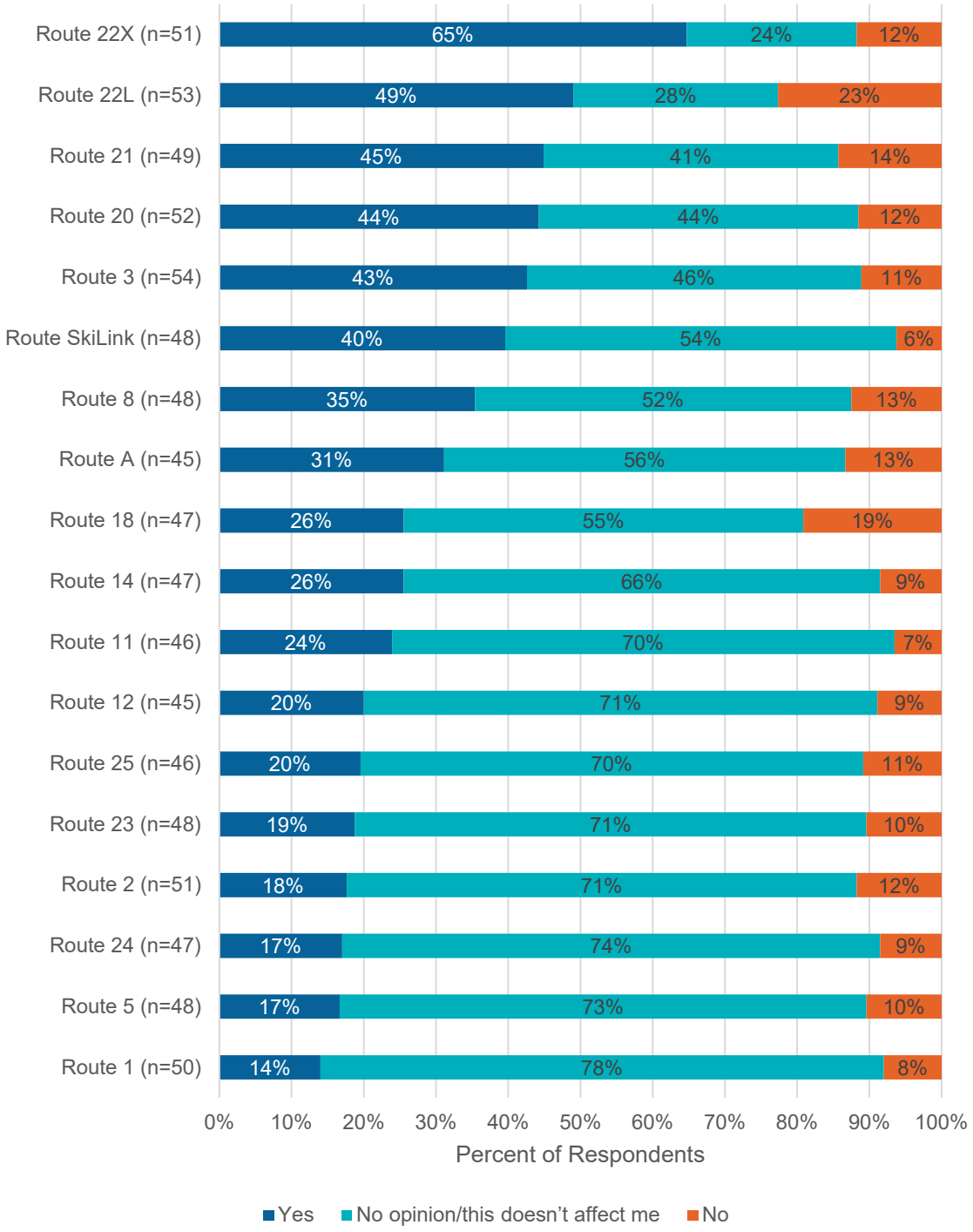


Figure 3-36 includes some of the open-ended comments from respondents that commented on individual proposed routes.

Figure 3-36 Respondent Opinion on Proposed Route-Level Changes in Scenario 3

Route	Comments
Route 5	▪ 5th Street is too busy, consider picking up on 9th Street instead.
Route 8	▪ Earlier AM service is needed, 8:00 or 8:30 a.m. ▪ Columbia Station is needed on this route. It's more centrally located.
Route 11	▪ 19th Street is too busy and it is not a safe street.
Route 12	▪ Leaves the area between 10th Street NE and 5th Street NE unsupported. ▪ 9th Street in East Wenatchee is too busy and is not a safe street.
Route 18	▪ Cutting out access to the Stemilt plant is not good for workers commuting by bus.
Route 20	▪ Access to Walmart needed on weekends. ▪ Later PM service needed.
Route 21	▪ Turning left onto highway 97A with traffic is dangerous and can be time-consuming. Take Entiat Way between the high school and library instead. ▪ Would be great to time this route with Route 20. ▪ Higher frequency needed.
Route 22L	▪ Requesting higher frequency during peak hours.
Route 22X	▪ Concern about the elimination of the Peshastin stops. ▪ Local and express should be coordinated so a rider can board at Icicle Junction and connect with express, otherwise commuters will need to drive to the park-and-ride. ▪ Would like later PM service and weekend service.
Route 24	▪ Needs to be extended to the other end of Saturday Avenue to accommodate the worker housing there.
Route A	▪ Concerned about college students using the Fred Meyer parking lot as a park-and-ride. The Fred Meyer parking lot is already too congested.

Comments on the proposed elimination of Routes 7, 26, 28, B, C, D, and the Chelan and Leavenworth DART

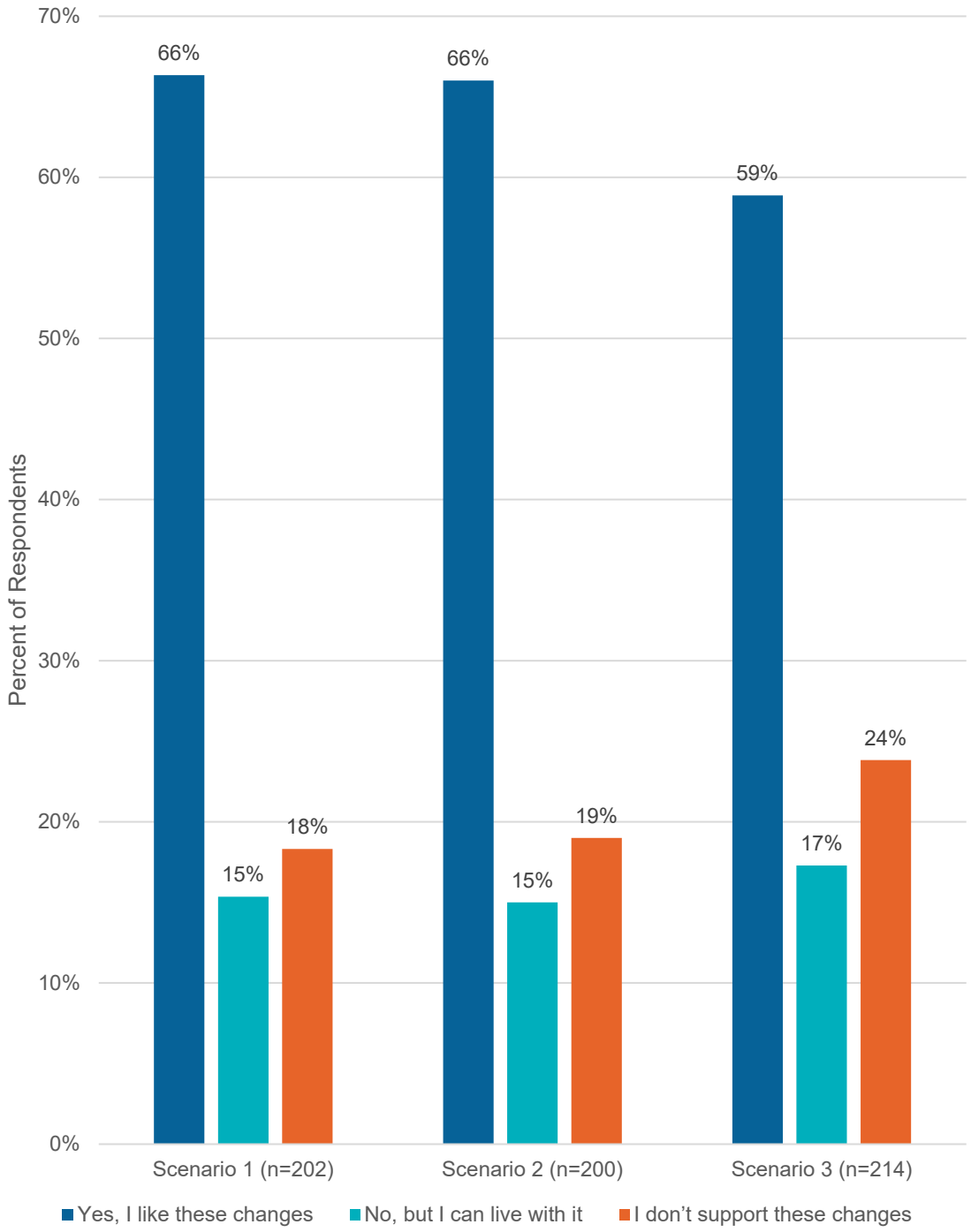
Respondents were able to also provide open-ended comments on the proposed elimination of some routes in Scenario 3. Many respondents were concerned with the proposed elimination of DART services, commenting that the change would remove access to Walmart in Chelan on the weekends. Respondents commented that Leavenworth DART is a great resource to the community and it helps reduce congestion in Leavenworth.

Some respondents were also concerned with the proposed elimination of Route 26. Respondents reported that many residents in the Entiat River Valley do not have transportation alternatives to Route 26. One respondent suggested that ridership would increase on Route 26 if there was another trip added in the morning.

All Scenarios

Scenarios 1 and 2 both had a 66% approval rating among respondents. Scenario 3 had the highest disapproval and lowest approval. Overall, respondents supported the scenarios, suggesting a general appetite for change (Figure 3-37).

Figure 3-37 How do you feel about each scenario?



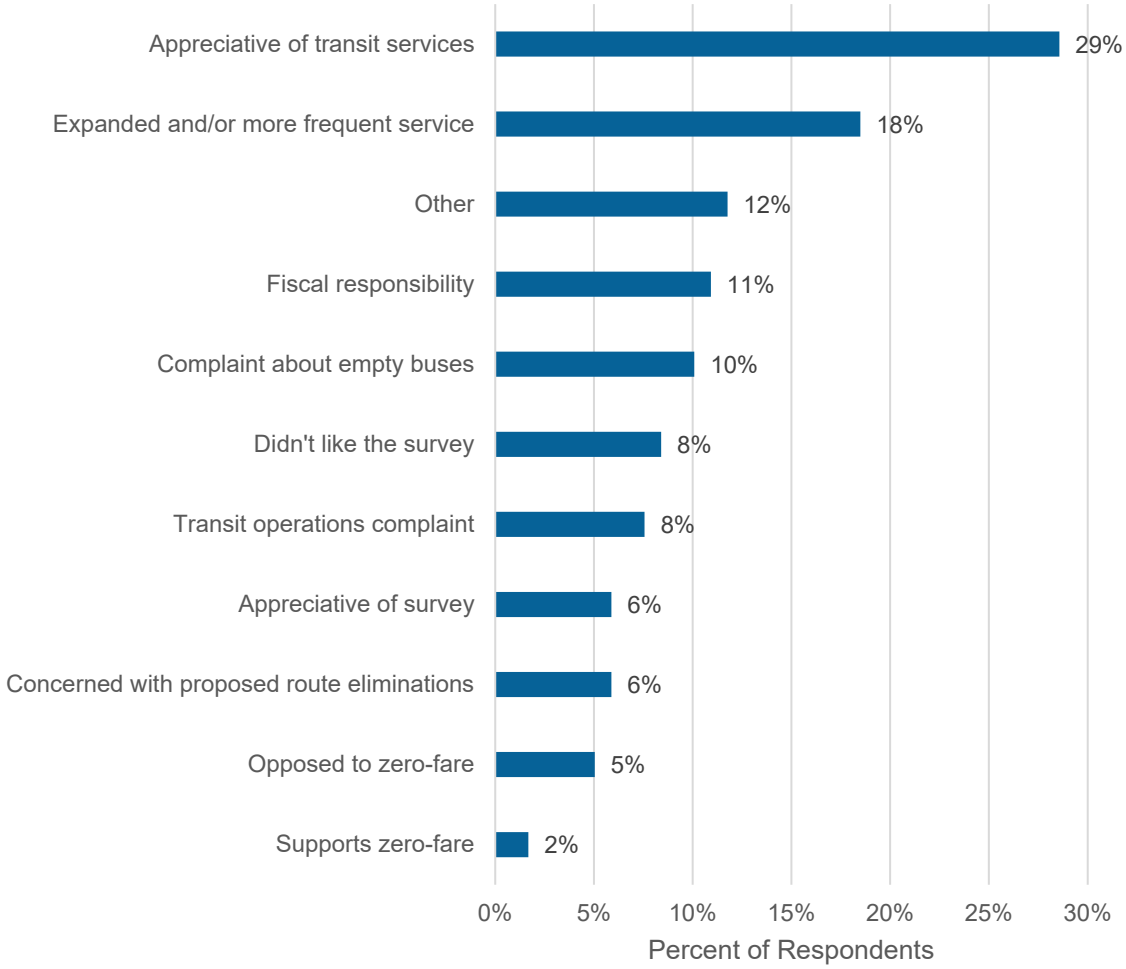
Common Feedback Themes Across All Scenarios

Several common themes in feedback appeared across scenarios. Respondents generally reacted positively to expanded transit service to Pangborn Memorial Airport, trailheads, and Central Washington Hospital. The Chelan Walmart was also often raised as a popular destination on weekdays and weekends. Increased frequency of service on Sundays was also well-received.

Concerns were raised about the proposed elimination of the Cashmere Fairground stop, DART services, and Route 26 Ardenvoir. Respondents emphasized the reliance certain populations have on these services for transportation.

Many respondents used the open-response section to express their appreciation for transit and to request additional transit service (Figure 3-38). The "Other" category includes comments about area demographics, respondents' personal ridership patterns, COVID-19, and more. Many people that complained about the survey were upset about being asked demographic questions; this is not an uncommon response to public surveys. Respondents that complained about empty buses were typically upset about the perceived waste of taxpayer dollars.

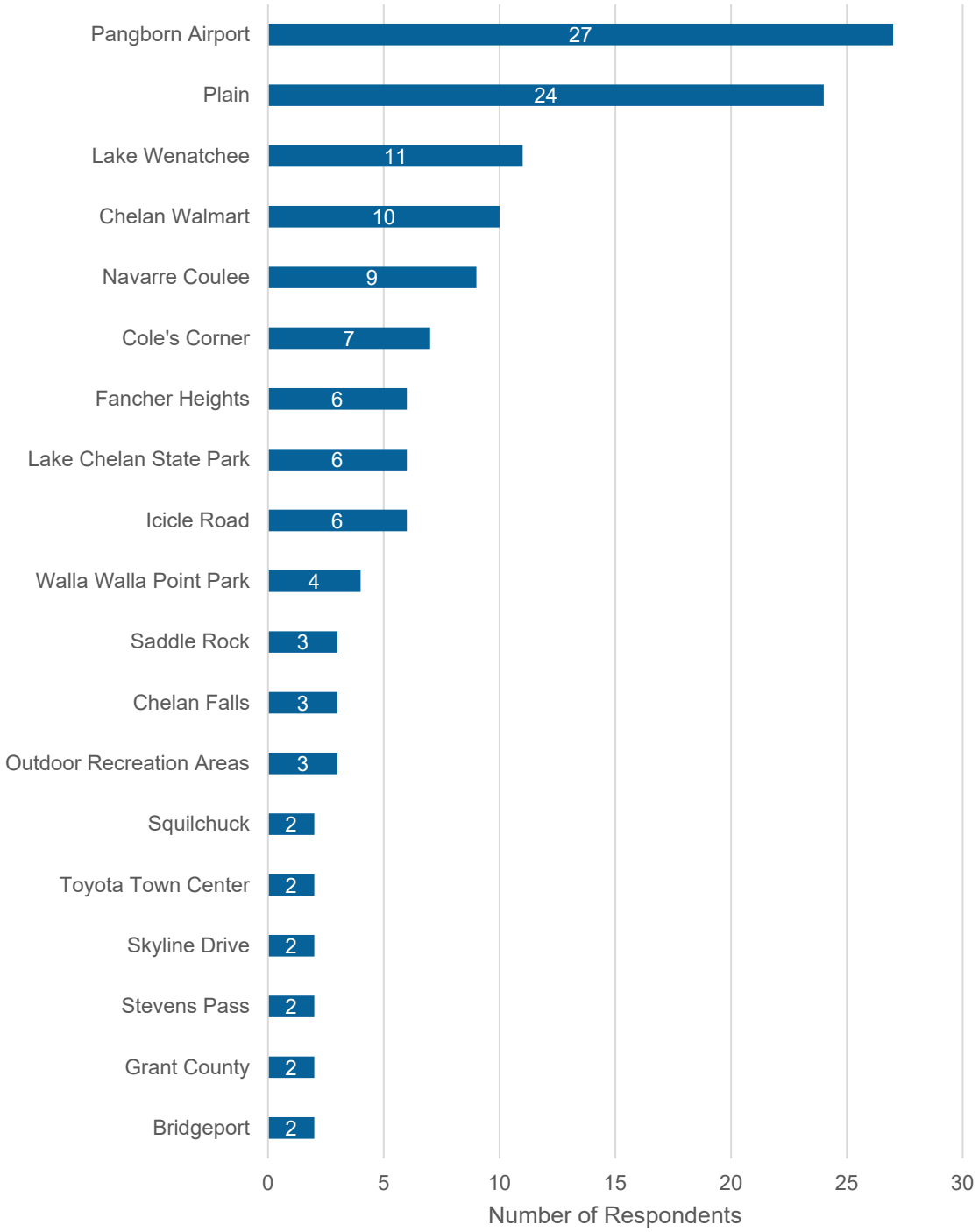
Figure 3-38 Themes from Overall Open Responses (*n*=119)



Note: Respondents were able to select multiple responses, so the total percentage shown is greater than 100.

Among respondents that requested service to new places in the survey, support for Pangborn Memorial Airport access and connections to Plain were strongest (Figure 3-39). Other locations that appeared in more than one open-ended response include Cole's Corner, Navarre Coulee, Lake Wenatchee, and the Chelan Walmart.

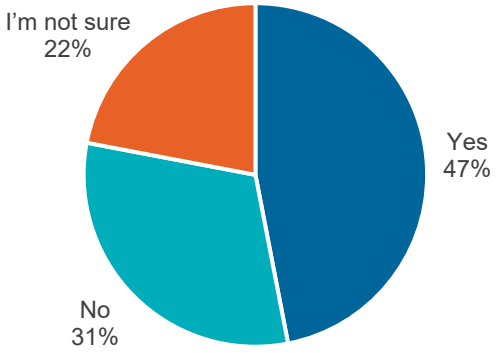
Figure 3-39 Requests for Expanded Transit Service



Zero-Fare Operation Questions

The survey also asked several questions about the potential for Link Transit to become a zero-fare system. Respondents were asked what they thought of a potential zero-fare Link Transit system and why. About half of respondents thought Link Transit should become a zero-fare system, and almost one quarter were not sure (Figure 3-40).

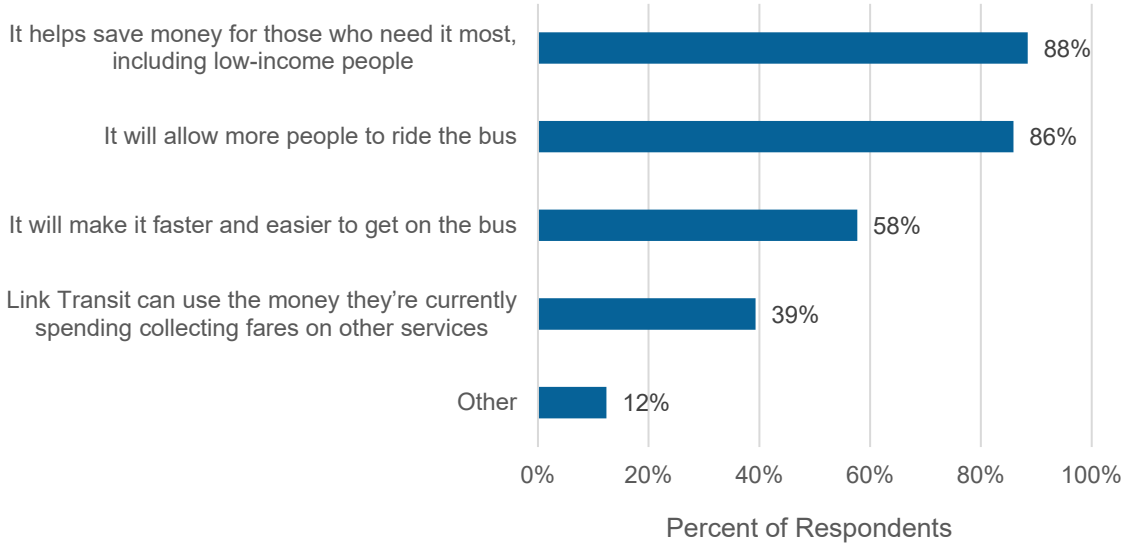
Figure 3-40 Do you think Link Transit should become a zero-fare system? (*n*=509)



Respondents Supporting Zero-Fare Service

Respondents in favor of a zero-fare system primarily supported the idea because it would allow low-income people to save money and would increase ridership on Link Transit (Figure 3-41). In the open-response comment portion of this section of the survey, respondents described other benefits, including reducing traffic, reducing pollution, and helping youth and senior populations move throughout the region. Some commenters also recalled that Link Transit was originally established as a zero-fare system. Respondents that selected "Other" discussed the importance of increasing access to jobs and schools, as well as how existing sales taxes should be sufficient for funding transit. Some respondents believed a zero-fare system would be a point of pride for the community.

Figure 3-41 Why do you think Link Transit should switch to zero-fare operations? (*n*=234)

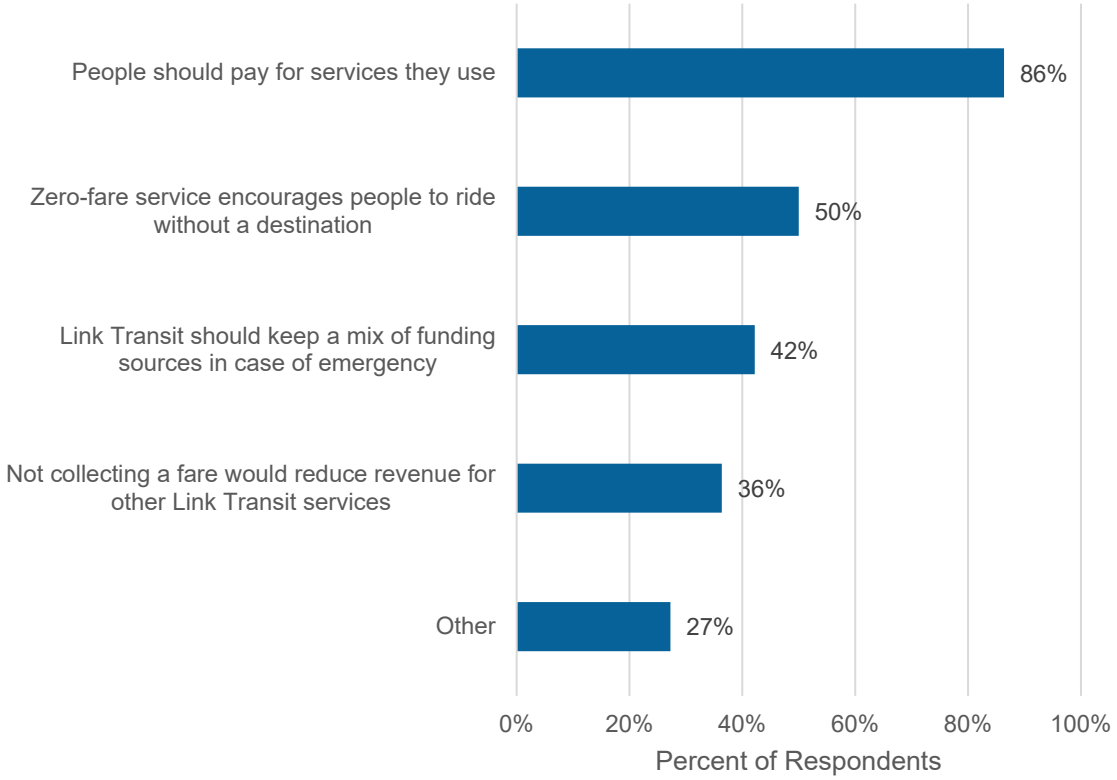


Note: Respondents were able to select multiple responses, so the total percentage shown is greater than 100.

Respondents Opposing Zero-Fare Service

Respondents not in favor of a zero-fare transit system primarily supported this position with the 'user pays' principle, or the idea that people should pay for services they use (Figure 3-42). About one-third of respondents that did not support a zero-fare system were concerned about revenue loss. In the open-response portion of this question, many respondents believed a zero-fare system is not fair to the taxpayers that do not use Link Transit. Many respondents commented that if eliminating farebox revenue would make Link Transit a financially unsustainable organization, the agency should not pursue zero-fare operation. Many of these same respondents expressed support for a zero-fare system if Link Transit could be financially sustainable under such a policy.

Figure 3-42 Why do you think Link Transit should not switch to zero-fare operations? (*n*=154)



Note: Respondents were able to select multiple responses, so the total percentage shown is greater than 100.

Respondents Who Were Unsure about Zero-Fare Service

Nearly one-quarter of respondents reported being unsure of whether they supported zero-fare service. Some of these respondents described how they would probably support zero-fare service if they were sure it would not harm the long-term financial sustainability of Link Transit. The comment below is representative of that sentiment:

> **"I like the idea if you can swing it. If not, then there could be a system where people who can afford it pay to ride and others don't. If you can swing it and provide quality service to the community with a zero fare, then yes. Absolutely in favor of that."**

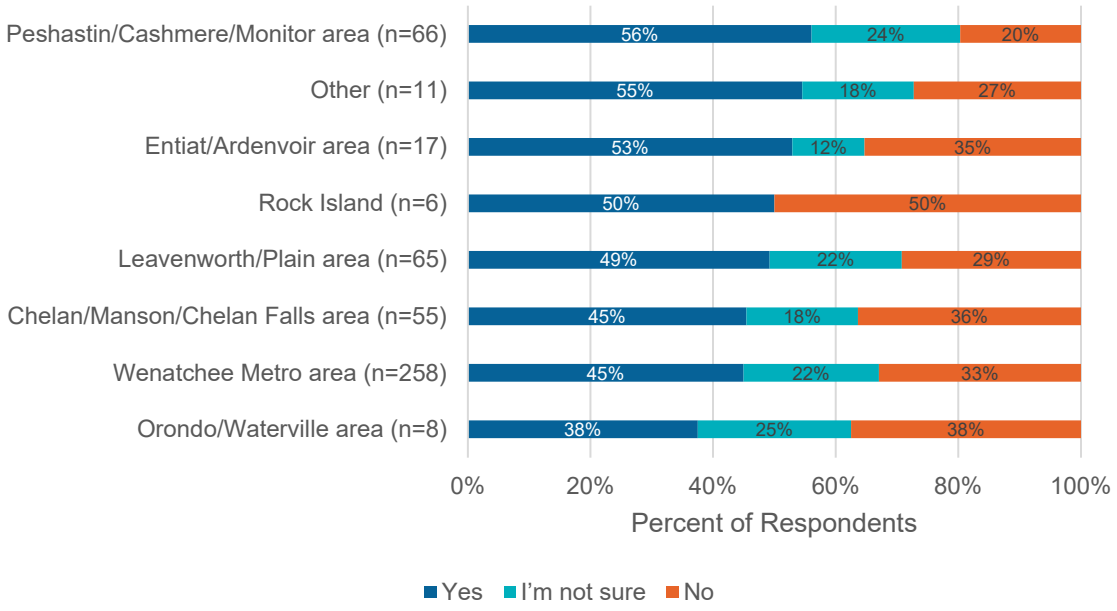
Other Zero-Fare Feedback

Other open-ended comments from respondents on the zero-fare question included:

- Concerns that Link Transit is already overfunded and should not be subsidizing rides further.
- Suggestions that transit subsidies should be provided only for those who demonstrate a financial need or through other social services.
- Disapproval that visitors to the area would be benefiting from a zero-fare system that is funded by the residents of the region.

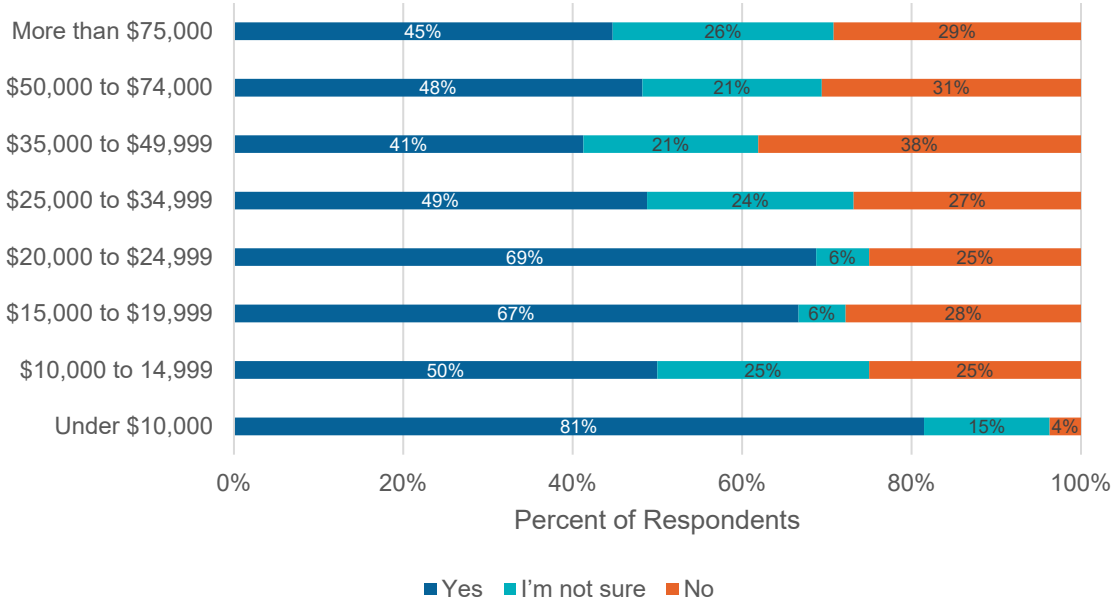
Support for and against a zero-fare transit system varied across home locations (Figure 3-43). The Peshastin/Cashmere/Monitor area had the highest rate of support for a zero-fare system, at 56% of respondents, and the Orondo/Waterville area had the lowest support for a zero-fare system, at 38% of respondents.

Figure 3-43 Respondent Opinion on Zero-Fare System, by Respondent Home Location (*n*=486)



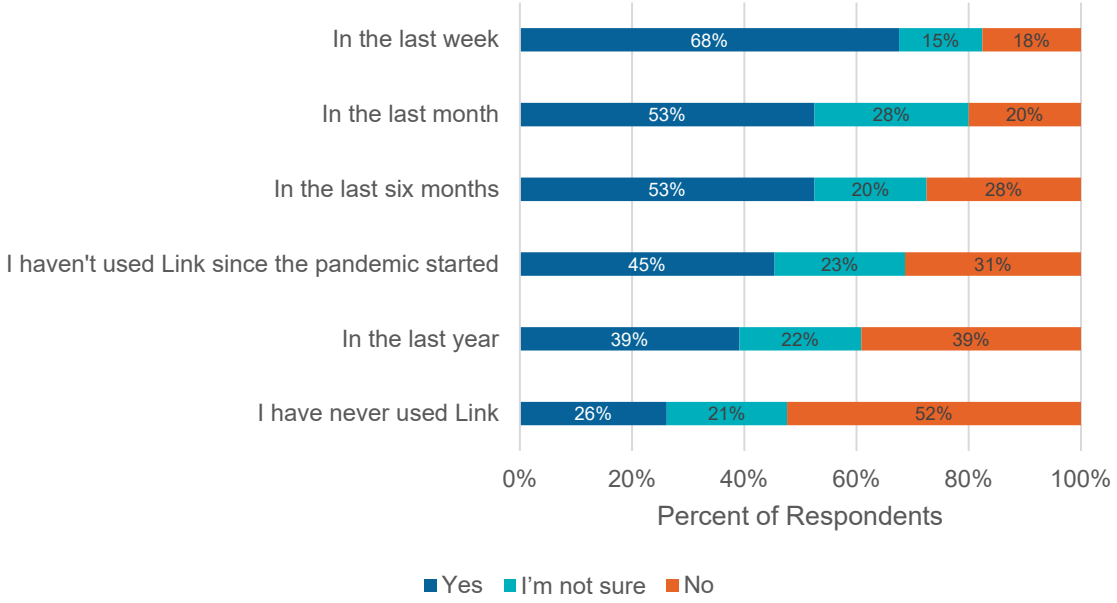
Support for a zero-fare transit system was greatest among lower-income households (Figure 3-44). In general, it appears higher-income respondents were more likely to dislike a zero-fare system.

Figure 3-44 Respondent Opinion on Zero-Fare System, by Respondent Household Income (*n*=427)



Respondents who rode transit recently were more likely to be in favor of a zero-fare transit system than those who did not ride transit as frequently (Figure 3-45). People that have never used Link Transit were by far the most likely to oppose a zero-fare system.

Figure 3-45 Respondent Opinion on Zero-Fare System, by Ridership Frequency (*n*=480)



4 LONG-TERM STRATEGIC ISSUES

In the development of transportation plans, there is always a degree of uncertainty surrounding the future planning and operating context, including potential developmental, operational, and interagency issues that can change over a 10-year planning horizon. Examining these long-term strategic issues and assessing probabilities, opportunities, and challenges will help Link Transit plan ahead, rather than reacting to the planning and operating context after it has changed. This document identifies and discusses several key long-term strategic issues for Link Transit and then makes relevant recommendations. The issues explored and key findings are:

Serving New Development

- Link Transit should use agency-established fixed-route performance measures and guidelines for determining if service to new areas is successful.
- Link Transit should be open to moving stops or re-aligning routes to better serve the largest new developments. Link Transit could negotiate with developers to procure operating funds required to extend service to these developments.
- Link Transit should strive to have developers contribute financially to operating and/or capital costs associated with providing service to new locations, or to upgrading capital facilities on existing routes, leveraging Wenatchee Civil Code (WCC) Ch. 10.60.070 when possible.

Operations Base

- The current location of Link Transit's operating base is suitable, and a relocation is likely not necessary for operational reasons.
- As the agency develops plans for base expansion, it should plan an expansion to support battery-electric buses (BEBs) and consolidate administrative functions at the facility.
- Link Transit should plan for transit priority treatments to and from the base, as development in the Olds Station area is likely to increase traffic congestion, impacting Link operations.

Bus Stop Consolidation

- Link Transit should approach stop optimization as a systemwide, holistic effort, rather than attempting to optimize stops on one corridor or route at a time.
- Link Transit should use a stop optimization process as an opportunity to improve amenities and active transportation access at the consolidated stops.

Major Access Improvements

- Link Transit should leverage federal current and proposed COVID-19 relief and infrastructure improvement bills to fund costly access improvements, such as bridge modifications and pedestrian overpasses.

- Link Transit should continue to work with real estate developers and other private interest to solicit financial contributions to major access improvements.

Transfer Hubs

- Link Transit should continue to monitor rider travel patterns and determine the feasibility of offering additional passenger amenities in Cashmere.
- Link Transit should evaluate the trade-offs and likely future development patterns in Chelan to determine if a downtown Chelan, Chelan Walmart, or both transfer centers would best serve riders.

Park-and-Rides

- Link Transit should strive to continue to provide high-quality park-and-ride facilities, such as those at Wilkommen Park-and-Ride in Leavenworth. Where this level of amenities cannot be provided, basic wind, rain, and sun protection should be provided.
- The agency should proceed with its two leased Cashmere park-and-ride plans and monitor utilization to determine if further stalls are necessary.
- Link Transit should consider developing an Orondo park-and-ride, particularly if service to Waterville or on the east side of the Columbia River were to change, making park-and-ride service to Orondo more attractive.
- Link Transit should proceed with plans to develop the Rock Island park-and-ride.

High-Capacity Transit Corridors

- The corridor connecting Wenatchee Walmart to Columbia Station and Wenatchee Valley Mall is recommended for development as a high-capacity transit corridor.
- Link Transit should plan transit priority treatments to ensure high-capacity transit on this corridor is a success.

Improving Rural Transit

- Link Transit should continue to pursue development of a volunteer driver program.
- Link Transit should consider piloting new modes of rural transit, such as transportation vouchers, ride share partnerships, or community vans.

Shared-Ride Mobility Services

- Link Transit should carefully consider the need to serve low-density portions of the PTBA within the context of its organizational goals, to determine if providing shared-ride mobility services is a worthwhile pursuit for lifeline and non-lifeline service.
- If shared-ride mobility services are implemented, Link Transit should develop clear standards for when, where, and why this service is provided.

Broader Regional Connections

- A six-month or one-year pilot route between Quincy and Wenatchee may be a worthwhile experiment for assessing transit demand and the sustainability of such a service.
- Pilot a vanpool service to fruitpacking sheds in the Link Transit PTBA to assess demand. If demand is great enough, consider upgrading vehicles to worker-driver buses.

Access to Outdoor Recreation

- Before implementing additional routes that serve outdoor recreation destinations, Link Transit should collect broad buy-in from community members, key stakeholders, and Link Transit's board of directors. Piloting these services before permanently implementing them may also be prudent.
- Link Transit should be sure that any outdoor recreation-type service does not violate Federal Transit Administration (FTA) charter service regulations.
- Outdoor recreation service could be pursued as a partnership with other government agencies or private industry.
- Link Transit could market transit service to outdoor recreation destinations to communities of concern, thereby addressing community equity goals.

Zero-Emissions Vehicles

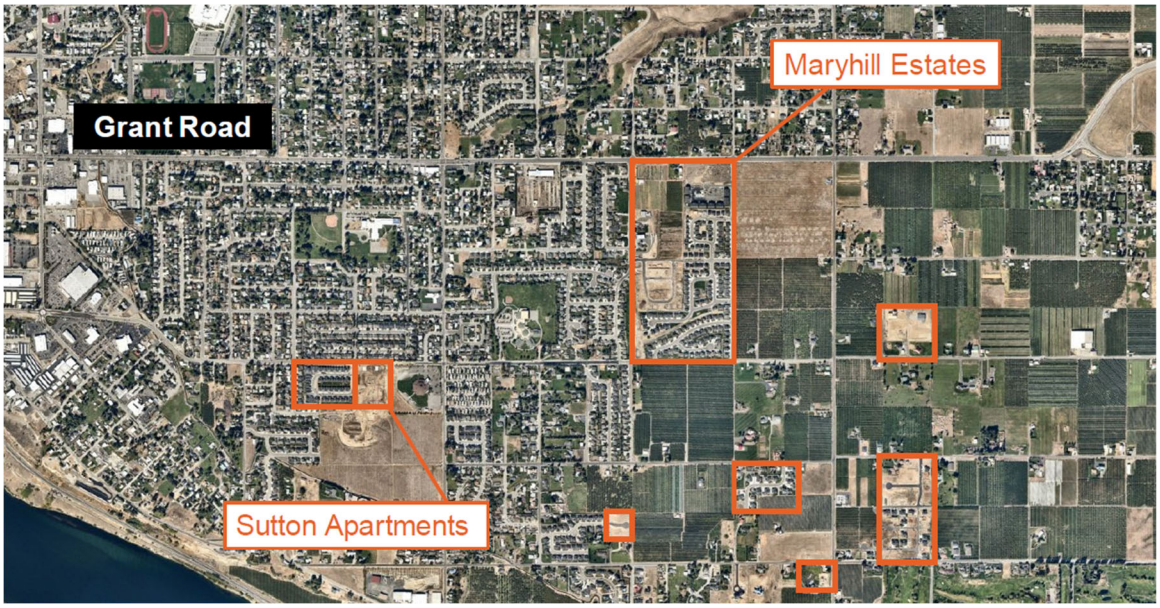
- Create a plan for BEB rollout and infrastructure development.
- Phase cutaway BEBs into service more slowly than heavy-duty BEBs, as cutaway BEB availability is currently limited and costs are high.
- Link Transit should incorporate BEB charging infrastructure into new park-and-ride and other facility design processes.

SERVING NEW DEVELOPMENT

Current Conditions

The Wenatchee metro area is growing rapidly. The Chelan-Douglas Transportation Council (CDTC) estimates the Wenatchee urban area will grow by 25,000 people, or 37%, from 2016 to 2045.[1] Although some of this growth will be infill development in the Wenatchee and East Wenatchee urbanized areas, much of this growth is expected to be greenfield development in unincorporated Douglas County, just outside East Wenatchee (Figure 4-1). Significant development is also expected in the Sunnyslope and Malaga areas of Chelan County, outside Wenatchee.

Figure 4-1 Recent and Upcoming Development South of the Grant Road Corridor in Douglas County



Source: Nearmap

Several significant developments are currently planned or underway in Link Transit's service area. These developments are shown in Figure 4-2.

[1] Estimates provided by CDTC from land use model.

Figure 4-2 Select Planned Developments in the Link Transit Service Area

Challenges

As development continues to sprawl outside the existing urban core, Link Transit will likely be pressured to serve new, low-density communities. Transit service in these areas will likely not be as productive on a passenger-per-hour basis as service in more established, dense areas. To provide service to these new developments, Link Transit will need to determine what type of service should be provided (i.e., fixed-route versus demand-response), how much service should be provided, and whether service should be provided at all. The answers to these questions will have significant impacts on Link Transit's operating and capital budgets.

Opportunities

Future infill development in Link Transit's service area's urban cores will likely increase the productivity of existing routes, growing ridership with minimal impact to Link Transit's capital or operating budgets. Some developments, such as The Majestic apartments at S Mission Street and Kittitas Street, may be significant enough trip generators to warrant stop relocation or route re-alignment.

Some greenfield development on the outskirts of the Wenatchee urban area could lend itself well to fixed-route service, as routes could be extended to serve these developments, provided operating funds are available and performance standards[2] can be met. In some cases, new route turnarounds, layover space, and operator relief stations will need to be identified. In other instances, Link Transit could consider negotiating with developers to procure operating funds for extending routes to new developments.

The greatest opportunity future development presents for Link Transit is ridership growth. If Link Transit serves new development efficiently, the agency can increase both absolute ridership and ridership productivity, representing a net positive outcome for the community, as residents use transit to make trips instead of single-occupancy vehicles.

New developments are also opportunities for Link Transit to have developers fund capital improvements to the transit network. Historically, real estate development in the Link Transit service area has involved good communication between developers and Link Transit, which often results in bus stops, pullouts, or shelters being paid for in part or in full by private interests. WCC Chapter 10.60.070 allows developers to reduce on-site parking provision by 20% if—as a part of other transportation demand management efforts—a bus shelter is within 700 feet of the project; this law can be leveraged to reduce Link Transit's capital costs associated with serving new development.

Recommendations

Based on the likely increase in both infill and greenfield development in the Link Transit service area, the following long-term strategic steps are recommended for Link Transit:

- Link Transit should use agency-established fixed-route performance measures and guidelines for determining if service to new areas is successful.

[2] As of June 2021, the most recently-available document is the *Link Transit Fixed Route Performance Measures and Guidelines 2013 Update*.

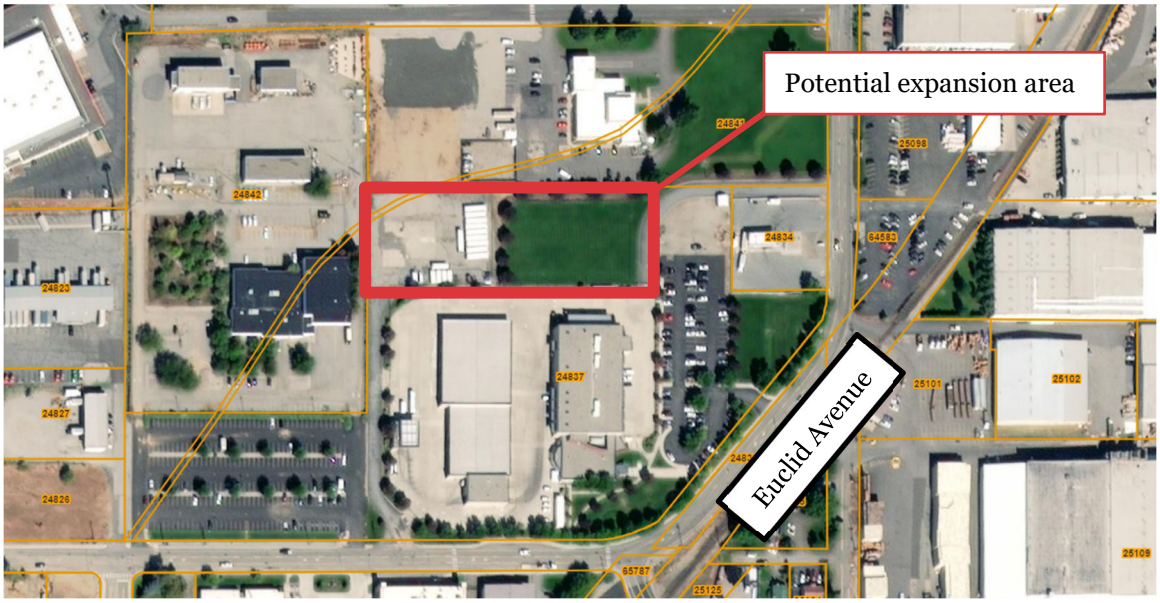
- Link Transit should be open to moving stops or re-aligning routes to better serve the largest new developments. Link Transit could negotiate with developers to procure operating funds required to extend service to these developments.
- Link Transit should strive to have developers contribute financially to capital costs associated with providing service to new locations, or to upgrading capital facilities on existing routes, leveraging WCC Ch. 10.60.070 when possible.

OPERATIONS BASE

Current Conditions

Link Transit's current operations are based out of the agency's 2700 Euclid Avenue operating base. The operating base parcel, which is owned by Link Transit, includes employee parking, undeveloped green space, maintenance, operations, and administrative structures, a bus yard, a relatively unimproved storage yard, and the Olds Station Park-and-Ride (Figure 4-3). Vehicle storage at the facility is particularly challenging.

Figure 4-3 Link Transit Operating Base with Parcel 24837 Overlay



Source: Chelan County Assessor GIS

As Link Transit grows, additional space for vehicle storage, maintenance, and charging infrastructure may be necessary. Although there is available land for such an expansion on the existing 2700 Euclid Avenue parcel (Figure 4-3), planning will be needed to determine exactly how to expand, where potential charging infrastructure would be located, how vehicle circulation will work, and how long an expansion would serve the growing Link Transit fleet.

Challenges

One of the biggest challenges to expanding an operating base is deciding on *expansion* or *relocation* of a base. In the case of the 2700 Euclid Avenue facility, the base's location, parcel size, and likely future neighbors make it a suitable location for expansion. Because the base is centrally located to Link Transit's service and has good highway access, it minimizes costs associated with deadhead for the agency. The parcel size is such that continued expansion is possible, even beyond the area identified in Figure 4-3. Future development in the area is likely to be primarily commercial, meaning residential neighbors that may be bothered by 24-hour operation of a bus base are unlikely to materialize in the area.

Expanding Link Transit's base will also require solidifying challenging long-term strategic decisions about the fuel type for Link Transit's fleets. This decision will have major implications

for capital budgets and yard space allocation. Based on the agency's current success operating BEBs, likely continued low electricity costs in the region, and the likely transition of the United States' public transit fleet at large to BEBs, it is recommended that Link Transit plan future base expansions assuming continued growth in the agency's BEB fleet (see the 'Zero-Emissions Vehicles' section of this document for more information). The Olds Station base also has diesel tanks that are nearing the end of their useful life and a roof that could support solar panels; both these infrastructure considerations support transitioning the base to support primarily BEBs.

The Olds Station base also does not have enough administrative space, which causes Link Transit's administrative functions to be partially housed at Columbia Station. An expansion of Link Transit's Olds Station facility should include additional administrative space, which would allow for the consolidation of administrative personnel at Olds Station. Among agencies of Link Transit's size, it is typical for administrative functions to operate from the same office location, which allows for efficient communication. Consolidating administrative functions would also allow for repurposing of Columbia Station office space into leasable office space (which could generate income for the agency) or a transit-community center with meeting rooms and other space available for use by local groups and organizations. Figure 4-4 is an example of an agency-owned building operating as a transit-community center in Shelton, WA.

Figure 4-4 Mason Transit Transit-Community Center in Shelton, WA

Source: Mason Transit

Opportunities

A major capital project, such as an operating base expansion, is a good opportunity for an agency to look far into the future and assess strategic transit needs. The future of the Olds Station area, where Link Transit's current base is located, is likely that of increased development, which will challenge operations by increasing congestion. Because of this, a base expansion project may also be an appropriate time for Link Transit to institute transit priority measures for vehicles entering and exiting the Olds Station area, allowing them to bypass this congestion. This type of capital planning could be started at the same time as planning for a base expansion.

Recommendations

Based on the likely expansion of Link Transit's fleet at 2700 Euclid Avenue, the following long-term strategic steps are recommended for Link Transit:

- The current location of Link Transit's operating base is suitable and a relocation is likely not necessary for operational reasons.
- As the agency develops plans for base expansion, it should plan an expansion to support battery-electric vehicles and consolidate administrative functions at the facility.
- Link Transit should plan for transit priority treatments to and from the base, as development in the Olds Station area is likely to increase traffic congestion, impacting Link operations.

BUS STOP CONSOLIDATION

Current Conditions

Optimal bus stop spacing requires a balance of customer convenience and operating efficiency. Closely spaced stops reduce the first- and last-mile distance to and from customer origins and destinations but result in slower bus speeds and less reliable service. Stops spaced far apart result in faster, more reliable service but can significantly increase first-/last-mile distances for riders.

Bus stop spacing varies in the Link Transit service area and is based on several factors, including population and employment densities, sidewalk availability, travel speeds, and past rider requests. On many corridors, stops in the Link Transit service area are more closely spaced than is ideal and—in some places—are spaced nearly two times as closely as is ideal. In general, the recommended stop spacing for local bus service is between 1/5 and 1/3 of a mile, or a five-minute walk. This industry standard is supported by optimization research.[3]

Challenges

Consolidating and optimizing bus stops is a challenging prospect for many transit agencies, as local politics generally make removal of public infrastructure difficult. In some cases, years of ad hoc requests for additional bus stops that serve niche markets are funneled through local government channels, resulting in a network with many stops used by small numbers of highly engaged riders. One strategy for overcoming this challenge is to engage in a holistic stop optimization process that examines all stops in the network at once, instead of optimizing bus stops on a corridor or route basis.

Opportunities

A stop optimization process is a good opportunity for investing in amenities and access at consolidated bus stops. In general, stops are recommended in areas with good pedestrian access and safe crossings of nearby streets to and from major destinations. When possible, bus stops should be located close to the 'front door' area of major destinations, without requiring buses to deviate into driveways or parking lots.

A stop optimization process can also result in long-term operating and capital savings, as the total number of stops that need to be maintained, updated, and potentially repaired is generally reduced.

Active transportation infrastructure in the stop area is also an important consideration; stops should be accessible via Americans with Disabilities Act (ADA)-compliant sidewalks and should consider local topography and traffic patterns. Link Transit could also use a stop optimization process as an opportunity to work with local governments to improve bicycle access to stops; this need was highlighted in the 2019 City of Wenatchee Urban Area Comprehensive Plan, Greater East Wenatchee Area Comprehensive Plan, and CDTC Wenatchee Valley Bicycle Master Plan.

[3] Peter Furth and Adam Rahbee, "Optimal Bus Stop Spacing Through Dynamic Programming and Geographic Modeling", Transportation Research Record 1731, Paper No. 00-0870 (2000)

Recommendations

Based on the high number and close spacing of bus stops in the Link Transit system, which affects service speed and reliability, the following long-term stop optimization strategic steps are recommended for Link Transit:

- Link Transit should approach stop optimization as a systemwide, holistic effort, rather than attempting to optimize stops on one corridor or route at a time.
- Link Transit should use a stop optimization process as an opportunity to improve amenities and active transportation access at the consolidated stops.

MAJOR ACCESS IMPROVEMENTS

Current Conditions

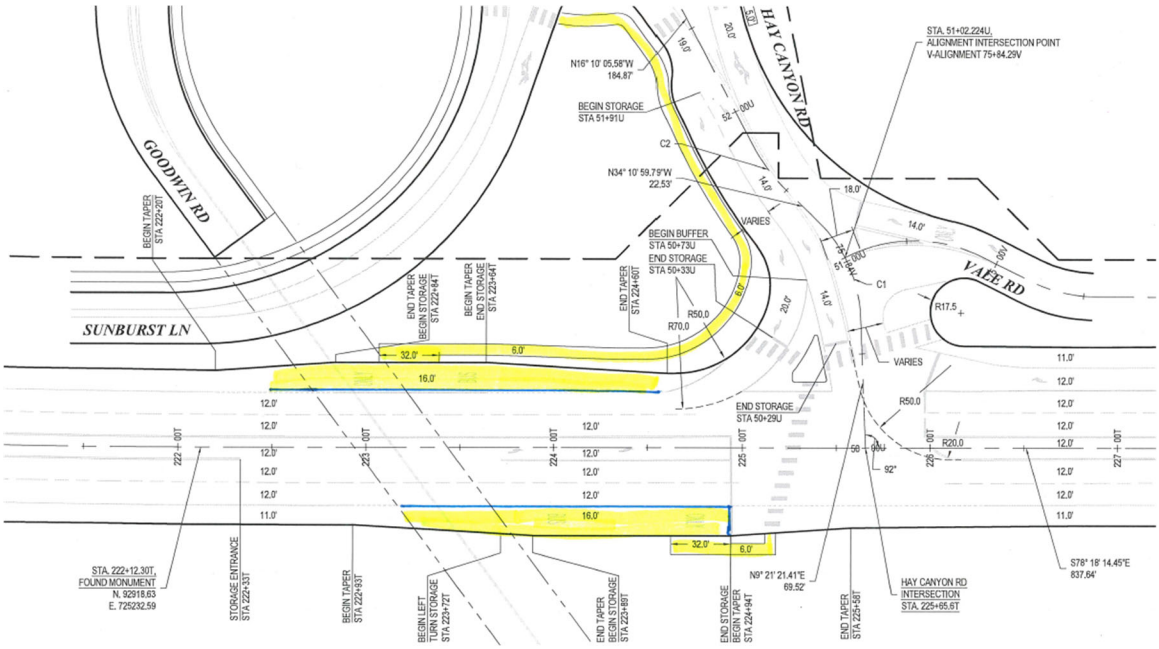
In many parts of Link Transit's service area, access to transit is challenged by active transportation barriers such as rivers, highways, bridges, or railroad tracks. In some instances, providing service to overcome these barriers reduces efficiency, speed, reliability, and ridership productivity. A service that deviates to overcome access barriers suffers from reduced attractiveness and may see reduced overall ridership.

Hay Canyon Road

Hay Canyon Road, which extends north from US 2 near Cashmere, is lightly developed, hosting residential, commercial, and institutional uses. The area is not currently served by Link Transit but may serve riders soon, provided access to transit in this area can be made safe and welcoming.

The current West Cashmere Goodwin Bridge replacement project is planning to add bus pullouts and sidewalks to this intersection but will retain a long, at-grade crosswalk for riders hoping to cross US 2 (Figure 4-5). This crosswalk may still be intimidating and unsafe for some riders, particularly those using mobility devices or walking slowly. Improvements to this area should be monitored and potentially revisited after access performance can be assessed. The new bridge is expected to open in December 2021.[4]

Figure 4-5 Planned Pullouts and Sidewalks at the West Cashmere Bridge Site



Source: Link Transit

[4] Chelan County Public Works. March 29, 2021. Contractor's Current Schedule. <https://www.co.chelan.wa.us/files/public-works/documents/construction/WCB%20Estimated%20schedule_updated%20March%202021.pdf>

Peshastin

Active transportation access between Peshastin and US 2 is limited to an auto-only bridge across the Wenatchee River, which requires Link Transit vehicles serving Peshastin to deviate into the town and turn around on Peshastin Mill Road. This deviation is time-consuming and affects the reliability of routes traveling between Leavenworth and Wenatchee. Operations would be significantly improved if riders traveling to and from Peshastin could access stops on US 2.

The cost of retrofitting the Peshastin Wenatchee River bridge to support active transportation would be significant, as the bridge would either need to be widened, a cantilevered addition would need to be added, or a new bridge would need to be constructed.

Entiat

The City of Entiat is developed on both sides of US 97A, which is the primary corridor for Link Transit service to and through the city. There are very few crosswalks on US 97A, which is signed as a 35 mile-per-hour speed limit in Entiat (vehicles often exceed the speed limit), making crossing US 97A a significant barrier for people on foot, bicycle, or using a mobility device.

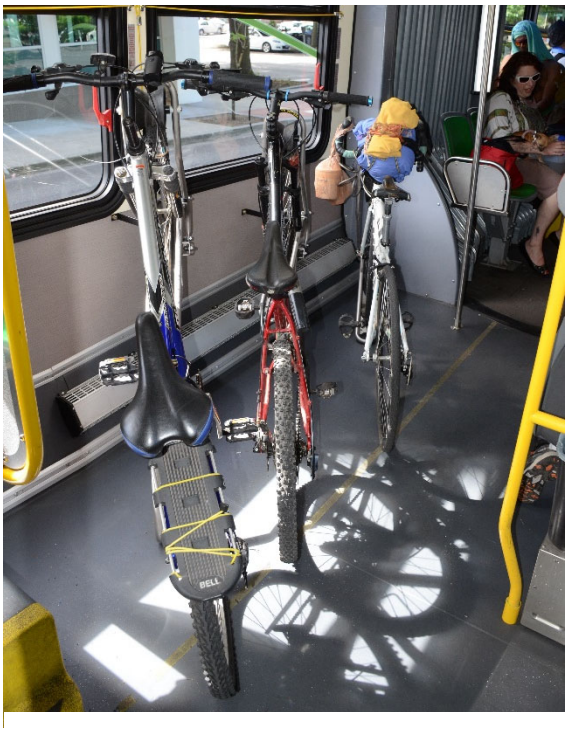
Improved crosswalks, pedestrian hybrid beacons (also known as HAWKs), or an active transportation overpass are all potential options that could improve access to transit in Entiat.

Bicycle/Bus integration

Several Wenatchee-area plans have identified the need for improved bicycle-bus integration. Improving the ability of transit riders to make the first or last mile of their transit trip via bicycle could increase bus ridership and reduce auto use in Link Transit's service area.

Less infrastructure-intensive improvements, such as providing adequate bicycle storage at transit stops near major bicycling corridors, are generally easier to accomplish in the short-term. More time- and resource-intensive improvements, such as bike lanes, protected intersections, and bicycle signals on corridors that connect to major transit routes, are typically longer-term projects. In Chelan and Douglas counties, where recreation cycling is a common activity, serving mountain or road biker travel patterns may be a sound strategy for increasing bicycle/bus integration. Figure 4-6 shows one method for accommodating additional bicycle positions on a heavy-duty transit bus.

Figure 4-6 Additional Bicycle Positions on a C-TRAN Bus in Vancouver, WA



Source: "Interior of C-Tran Vine bus with all three bicycle racks in use" by Steve Morgan is licensed under CC BY-SA 4.0.

Challenges

Some access to transit challenges require significant capital expense, making them

particularly challenging to local governments and transit agencies with limited funding. Examples of these types of expensive access to transit projects include an active transportation connection across the Wenatchee River in Peshastin, a potential footbridge across US 97A in Entiat, or an under- or overpass across US 2 at Hay Canyon Road/Goodwin Road outside Cashmere.

Recent signed and proposed federal legislation relating to COVID-19 relief and national infrastructure improvement may be a good source of capital funds for projects that address these access issues. The scale and scope of these bills may represent a once-in-a-generation opportunity for Link Transit and local governments to fund projects that would be otherwise out of reach.

Opportunities

In addition to one-time federal infrastructure funds, Link Transit may be able to leverage private development investment to support access to transit in some contexts. Development in Entiat, for example, may continue and be able to financially support a safer, more welcoming US 97A crossing, and the business community in Peshastin may be able to contribute to an improved Wenatchee River active transportation crossing.

Recommendations

Based on the high capital costs of major access to transit improvements, the following long-term strategic steps are recommended for Link Transit:

- Link Transit should leverage federal current and proposed COVID-19 relief and infrastructure improvement bills to fund costly access improvements, such as bridge modifications and pedestrian overpasses.
- Link Transit should continue to work with real estate developers and other private interest to solicit financial contributions to major access improvements.

TRANSFER HUBS

Current Conditions

Transfer hubs are designated off-street facilities that are useful for reducing delay in heavily congested areas, providing a safe and comfortable environment for passengers to make transfers, and reserving space for buses to dwell during layover periods. Transfer hubs can provide space for bus stop bays, which separate buses from general purpose traffic, or layover bays, which allow buses to pull out of service for recovery time at the end of one trip before starting another. Layover recovery time is an essential component of transit operations and is built into schedules to allow vehicles to recover from delays, wait if a trip is running ahead of schedule, and ensure reliable scheduling in congested areas.

Transfer hubs are a key tool for reducing transit vehicle dwell time on streets and facilitating transfers at high ridership locations. Effective transit hubs provide passenger benefits and performance improvements by separating the bus from general purpose traffic in select locations. There are some challenges to developing additional transfer hubs in the Link Transit service area, but the opportunities for improvements to service are significant enough to warrant overcoming these challenges.

Challenges

In many instances, the layover portion of a transfer hub facilitates operator relief (e.g., resting, stretching, and using the bathroom). In locations where there are nearby businesses or government facilities with bathrooms, interlocal agreements or informal usage can allow sufficient operator access to bathrooms. In instances where bathrooms are not available, transit agencies may need to construct their own restroom facilities, which can be expensive, due to the need to bring power, water, and sewer to the site. In many instances, these can be simple structures (Figure 4-7) but funding them can be challenging.

Figure 4-7 Example of a King County Metro Operator Relief Station in Seattle

Source: Nelson\Nygaard

Another challenge for transfer hubs is addressing the wear-and-tear on asphalt roadways caused by repeated use by heavy-duty transit buses (Figure 4-8). In many instances, years of heavy-duty transit bus use can render asphalt roadways difficult to use for some vehicles and active transportation users; the high axle weight of BEBs can exacerbate this issue. To mitigate these concerns, many transfer hubs pour concrete pads at bus bays and layover locations, or throughout a transfer hub area. Concrete roadways are more expensive than asphalt, however, and can pose funding challenges.

Figure 4-8 Asphalt Damage from Long-Term Heavy-Duty Transit Bus Use

Left: Crocodile cracking at a heavily used bus stop in San Francisco, CA. Right: Damaged asphalt at a heavily used bus stop in Seattle, WA. Source: Nelson\Nygaard

Opportunities

There are several opportunities for Link Transit to develop or formalize transfer hubs throughout the service area, thereby improving service, the rider experience, system legibility, and operator relief opportunities. Three such opportunities are described below.

N Wenatchee Avenue

The 2011 North Wenatchee Transportation Master Plan identified the potential for a future North Wenatchee Transfer Center on the N Wenatchee Avenue corridor. Such a transfer center could allow riders to avoid some of the congestion on this corridor and reduce trip times to certain destinations in Wenatchee on trips that require a transfer, such as Walmart or Wenatchee Valley College. The 2011 North Wenatchee Transportation Master Plan estimated the cost of this transfer center to be between $10 million and $15 million, making it a significant capital undertaking for Link Transit.

Chelan

Link Transit's Vision 2020 service improvements include a transfer center/park-and-ride facility in Chelan, which could serve the Route E Chelan Shuttle and Routes 20 and 21, which provide connecting service to Wenatchee on both sides of the Columbia River. Two logical locations for such a transfer center exist:

- **Downtown Chelan:** A transfer center could be located near major commercial and governmental destinations in downtown Chelan, potentially near the current shelter on E Johnson Avenue. Other potential locations include the Chelan City Hall parking lot or nearby on-street locations in downtown. A transfer hub in downtown Chelan could

facilitate transfers among future routes serving Manson, Chelan Falls, and points south on both side of the Columbia River.

- **Chelan Walmart:** A transfer center/park-and-ride facility at the Chelan Walmart would take advantage of the large number of parking stalls available at the site but would also be isolated from other destinations in Chelan. Depending on how the future Chelan-area transit network is structured, a transfer hub at the Walmart could serve some, or all, routes that serve downtown Chelan. A transfer center at this stop could also serve the Apple Line intercity bus, which currently stops outside Chelan Falls near the intersection of SR 150 and Broadview and has no formal rider amenities (Figure 4-9). Any park-and-ride at the Chelan Walmart would be subject to an agreement between Walmart and Link Transit.

Figure 4-9 Current Link Transit/Apple Line Transfer Stop Near Chelan Falls

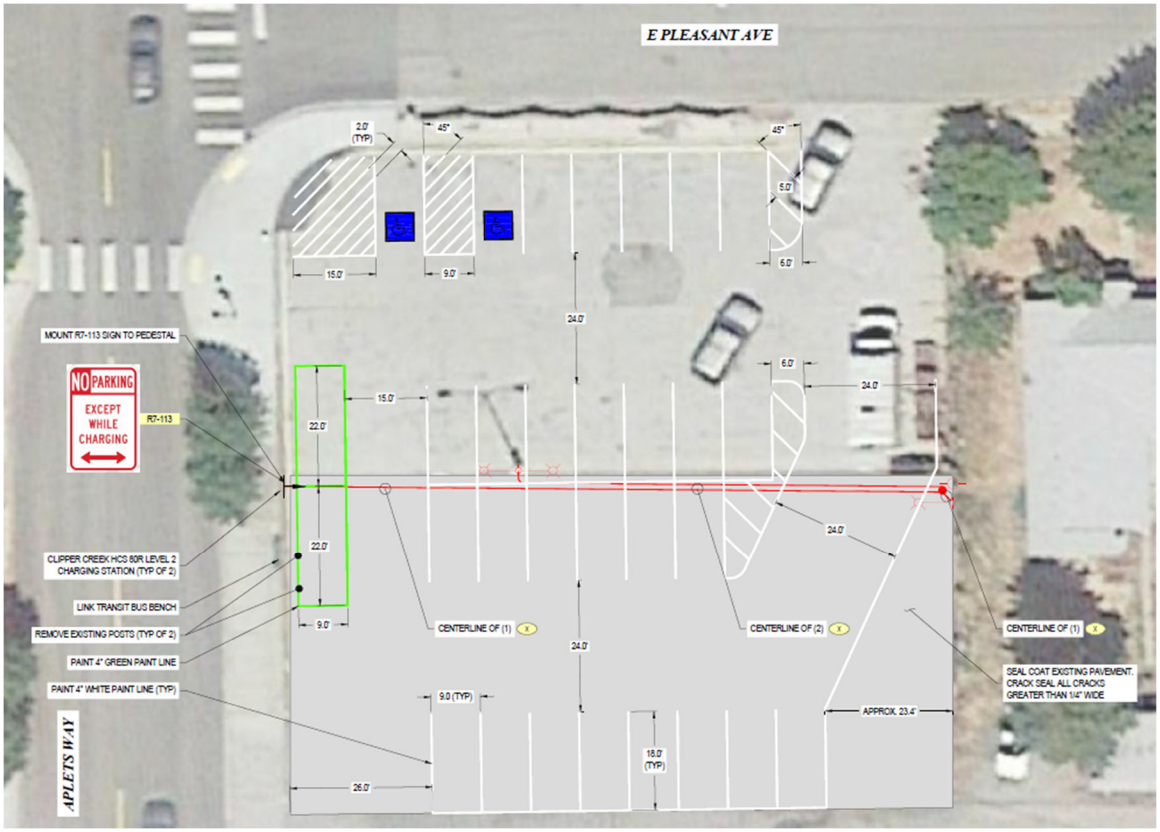
Source: Nelson\Nygaard

Planning for a Chelan transfer center should carefully weigh the pros and cons of locating a transfer center/park-and-ride facility in either downtown Chelan, at the Chelan Walmart, or in both locations. Future development plans in Chelan should also be considered as a part of this decision. In general, a transfer hub in downtown Chelan may serve non-park-and-ride riders more effectively than a transfer hub at the Chelan Walmart, which may have greater park-and-ride capacity.

Cashmere

Link Transit's Vision 2020 service improvements include a transfer center/park-and-ride facility in Cashmere, where Routes 22 and 28 currently provide service. Although Link Transit plans to deliver the park-and-ride portion of the facility in 2021 through a lease of parking lot space at the Country Boys BBQ parking lot on Aplets Way in Cashmere, there are no current plans for a formal transfer center at this location.

Figure 4-10 Cashmere Park-and-Ride Plan



Source: Link Transit

While the Preferred Scenario described in Chapter 6 does not suggest a near-term need for a transfer facility in Cashmere, Link Transit should continue to monitor rider travel patterns and determine the feasibility of offering additional passenger amenities in Cashmere. The planned Country Boys BBQ park-and-ride location may be suitable for a transfer location in Cashmere but there are other potential sites that are closer to major employment destinations, such as Crunch Pak, and the retail core of Cashmere, which is located on Cottage and Mission avenues. These locations include the public parking lot on N Division Street and the opposing stops on Mission Avenue, east of the intersection with N Division Street. Both these locations may be better transfer center locations as they could facilitate service across the new West Cashmere Bridge more seamlessly than the Country Boys BBQ site. These locations should be considered and vetted more seriously before Link Transit moves forward with the Country Boys BBQ park-and-ride as the site of a future transfer center.

A transfer center in Cashmere could also serve private intercity transit services such as Northwest Trailways, although these services do not currently stop in Cashmere.

Recommendations

Based on the high capital costs and long-term service implications of transfer hub development, the following long-term strategic steps are recommended for Link Transit:

- Link Transit should continue to monitor rider travel patterns and determine the feasibility of offering additional passenger amenities in Cashmere.
- Link Transit should evaluate the trade-offs and likely future development patterns in Chelan to determine if a downtown Chelan, Chelan Walmart, or both transfer centers would best serve riders.

PARK-AND-RIDES

Current Conditions

Link Transit currently operates a network that is partially based on a park-and-ride ridership model serving Wenatchee, where riders park at park-and-rides on the periphery of the Wenatchee urban area and ride Link Transit into Wenatchee. Current Link Transit park-and-rides exist in Chelan, Entiat, at the intersection of US 2 and US 97 (the "Big Y"), in Leavenworth, and at Link Transit's Columbia Station and Olds Station.

Link Transit is currently planning to add park-and-rides to the route network; two are planned for Cashmere, and land in Rock Island has been acquired for development into a park-and-ride.

Challenges

Siting a park-and-ride can be challenging due to the requirement for a long-term lease, interlocal agreement, or purchase of land on which to place stalls. In some instances, significant capital costs are also required, particularly if improvements to the roadway are needed to support frequent use by heavy-duty transit buses, or if rider facilities such as bathrooms or heated waiting areas are constructed. Because the Link Transit service area is prone to extreme cold and hot temperatures, it is recommended that Link Transit aspire to construct park-and-rides with passenger amenities, such as those provided in Leavenworth (Figure 4-11). In instances where high levels of amenities can't be provided, basic amenities, such as adequate wind, rain, and sun protection should be provided.

Figure 4-11 Wilkommen Park-and-Ride Rider Facilities in Leavenworth

Source: Nelson\Nygaard

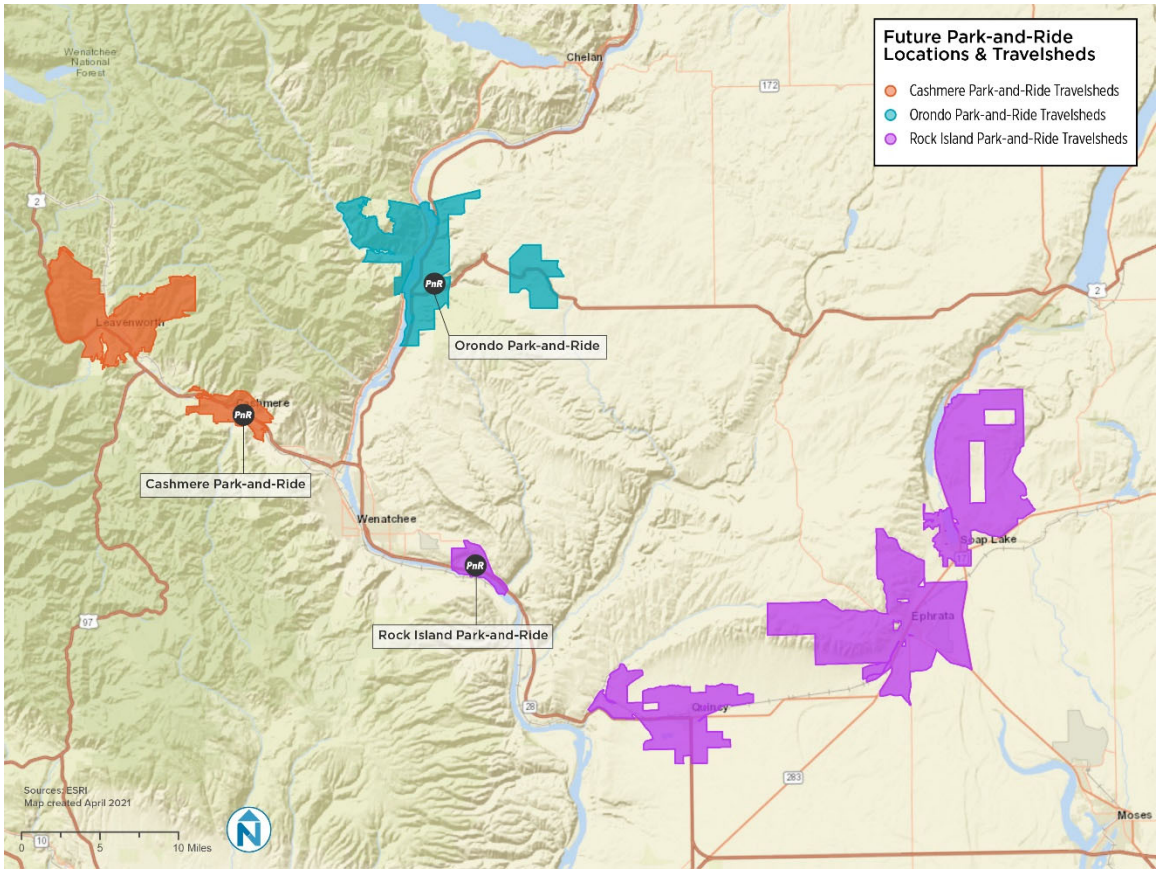
As noted elsewhere in this document, one-time funding opportunities in signed and proposed federal COVID-19 and infrastructure improvement bills may be a good source of funding for Link Transit park-and-ride expansion.

Opportunities

Although Link Transit completed a park-and-ride study in 2008, much of the analysis and information produced as a part of that study is out-of-date. To update the 2008 park-and-ride study and identify potential locations for future park-and-rides, U.S. Census Bureau Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LEHD LODES) data were used to estimate travel demand to the Wenatchee urban area from other communities in the Link Transit service area. These data identified three potential suitable sites for new Link Transit park-and-rides, which are described below and shown in Figure 4-12.

The market area for each park-and-ride includes outlying communities and assumes riders would drive a significant distance before parking and boarding a Link Transit bus at a park-and-ride. This assumption is generous and so the estimated stall count for each park-and-ride is conservative; it is likely these stall counts will serve Link Transit for years to come, as development continues to occur in Chelan, Douglas, and Grant counties.

Figure 4-12 Map of Recommended Future Park-and-Ride Locations



An estimate of the number of stalls necessary for serving demand from these locations is in Figure 4-13. These estimates are based on current LEHD LODES commute data and are conservative, as discussed above.

Figure 4-13 Estimated Stalls Required to Serve Park-and-Ride Demand

Potential Park-and-Ride Location	Estimated Park-and-Ride Stalls Needed
Cashmere	87
Orondo	13
Rock Island	74

Cashmere

The Cashmere area is a suitable site for one or more park-and-rides with a conservative total of approximately 87 parking stalls, assuming the park-and-ride market extends into Leavenworth when Leavenworth and Big Y stalls are filled. Link Transit is currently planning to meet this demand with two separate leased park-and-rides in Cashmere: a park-and-ride at the Country Boys BBQ parking lot, with 30 total possible parking stalls, and a park-and-ride at the Cashmere Museum parking lot, also with 30 total possible parking stalls. It is recommended Link Transit advance these plans and monitor occupancy to determine if the provision of additional stalls is necessary. Due to the conservative nature of these estimates, it is likely the 60 planned stalls are sufficient.

Orondo

Link Transit currently offers service to Orondo and Waterville but may alter this service in the near or distant future, creating an opportunity for park-and-ride service from Orondo to Wenatchee. Assuming Waterville is included in the Orondo park-and-ride market area, Orondo could support a park-and-ride with approximately 13 stalls. This park-and-ride could also serve Apple Line intercity bus riders. It may be premature to design and build an Orondo park-and-ride, but if service changes—such as the elimination of the Route 25 to Waterville or changes to Route 20 serving Orondo and Chelan—were to be enacted, this could be coordinated with the addition of an Orondo park-and-ride.

Rock Island

Link Transit owns a parcel of land on Rock Island Drive, opposite the gas station and truck stop, that is suitable for a park-and-ride. The evaluation conducted in this document recommends a park-and-ride stall count of approximately 74 stalls, assuming the park-and-ride market area includes Quincy and Ephrata. It is recommended Link Transit move forward with developing this park-and-ride, particularly due to growing calls from stakeholders to support future improved transit service between Wenatchee and Quincy. This site could also serve as an operator relief station and charging location for Link Transit BEBs.

A Washington State Department of Transportation (WSDOT)-owned Rock Island park-and-ride, located south of the Rock Island Golf Course on SR 28 in Rock Island, currently exists but is located outside the core urbanized area of Rock Island, is further from existing utilities, and is more dangerous for transit and personal vehicles to access. No transit services currently utilize the park-and-ride. Due to the issues described above, it is not recommended Link Transit move forward with this site as the primary Rock Island Park-and-Ride.

Other Opportunity: East Wenatchee

Douglas County is prepared to sell a surplus property at 310 Rock Island Road, at the intersection of Rock Island Road and 3rd Street SE. The site is currently a parking lot that could be repurposed as a park-and-ride, or route turnaround/layover location for Link Transit. The park-and-ride function of this parcel could be most valuable in supporting a Quincy-Wenatchee commuter service; people living in East Wenatchee could park at this location and take the bus to worksites in Quincy. If Link Transit plans to move forward with a Quincy-Wenatchee route, this location would be a good addition to the route's supportive park-and-ride infrastructure.

Recommendations

Based on estimated current and future demand for park-and-ride stalls in the Link Transit network, the following long-term strategic steps are recommended:

- Link Transit should strive to continue to provide high-quality park-and-ride facilities, such as those at Wilkommen Park-and-Ride in Leavenworth. Where this level of amenities cannot be provided, basic wind, rain, and sun protection should be provided.
- The agency should proceed with its two leased Cashmere park-and-ride plans and monitor utilization to determine if further stalls are necessary.
- Link Transit should consider developing an Orondo park-and-ride, particularly if service to Waterville or on the east side of the Columbia River were to change, making park-and-ride service to Orondo more attractive.
- Link Transit should proceed with plans to develop the Rock Island park-and-ride.

HIGH-CAPACITY TRANSIT CORRIDORS

Current Conditions

High-quality transit is typically considered service that arrives at least every 15 minutes during peak periods and operates on a direct alignment between major destinations, with relatively high speed and reliability. In the current Link Transit system, two routes operate with 15-minute headways: the zero-fare A East Wenatchee Shuttle and C Downtown Shuttle. These routes are the highest-ridership and -productivity services in the Link Transit system.

As Link Transit grows, there are opportunities to improve and expand high-quality transit on what are sometimes called 'high-capacity transit corridors.' These corridors typically feature high-quality service that operates frequently, larger vehicles that support greater passenger loads, and some measure of transit priority infrastructure that allows service to operate quickly and reliably. Transit priority infrastructure commonly includes dedicated transitways, business access and transit (BAT) lanes, queue jumps, and transit signal priority.

Challenges

In the Wenatchee urban area, corridors that may support high-capacity transit now or in the future are also those that are likely to be heavily congested with auto traffic in peak periods. This congestion, which occurs at critical pinch points in the road network, such as N Wenatchee Avenue and the Sellar Bridge, presents both an opportunity and a challenge for high-capacity transit development, as transit could serve as an efficient means of avoiding sitting in traffic for many people, but transit cannot function well in severe traffic congestion unless given some sort of priority.

Developing transit priority systems on heavily congested roads is challenging from a political, planning, and construction perspective. In many cases, right-of-way must be re-allocated from general purpose traffic to transit-only traffic through use of BAT lanes, exclusive transitways, or queue jumps. This reallocation can be politically fraught, as many people believe adding road capacity will reduce congestion in the long-term and so shifting road space to transit is perceived as worsening congestion. In most highway projects where capacity is added to severely congested roadways, congestion is worsened shortly after the project is completed, as the newly uncongested roadway induces demand for travel and real estate development, which further increases travel demand. Improving transit operations on a corridor is one way to increase the person-capacity of the roadway without adding general purpose auto lanes. In addition to political challenges associated with right-of-way allocation and transit signal priority projects, the complexity and cost of design and construction can be financially challenging.

One critical challenge for Link Transit's future operations will be the proposed Confluence Parkway project, which would construct a new limited-access roadway from Olds Station to downtown Wenatchee, adding enough traffic capacity to support 40,000 to 60,000 additional vehicles each day.[5] In the short-term, this project may reduce congestion on a potential N Wenatchee Avenue high-capacity transit corridor. In the long-term, this project will likely increase the amount of congestion occurring throughout the Wenatchee urban area, impacting

[5] City of Wenatchee. 2020. Confluence Parkway in Wenatchee. <https://www.wenatcheewa.gov/government/city-projects/confluence-parkway-in-wenatchee>

potential future high-capacity transit corridors. Addressing the additional auto traffic supported by the Confluence Parkway will be a key challenge for Link Transit throughout the system.

Although Confluence Parkway could challenge the speed and reliability of Link Transit operations in the future, the project also represents an opportunity for inclusion of dedicated transit infrastructure. Because Confluence Parkway would largely be built from scratch, it may be possible to include dedicated transit lanes, transit signal priority, or other transit infrastructure as a part of the project. If discretionary grant programs that would fund the project award points for improvements to transit, Link Transit may be a crucial partner in winning funding for the project.

Opportunities

Existing high-quality transit service on routes A and C in the Link Transit network produces the system's highest levels of ridership and productivity, suggesting demand for a high-capacity transit corridor connecting the Wenatchee Walmart, Columbia Station, the Wenatchee Valley Mall, and major destinations in-between (Figure 4-14). This corridor connects some of the existing route A and C alignment with places currently served by other Link Transit routes, expanding the reach of existing high-quality transit. Future development on the corridor will likely increase its viability as a high-capacity transit corridor.

This corridor, which was incorporated into the service scenarios that were shared with the public as part of the Winter/Spring 2021 Link Transit CSA outreach (the public-facing portion of the study was called *Moving Link Forward*), connects major retail, government, and institutional destinations, giving riders access to jobs, critical services, and shopping opportunities. The corridor is also adjacent to some of the Wenatchee metro area's highest densities of housing.

For this corridor to be a success, it is recommended that Link Transit provide transit with priority at intersections, exclusive right-of-way, and other best practice high-capacity transit treatments, such as clear branding and stops designed to speed boarding and alighting. Link Transit may also consider all-door boarding on certain routes, which reduces vehicle dwell times at stops. If Link Transit were to operate as a zero-fare system, all-door boarding could be implemented through a simple policy change, assuming the service is operated with vehicles containing both front and rear doors.

Recommendations

Based on current route performance and projected future development, the following long-term high-capacity transit corridor strategic steps are recommended for Link Transit:

- The corridor connecting Wenatchee Walmart to Columbia Station and Wenatchee Valley Mall is recommended for development as a high-capacity transit corridor.
- Link Transit should plan transit priority treatments to ensure high-capacity transit on this corridor is a success.

Figure 4-14 Potential Future High-Capacity Transit Corridor in the Wenatchee Urban Area

IMPROVING RURAL TRANSIT

Current Conditions

The low-density nature of much of Link Transit's service area makes for a challenging geographic context for transit service provision. In most low-density communities, fixed-route transit service is not generally productive and often operates as a coverage, or 'lifeline' service. Because Link Transit is committed to providing service in many of the rural communities within its PTBA, the agency currently operates a mix of demand-response and fixed-route services in these areas.

Challenges

The primary challenge associated with providing transit in low-density areas is efficiency. Traditional fixed transit routes can operate in rural areas, but passengers often need to travel significant distances to access stops on the fixed routes, and these routes typically perform poorly on productivity and cost efficiency metrics. Many rural fixed routes have costs per passenger trip that are magnitudes higher than those for urban routes in the same system.

In extremely rural areas, vehicle size constraints can also challenge operations. Where roads are not paved or turnaround infrastructure does not exist, heavy-duty transit buses may not be appropriate for service provision and—in some extreme cases—may not be able to physically navigate the roadway or safely turn around at the end of a route. In these instances, vehicles of cutaway size or smaller are typically used.

Opportunities

For agencies with rural transit provision as a major organizational goal, there are several methods for providing service in rural communities without operating fixed-route buses. Link Transit already uses some of these methods, such as dial-a-ride transit. Others, which are described below, are potential opportunities for Link Transit to improve or expand its rural service.

Flex/Deviated Fixed-Route

Flex or deviated fixed-route service operates as a hybrid between fixed-route and demand-response service. This service typically operates with smaller, cutaway buses and along a fixed route, but makes deviations within a certain distance from the fixed-route alignment to pick up passengers. Deviations are typically prearranged via reservation, similarly to demand-response service. Allowing route deviations fulfills ADA requirements if deviations are available to the general public. The Preferred Scenario described in Chapter 6 of this report recommends implementation of deviated fixed routes.

Vanpool

Vanpools are subsidized ride-sharing programs for groups of people with similar commute patterns. Vanpools are generally self-organized but may receive assistance from an employer to oversee vanpool formation. Vans, which are owned or administered by the transit agency, are provided to the vanpool, and individual members operate as drivers. Individual fares may vary based on mileage and the number of riders participating in the vanpool. Vanpools may be an appropriate service type for areas with sufficient travel demand but low residential densities.

Community Van Programs

In community van programs, vans are leased directly to qualifying non-profit or government agencies, which use the vans to provide transportation services to their individual constituencies. These programs are designed to enhance economic development and enable social service functions within the community.

Worker-Driver Programs

Worker-driver programs are high-capacity commuter services in which an employee is trained as a bus operator to transport other employees to and from their employment site using an agency vehicle. This service type requires accommodations for bus storage during the day and may be an appropriate service type for large employers. Worker-driver programs serving Naval Base Kitsap-Bremerton (NBK-Bremerton) in Kitsap County, WA, are a successful example of this type of program. Worker-driver programs are discussed in greater detail in the 'Broader Regional Connections' section of this chapter.

Volunteer Driver Programs

Volunteer driver programs provide agency funding for volunteer drivers to provide transportation to friends, family members, or neighbors. These drivers can be reimbursed at a per-mile rate and may be organized to provide service to specific customers (seniors, people with disabilities, limited income, human service agency clients) or the general public. Link Transit is currently moving forward with implementing a formal volunteer driver program.

Transportation Vouchers

Transportation vouchers are a method to subsidize the cost of a ride, regardless of service type. These programs may be used to reduce the cost of fixed-route, dial-a-ride, or paratransit services for vulnerable populations. Voucher programs are commonly used to supplement or serve as paratransit service. The Taxi Scrip program in King County, WA, for example, provides a 50% discount on select local taxi companies for eligible low-income seniors and people with disabilities.

Shared-Ride Mobility Services

Shared-ride mobility services (or ride share partnerships) are organizational agreements where a transit agency provides passenger subsidies for a specific e-hailing (e.g., Lyft, Uber) or taxi company. These partnerships could fill service gaps in low-density areas of Chelan and Douglas County, but may still be more expensive for passengers than other service types.

There is potential for accessibility and equity issues regarding ride share partnerships because not all vehicles are capable of transporting people with disabilities, low-rated passengers must still be picked up, and there are barriers for riders without credit cards or a smartphone. Existing ride share partnership case studies are primarily in urban areas, so the effectiveness of this strategy in a rural setting is still largely unknown.

This service type is discussed in greater detail in the next section.

Recommendations

- Link Transit should continue to pursue development of a volunteer driver program.
- Link Transit should consider piloting new modes of rural transit, such as transportation vouchers, ride share partnerships, or community vans.

SHARED-RIDE MOBILITY SERVICES

Current Conditions

Link Transit's service includes urbanized portions of Wenatchee and East Wenatchee, small urban areas such as Cashmere, Leavenworth, and Chelan, and extremely rural communities such as Ardenvoir and Plain. This mix of densities makes a one-size-fits-all approach to transit service provision impossible. Service in urban areas and small cities is typically provided with fixed routes or demand-response service but providing service in more rural communities is a less clear-cut prospect.

Currently, Link Transit provides some fixed-route service to rural areas. This service (e.g., Route 26 to Ardenvoir) is generally unproductive, with some routes seeing as few as two riders board each revenue hour. Providing service at this level of productivity is very costly and may be more efficient with a shared-ride mobility service such as Uber, Lyft, or taxi. For a rider, shared-ride mobility service could look like a discounted trip, where their Uber mobile application interface offers them a certain discount if they start or end their ride in a certain geography. For a transit agency, this would involve an agreement to pay a third-party based on the service they provide.

There is no standard metric or 'correct' approach to providing shared-ride mobility services as a public transit option; the opportunities and challenges of such a service must be balanced with Link Transit's goals as a public transit agency.

Challenges

The primary challenge associated with providing shared-ride mobility services in lower-density communities is that these services are very inefficient. In many cases, trips on these services will not be shared and will be a de facto subsidized auto trip. For people living in the Link Transit Public Transportation Benefit Area (PTBA) who do not have other transportation options, this service may be considered 'lifeline' transportation, offering them access to grocery shopping, medical appointments, and other services they would otherwise be unable to use. For many transit agencies, providing community members with lifeline mobility is a core organizational goal, and the inefficiency of the service is a secondary consideration. Many agencies place thresholds around the level of inefficiency they will tolerate; they may not serve communities that are more than a certain distance away from the core service area. Some transit agencies consider subsidizing auto trips to be beyond the core purpose of a transit agency and do so only to the extent of providing federally mandated paratransit service.

Another challenge associated with providing shared-ride mobility services is that—unlike directly operated paratransit or demand-response service—a transit agency has little control over the quality of the service. Although the agency can attempt to mandate a certain level of driver quality, on-time performance, vehicle cleanliness, and ride quality, the market of available shared-ride mobility services may make achieving these standards challenging. If, for example, there is only one taxi company that agrees to provide shared-ride mobility to a certain area, then the quality of the service is limited to that provided by this particular company.

An additional challenge to the provision of shared-ride mobility services is the likely inability for the service to meet a surge in demand. If, for example, a zone-based shared-ride mobility service typically carries one passenger per hour, there may not be enough vehicles on hand to serve 15 or 20 riders that request trips to a major event at the same time.

Opportunities

Shared-ride mobility services have significant advantages when compared to fixed-route and directly operated demand-response service. The primary opportunity associated with shared-ride mobility services is the limited overhead associated with its provision. If the transit agency structures its contract with a provider so only trips that are conducted are rebated, there is zero overhead cost for the agency. If there is a week where no trips are requested, the transit agency does not pay the provider.

Although inefficient as a means of transporting passengers, shared-ride mobility services can be lower-cost than directly operated demand-response service, as shared-ride mobility operations are generally less regulated and more competitive than directly operated transit. This low cost can present a challenge to an agency's organizational goals, however, as the agency may be contracting with a service that does not meet minimum wage, benefits, safety, or working condition requirements that the agency sets for its directly operated service.

Another major advantage to the provision of shared-ride mobility services by a transit agency is the ability to reach communities that might otherwise not be served. In the Link Transit service area, isolated communities such as Fancher Heights may only be reasonably served with shared-ride mobility services, as demand for transit may be so limited as to preclude offering even directly operated demand-response service. To this end, shared-ride mobility services are an opportunity to provide service in areas that contribute to the PTBA but may not otherwise receive mobility benefits from those contributions.

If Link Transit is to pursue shared-ride mobility services, it is recommended the agency develop clear standards and guidelines for when, why, and where it is provided. This is an important step from an organizational goal-setting perspective, as many stakeholders may see shared-ride mobility services as simple auto trip subsidies that step beyond the role and responsibility of a public transit agency.

Recommendations

Based on the presence of low-density communities with limited transit demand in the Link Transit PTBA, the following shared-ride mobility service strategic steps are recommended for Link Transit:

- Link Transit should carefully consider the need to serve low-density portions of the PTBA within the context of its organizational goals, to determine if providing shared-ride mobility services is a worthwhile pursuit for lifeline and non-lifeline service.
- If shared-ride mobility services are implemented, Link Transit should develop clear standards for when, where, and why this service is provided.

BROADER REGIONAL CONNECTIONS

Current Conditions

Wenatchee is the urban hub of Central Washington and serves as a focal point of activity for people living in smaller communities throughout the region. For many of these communities, Wenatchee is an important destination for shopping, medical and professional services, and work. Although some of these small communities are within the Link Transit service area and are served by Link Transit fixed-route buses, there are other nearby small communities that do not have robust transit access to Wenatchee. These places include cities and towns to the north, such as Pateros, Brewster, and Bridgeport, and cities and towns to the south and east such as Ellensburg, Quincy, Ephrata, and Moses Lake.

Existing public transit connections to these small cities and towns are limited. The WSDOT-funded Apple Line operates one round trip per weekday between Omak and Ellensburg (with stops near Chelan Falls, in Orondo, and at Columbia Station), and, prior to the COVID-19 pandemic, Grant Transit offered a service connecting Grant County population centers with Columbia Station in Wenatchee. Today, the non-profit People for People operates a free medical shuttle connecting Moses Lake, Ephrata, Quincy, and Wenatchee.

During public outreach efforts and in conversations among board members and with key stakeholders, many people have raised the prospect of Link Transit expanding its network of regional connections, with the most-requested regional connection being commuter service between Wenatchee and Quincy.

Challenges

Operating inter-county transit service between Wenatchee and nearby small communities is a challenging undertaking, for many reasons. For one, providing service outside the Link Transit PTBA would likely require some sort of interlocal funding agreement or outside funding source, as Link Transit would be spending significant resources providing service outside its PTBA. This type of arrangement is not unusual in Washington; in Mason County, Mason Transit operates commuter service to Bremerton, which is located in Kitsap County. In Yakima County, Yakima Transit operates commuter/educational access service to Ellensburg, which is located in Kittitas County.

Another challenge to Link Transit's successful provision of inter-county transit service is productivity. Travel between Wenatchee and communities such as Quincy and Ephrata will likely be faster via auto and so the market for transit service will be significantly smaller than that for overall travel. Although a Quincy-to-Wenatchee service may be successful, it is not likely to be a highly productive route in the near-term. To assess demand for such a service, offering a six-month or one-year pilot route may be appropriate.

Opportunities

There are opportunities for Link Transit to improve travel outcomes for community members through broader regional transit connections. Providing service between Quincy and Wenatchee, for example, may reduce auto travel between those cities, thereby improving traffic congestion and reducing pollution from vehicles. A transit trip between these communities would also likely be lower cost for travelers than an auto trip. A future inter-county route would likely be

implemented as an inter-agency partnership. In the case of a Quincy-Wenatchee route, Link Transit could partner with Grant Transit. TranGO, in Okanogan County, may also be a potential inter-county service partner.

In addition to serving the commuter market between Wenatchee and Quincy, another regional connection opportunity is service to major seasonal employment destinations, such as fruitpacking sheds in the Wenatchee, Cashmere, Peshastin, Orondo, and Chelan areas. Because travel demand to these destinations is tied to shift times, it can be challenging to provide productive, all-day, fixed-route transit service to these workplaces, despite their relatively high and concentrated levels of employment. The unique travel market associated with these destinations may be best served by vanpool or worker-driver service, which allow employees to share rides in high-capacity vehicles provided by the transit agency, thereby reducing their travel costs, reducing traffic congestion, and expanding an employers' access to labor in the service area. This type of service is operated by other transit agencies in Washington, including:

- Ben Franklin Transit: Vanpool service to the Hanford Site
- Kitsap Transit: Worker-driver service to NBK-Bremerton
- Mason Transit: Worker-driver service to NBK-Bremerton

Figure 4-15 A Kitsap Transit Worker-Driver Bus in Operation

Because worker-driver bus service assumes a significantly high level of demand, Link Transit may be best served piloting such service as vanpools, and growing fruitpacking worker service to worker-driver vehicles when demand is appropriate. Planning for such a service should keep in mind that demand is seasonal, and the fleet assigned to this use may be idle for part of the year if it can't be repurposed elsewhere in the Link Transit system.

Recommendations

Based on potential demand for transit service making broad regional and major workforce connections, the following strategic steps are recommended for Link Transit:

- A six-month or one-year pilot route between Quincy and Wenatchee may be a worthwhile experiment for assessing transit demand and the sustainability of such a service.
- Pilot a vanpool service to fruitpacking sheds in the Link Transit PTBA to assess demand.

ACCESS TO OUTDOOR RECREATION

Current Conditions

Outdoor recreation is a major industry and travel demand generator in Chelan and Douglas counties. In Chelan County in particular, outdoor recreation is a year-round activity that draws visitors from throughout the northwest, including many from Seattle and the urbanized Puget Sound region.

Link Transit does not currently serve this travel market, except for seasonal SkiLink service to Mission Ridge Ski & Board Resort. The SkiLink route is unique in Link Transit's system in that the resort helps fund the route. Providing additional transit service for the outdoor recreation travel market is a potential growth area for Link Transit but one which has several challenges and opportunities that should be considered prior to implementation.

Challenges

Transit service to outdoor recreation sites such as trailheads, ski resorts, waterways, and campgrounds is not without precedent; several transit agencies have previously or currently operate this type of service, including:

- Cascades East Transit Ride the River Shuttle
- Clackamas County Mt. Hood Express
- Eastern Sierra Transit Authority Mountain & Town Shuttle
- King County Metro Trailhead Direct
- Oregon Department of Transportation Columbia Gorge Express
- Roaring Fork Transportation Authority Bike Express

Outdoor recreation service is, however, a departure from the primary mission of most public transit agencies, which is to provide a combination of lifeline service and transit connecting destinations with the highest levels of transit demand. Serving outdoor recreation opportunities with Link Transit's limited resources is something that may require broad buy-in from community members, key stakeholders, and Link Transit's Board of Directors. First operating new outdoor recreation services on a pilot basis could ensure this buy-in remains consistent and the service performs well.

Another challenge to implementing outdoor recreation-based public transit service is the prospect of Link Transit competing with private enterprise that offers similar service. There are companies, for example, that operate buses for river tubing clients in Leavenworth, as well as wine tour limousines in the Chelan area that allow people to visit wineries without drinking and driving. Transit agencies may be wary of providing a government-subsidized competition to successful private transportation companies for outdoor recreation purposes. The FTA prohibits transit agencies from providing charter service; some service to outdoor recreation could be considered a charter service.

There are also infrastructure challenges to providing service to outdoor recreation sites. In some cases, road access and turnarounds at campgrounds and trailheads are primitive and run the risk of damaging public transit vehicles or providing a ride quality that is lower than Link Transit's desired standard. ADA regulations may require that new service to outdoor recreation destinations incorporate costly infrastructure upgrades.

The fleet requirement for seasonal outdoor recreation-based transit service may also pose a challenge for Link Transit. Should vehicles be purchased for the summer hiking and watersports season, they may not be able to be put into service on a one-to-one basis for winter snowsports season. This would drive up the capital costs associated with providing outdoor recreation service.

Opportunities

Providing outdoor recreation service could address several important opportunity areas for Link Transit, potentially to an extent that outweighs some of the challenges described above.

At many trailhead locations—especially along Icicle Creek in the Leavenworth area—traffic and parking congestion has reached problematic levels in the past few years. The Stuart Lake Trailhead parking lot, which the U.S. Forest Service (USFS) estimates at 90 parking stalls, has seen as many as 300 cars at once.[6] Providing transit service in this area may allow hikers to access trailheads without overwhelming National Forest roads or trailheads. This sort of route could be developed as a partnership between Link Transit and USFS.

In other parts of the Link Transit service area, public transit could facilitate opportunities for economic growth in the outdoor recreation sector, potentially with support from and in partnership with outdoor recreation-based businesses, such as Stevens Pass, which already operates an employee shuttle and may be interested in a SkiLink service. Link Transit's existing SkiLink service could serve as a precedent for outdoor recreation partnership services, which could help attract visitors looking to engage with Chelan and Douglas counties' outdoor resources. Transit agencies in places with large outdoor recreation industries have implemented services to support these activities; Figure 4-16 shows a Cascades East Transit (Bend, OR) river shuttle preparing to carry river tubers.

Figure 4-16 Passengers Waiting to Board the Cascades East Transit Ride the River Shuttle

Source: Cascades East Transit. 2016. Ride the River. <https://cascadeseasttransit.com/ride/ride-the-river/>

[6] Burh, Tony. August 8, 2019. "Forest Service restricts parking at Stuart Lake Trailhead." *The Wenatchee World*. <https://www.wenatcheeworld.com/news/forest-service-restricts-parking-at-stuart-lake-trailhead/article_97fe3f32-ba20-11e9-8a32-df2bbead680d.html>

There are also equity-related opportunities for Link Transit to explore in providing transit service to outdoor recreation. This type of service could create outdoor recreational opportunities for lower-income people that do not have vehicles to access trailheads or campgrounds. Marketing such a service to residents that do not currently have access to outdoor recreation is something that other transit agencies, such as King County Metro, have done successfully (Figure 4-17).

Figure 4-17 King County Metro Trailhead Direct Spanish-Language Marketing

Recommendations

Based on the potential challenges and opportunities associated with providing transit service to outdoor recreation destinations, the following strategic steps are recommended for Link Transit:

- Before implementing additional routes that serve outdoor recreation destinations, Link Transit should collect broad buy-in from community members, key stakeholders, and Link Transit's board of directors. Piloting these services before permanently implementing them may also be prudent.
- Link Transit should be sure that any outdoor recreation-type service does not violate FTA charter service regulations.
- Outdoor recreation service could be pursued as a partnership with other government agencies or private industry.
- Link Transit could market transit service to outdoor recreation destinations to communities of concern, thereby addressing community equity goals.

ZERO-EMISSIONS VEHICLES

Current Conditions

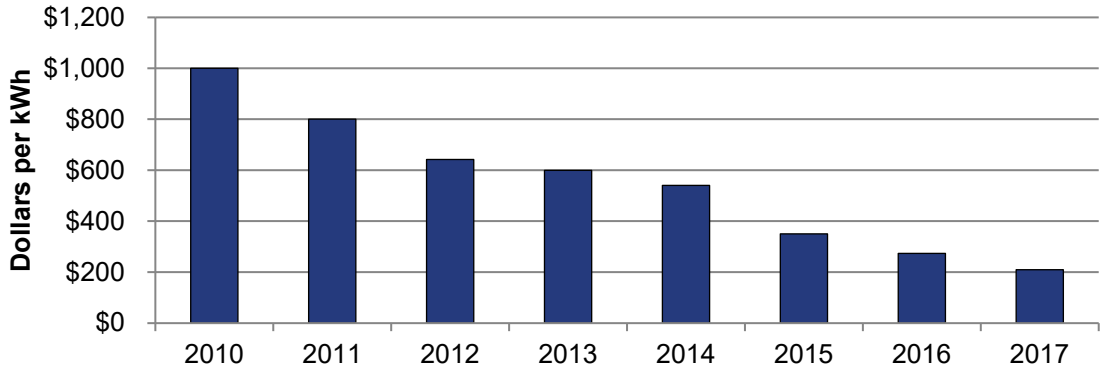
Link Transit is one of Washington State's leaders in transit electrification. The agency currently operates ten[7] BYD 35' low-floor, heavy-duty BEBs, which charge via Momentum Dynamics (MD) wireless chargers at Columbia Station in Wenatchee.[8] Link Transit's BEB fleet is advantaged by the low cost of electricity from nearby hydroelectric power sources, as well as agency experience with the technology. Link Transit piloted BEBs long before most agencies and has experimented with different BEB and charger technologies, including plug-in, overhead, and wireless charging.

Link Transit's BEB fleet operates well, and the agency plans to continue to expand the fleet and its supportive infrastructure. This section explores some of the challenges and opportunities related to this effort and makes relevant long-term strategic recommendations for Link Transit.

Challenges

The primary challenge any transit agency faces when converting their fleet to BEBs is the high capital cost of BEBs and electric vehicle supply equipment (EVSE, which includes chargers and associated infrastructure). These costs make BEBs approximately twice as costly, on a capital cost basis, as diesel buses, although one of the main drivers of this increased cost is battery price, which has been declining dramatically for years (Figure 4-18).

Figure 4-18 Lithium-Ion Battery Prices, 2010-2017



Source: Bloomberg New Energy Finance[9]

Although formula and competitive grants can fund BEB and EVSE purchases, state and federal dollars set exclusively aside for this purpose do not meet statewide or national demand. As discussed in other sections of this document, COVID-19 recovery and proposed federal infrastructure funds may represent a once-in-a-generation source of funding for BEB expansion projects. Link Transit should pay careful attention to these resources and be prepared to access them to fund BEB expansion.

---

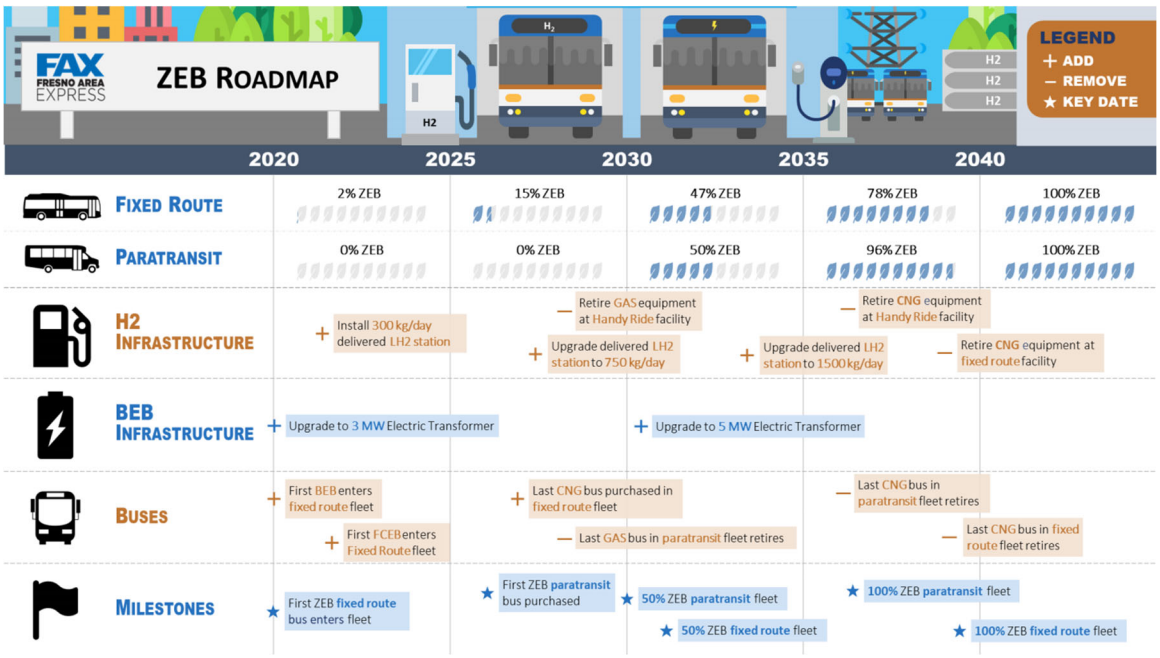
[7] Link Transit is planning to take delivery of three BYD 30' BEBs in May 2021.

[8] Link Transit is expecting installation of one Momentum Dynamics wireless charger at Leavenworth's Wilkommen Park-and-Ride will be complete in June 2021.

[9] Bloomberg New Energy Finance, 2018. *Electric Buses in Cities: Driving Towards Cleaner Air and Lower CO2*. p. 22. <https://data.bloomberglp.com/professional/sites/24/2018/05/Electric-Buses-in-Cities-Report-BNEF-C40-Citi.pdf>

One tool Link Transit can use to meet the challenge of a high-cost BEB expansion is to produce a BEB rollout plan that details the 'order of operations' Link Transit plans to follow as it grows its fleet, including the location of future on-route charging stations, the count and types of BEBs that will be purchased, and a timeline for upgrading maintenance and operating facilities, incorporating necessary power upgrades. These types of plans are required by state law in California[10] and have prepared agencies there for faster, more efficient rollout of BEBs.

Figure 4-19 An Example of a Transit Agency BEB Rollout Timeline



Source: Fresno Area Express. 2020. Zero Emission Bus Rollout Plan. p. 32. <https://ww2.arb.ca.gov/sites/default/files/2020-12/FAX_ICT_ROP_ADA122120.pdf>

The primary additional challenge Link Transit will face in expanding its BEB fleet is acquiring non-heavy duty transit vehicles at a reasonable cost and with acceptable performance. Although the heavy-duty transit BEB market is fairly well-developed and features a number of companies manufacturing vehicles with sufficient range and within a reasonable (and declining) price, the cutaway BEB market is still in its infancy. There is currently only one small passenger transit vehicle—the GreenPower EV Star—that has been Altoona tested,[11] further complicating acquisition of BEBs for paratransit or demand-response service with federal funds. The GreenPower EV star has a maximum range of between 77 and 120 miles before needing to be recharged, which may also limit its usability in certain applications within Link Transit's service area.

Due to the limited availability and performance of small transit BEBs, it is recommended that Link Transit phase these vehicles into their electric vehicle fleet more slowly than heavy-duty transit buses, to give the market time to develop. It is expected that the cost of these vehicles will decline as performance improves over the next five or more years.

[10] California Air Resources Board. 2021. ICT-Rollout Plans. <https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit/ict-rollout-plans>

[11] Altoona database review is current as of May 2020.

Opportunities

There are several opportunities that Link Transit can take advantage of as it transitions its fleet to BEBs. Chief among these is the likely sustainability of low electricity costs in the region, as hydroelectric power production is expected to remain viable.

In addition to low power costs, Link Transit has the advantage of currently planning for new park-and-ride facilities, some of which may be suitable for on-route charging stations. The ability to plan and design for charging stations prior to construction of new facilities is advantageous, as retrofitting charging infrastructure into facilities can be costly and challenging.

As discussed above, a BEB rollout plan would help Link prioritize and plan for which park-and-rides should be outfitted with charging stations.

Recommendations

Based on the potential challenges and opportunities associated with expanding Link Transit's BEB fleet, the following strategic steps are recommended for Link Transit:

- Create a plan for BEB rollout and infrastructure development.
- Phase cutaway BEBs into service more slowly than heavy-duty BEBs, as cutaway BEB availability is currently limited and costs are high.
- Link Transit should incorporate BEB charging infrastructure into new park-and-ride and other facility design processes.

5 FARE RECOMMENDATIONS

This chapter reviews recommendations for Link Transit's fare structure. Additional information about revenue trends, fare media usage, rider demographics, and other existing conditions analysis is available in Appendix A; key findings from the Existing Conditions Report are also available in Chapter 2 of this report.

FARE RECOMMENDATIONS SUMMARY

In March 2020, Link Transit suspended fares due to COVID-19 to ensure the safety of operators, staff, and guests during the pandemic. While COVID-19 reduced boardings and discouraged ridership, continuing to offer fare-free service will encourage ridership to return to the system, as well as helping those in need of transportation services who are unable to afford it. As a result of analysis conducted as part of the CSA and conversations with the Link Transit Board of Directors, it is recommended that Link Transit **offer fare-free (or zero-fare) service as a pilot program for one year—through June 30, 2022.**

The pilot program will allow Link Transit staff to evaluate the impacts of zero-fare service on the following:

- Unanticipated increases in paratransit demand
- Levels of inappropriate behavior on the buses and our transit facilities
- Levels of increased transit ridership encouraged by the zero-fare system

Throughout the pilot program, Link Transit may need to modify, enforce, or develop new policies to support a zero-fare system. It will also be important for the agency to articulate the value proposition and overall benefits of zero-fare service to the community and local employers.

Continuation of the zero-fare system past this pilot year should be evaluated based on data collected and broader policy decisions of the Board of Directors. Longer-term continuation of a zero-fare policy should be considered if it does not cause significant unanticipated paratransit demand or passenger disruptions.

FARE REVENUE TRENDS

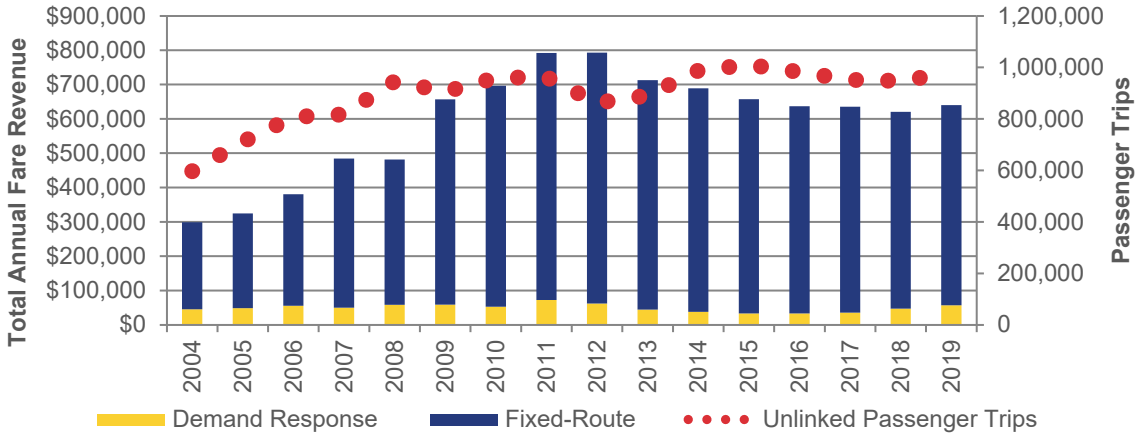
Link Transit's fare policy is guided in part by goals and expectations for fare revenues, which help fund service. This portion of the chapter reviews high-level financial and operating statistics that provide important context for the proposed zero-fare policy.

Fare Revenue

In 2019, Link Transit collected approximately $580,000 in fare revenue from fixed-route service and $57,000 from demand-response service (Figure 5-1). Total fare revenue has generally declined since 2013, for an overall 10% decrease over the seven-year period following, driven primarily by reductions in fixed-route fare collections.

In 2011, Link Transit increased the base fare from $1.00 to $1.25; as a result, ridership dropped more than 10%. To help regain ridership, Link Transit reduced the base fare back to $1.00 and eliminated fares on urban shuttle routes in 2013, which had a positive impact on ridership. This process revealed strong price sensitivity on the part of riders, particularly in the urban area.

Figure 5-1 Link Transit Fare Revenue by Mode, 2004–2019



Source: National Transit Database

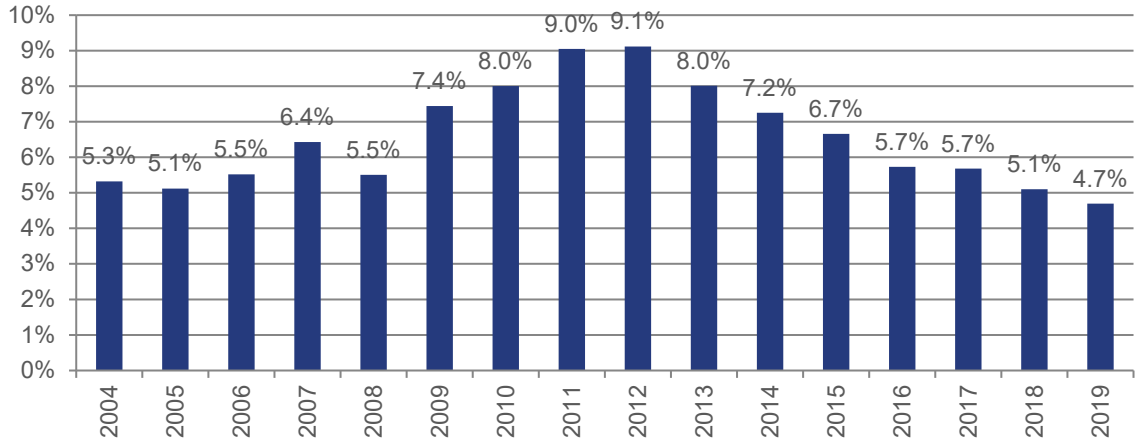
Farebox Recovery Rate

Farebox recovery rate is a ratio of farebox revenue to operating expenses that estimates what percent of a transit agency's operations are funded by rider fares. From 2013 to 2019, farebox recovery for Link Transit's fixed-route service has steadily declined (Figure 5-2). This decline is due largely to increasing operating costs, as Link Transit has added service since 2013, while ridership has remained relatively flat.

Compared to peer agencies[1], Link Transit is on the lower end of peer agency farebox recovery rate but is consistent with Skagit Transit (Figure 5-3). While Kitsap Transit has a generally higher farebox recovery rate, it has also steadily declined over this time period.

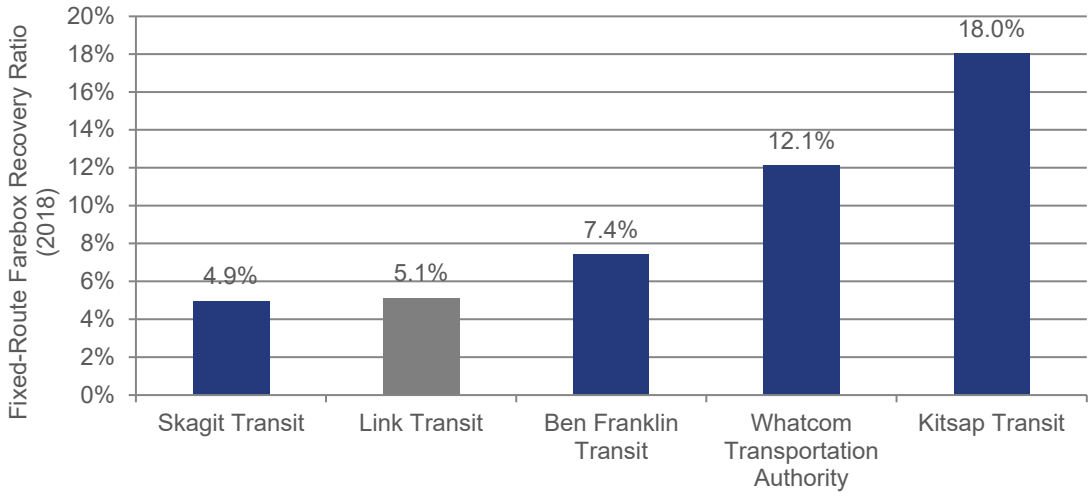
[1] More information about peer agencies is included in the organizational assessment chapter of the Existing Conditions Report, available in Appendix A.

Figure 5-2 Link Transit Fixed-Route Farebox Recovery Rate, 2004–2019



Source: National Transit Database

Figure 5-3 Link Transit Peer Agency Farebox Recovery, 2018

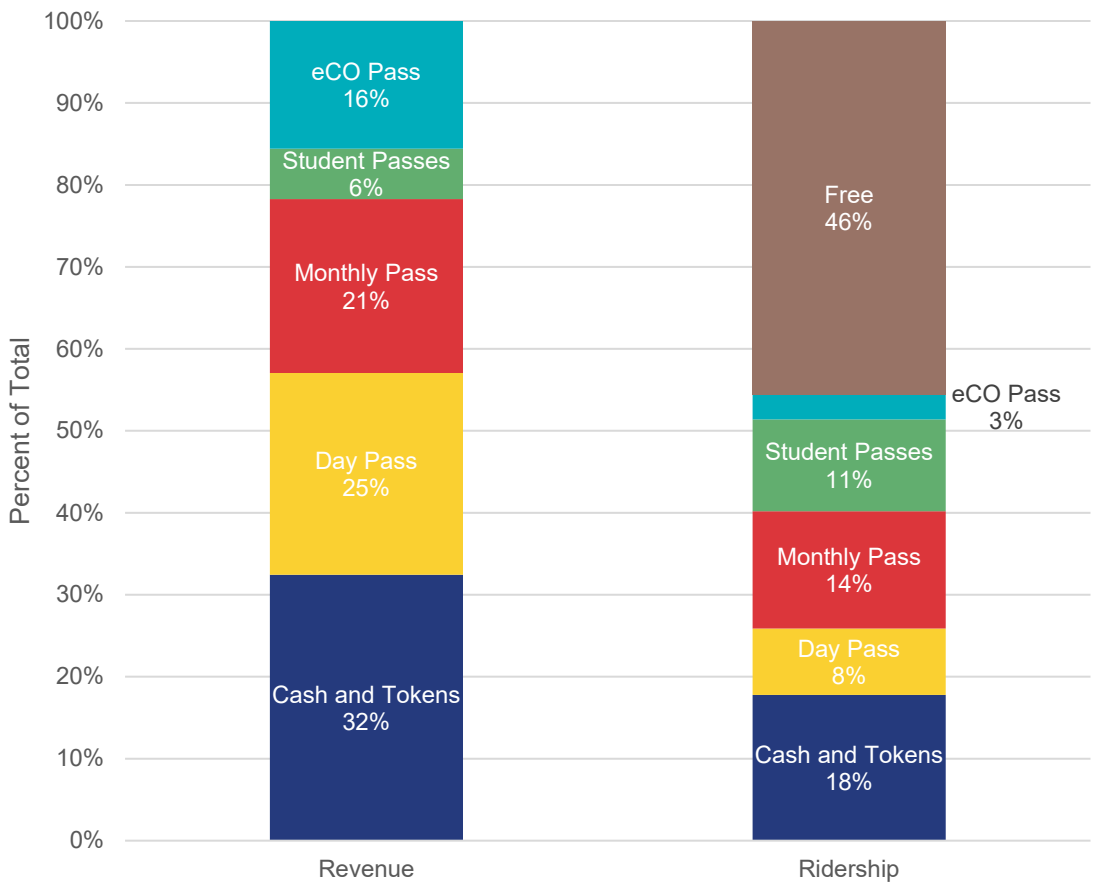


Source: National Transit Database

Fare Media Use

A breakdown of ridership and revenue (Figure 5-4) by fare type shows how riders currently pay for trips and how much revenue each fare type generates. Nearly half of Link Transit passengers (46%) ride without paying a fare, either by riding a zero-fare route or as a LinkPlus-eligible passenger riding fixed-route service.

Figure 5-4 Link Transit Ridership and Revenue by Fare Type, 2019



Source: Link Transit fare revenue data from the full 2019 calendar year.

ZERO-FARE ANALYSIS

Existing Fare Collection Costs and Revenue

Transitioning to zero-fare service generally results in a decrease in revenue for an agency. Although zero-fare service eliminates fare collection costs, it also eliminates fare revenues, which are typically greater than collection costs. The need to replace this revenue depends on several factors, including the amount of lost fare revenue, the associated costs to collect fares, and the farebox recovery ratio. Identifying the tradeoffs between fare revenue and collection costs is the first step in determining the financial impacts of providing zero-fare service.

Link Transit earned approximately $640,000 in fare revenue in FY 2019. To earn this revenue, Link Transit incurs operating and administrative costs, including farebox equipment maintenance, accounting, and other services. Link Transit's estimated annual cost of collecting fares is approximately $57,000. **The estimated net revenue (fare revenue minus fare collection costs) generated by fares is approximately $583,000 per year.**

As discussed earlier in this chapter, Link Transit farebox revenues account for less than 5% of annual operating expenses. This is a relatively low farebox recovery ratio for an agency of Link

Transit's size and foregoing this revenue does not represent a major revenue loss—especially because several high-ridership routes already operate without fares.

Ridership and Cost Implications

Fixed-Route Implications

Increasing ridership is often a high priority for transit agencies, and providing zero-fare service has been shown to consistently and quickly accomplish this goal. Transit ridership is elastic relative to fares. The more fares are reduced, the more ridership will increase. Based on the experience of peer agencies, transitioning to zero-fare service can increase transit ridership by between 40% and 60%. **For Link Transit, this represents a range of increased ridership between 236,000 and 354,000 annual passenger trips** when accounting for routes that already operated without a fare prior to the COVID-19 pandemic.

As ridership increases, vehicles on specific trips or routes could see passenger loads exceed capacity, requiring the agency to provide additional trips or use larger vehicles. However, **no additional fixed-route operating costs, capital costs, or FTEs are expected to be needed** to support increased ridership due to transitioning to systemwide zero-fare service, primarily because the projected increase in ridership can be absorbed by existing service. Additional supervisors may potentially be needed based on higher ridership across the system. However, because additional staff are already planned as part of Vision 2020, zero-fare service would likely not require additional staff associated with fixed-route service beyond what is planned for Vision 2020 implementation.

Small Transit Intensive Cities Funding Implications

Small Transit Intensive Cities (STIC) is a federal program designed to reward high performing small transit systems. The program provides funding to small urbanized transit agencies with population under 200,000 through evaluation of six performance metrics with established thresholds—passenger miles per vehicle revenue mile, passenger miles per vehicle revenue hour, vehicle revenue miles per capita, vehicle revenue hours per capita, passenger miles per capita, and passenger trips per capita. Agencies qualify for $274,458 per metric threshold met or exceeded. Link Transit currently exceeds five out of six thresholds (Figure 5-5).

Based on the projected ridership increase from zero-fare service, Link Transit is anticipated to also exceed the STIC threshold for passenger miles per vehicle revenue mile[2], qualifying Link Transit for an additional $274,458 in annual revenue.

[2] Based on pre-COVID ridership and service levels

Figure 5-5 Link Transit STIC Funding Metrics and Thresholds, 2019

Metric	Funding Threshold	Link Transit Values
Passenger Miles per Vehicle Revenue Mile	5.87	5.44
Passenger Miles per Vehicle Revenue Hour	100.70	**105.42**
Vehicle Revenue Miles per Capita	11.68	**29.74**
Vehicle Revenue Hours per Capita	0.74	**1.53**
Passenger Miles per Capita	78.55	**161.76**
Passenger Trips per Capita	11.98	**14.77**

Paratransit Implications

Transitioning to zero-fare fixed-route service means LinkPlus paratransit service must also be provided as zero-fare service.[3] As is the case with fixed-route service, eliminating paratransit fares is expected to increase demand.

The estimated paratransit ridership increase, based on the experiences of zero-fare peer agencies, of between 20% and 40% would result in a range of cost implications. Annual revenue hours would be expected to increase by between 28% and 34%, resulting in between 5,900 and 7,400 additional hours. Accounting for forgone fare revenue, **transitioning to zero-fare service could increase total operating costs for LinkPlus service by between $767,000 and $938,000.** The increase in demand for paratransit service could require Link Transit to purchase approximately two additional vehicles at a total cost of $260,000. One to two additional FTEs would potentially be needed to meet this increased demand and provide additional administrative and dispatch functions; this need should continue to be monitored.

Zero-Fare Analysis Systemwide Cost Summary

Figure 5-6 provides a systemwide summary of the **net cost implications of zero-fare service, which ranges from $1.02 million to $1.19 million.** There would be no additional operating costs associated with fixed-route service.

Figure 5-6 Estimated Annual Change in Operating Costs under Zero-Fare Implementation Summary

Annual Cost Item	Low Ridership Increase Estimate	High Ridership Increase Estimate
Foregone Farebox Revenue (FR+DR)	$640,000	$640,000
Fixed-Route Operating Cost Increase	$0	$0
LinkPlus Operating Cost Increase	$710,000	$881,000
Existing Fare Collection Costs	($57,000)	($57,000)
Additional STIC Funding (approx.)	($275,000)	($275,000)
Net Change in Operating Cost	**$1,018,000**	**$1,189,000**

[3] Federal law requires that complementary paratransit fares be no more than twice the cost of a comparable fixed-route full fare. 49 CFR § 37.131 - Service criteria for complementary paratransit.

FARE CHANGE PROCESS

If Link Transit opts to re-institute a fare following the one-year fare-free pilot program, a series of steps would be initiated to implement a fare system. The process of implementing a fare change involves consideration of several key factors. When considering a fare change, an agency may consider:

- **Farebox recovery:** Is there a systemwide goal that will drive the fare structure?
- **Fare types:** Are there opportunities to simplify or expand fare options compared to the old structure?
- **Fare collection:** Are there opportunities to implement new technologies, practices, or policies to streamline fare collection?

A new fare policy must balance multiple conflicting goals. Any changes to the existing fare structure must balance the tradeoff between ridership and revenue. For example, while re-establishing fares would result in higher revenues for Link Transit, it would also result in a decrease in ridership. Likewise, prices for different fare media should be set with the impacts to revenues and ridership in mind. Price points for different fare media (such as one-way fare, day passes, and monthly passes) create different incentives for users and pass buyers. Other considerations for implementing a fare increase include customer experience, technical operations, timing a change in fares with a service change, financial processes, system operation, and accessibility to vulnerable populations.

Ultimately, any changes in fare policy should be practical for Link Transit service and align with systemwide goals. Once agency goals and desired outcomes have been determined, there are several actions that should be taken as part of the fare change process. These include:

- **Involve the public:** Proposed fare changes should include extensive public outreach, to both riders and non-riders, to educate the public about any changes and obtain valuable public feedback. The rationale for any fare increase should be clearly messaged to the public, as well as any associated improvements.
- **Revise customer information:** Once changes have been agreed upon, customer information (such as websites, brochures, apps) should be updated in a timely manner.
- **Monitor results:** allow opportunity to review and fine-tune the fare structure following implementation.

Figure 5-7 provides an overview of an agency's approach to fare changes.

Figure 5-7 Phased Approach to Implementing Larger Fare Changes

Link Transit Title VI Public Participation and Notification Policy[4]

Link Transit's policy is to maintain an open and participatory process, as well as to consider public comment prior to a fare increase, a major service change, and short and/or long-term planning programs. Link Transit's definition of a 'fare increase' is an increase of any amount over the existing base fare.

To ensure maximum opportunity for community input and involvement in the decision-making process, Link Transit adheres to the following procedures:

1. Provide a 14-day or appropriate **advance notice** of a public hearing to consider the proposal in The Wenatchee World, Douglas County Empire Press, Leavenworth Echo, Chelan Mirror, Cashmere Valley Record, El Mundo and other publications, as deemed appropriate by the General Manager.
2. **Mail notification** of public hearing and availability of specific proposal to community organizations that represent and service the consumers, and regional radio stations.
3. Provide **customer information** regarding the fare increase/service change proposal and process for public comment **on board service vehicles**.
4. Post **notification** of public hearing and the specifics of the proposal on the **agency website**.
5. Link Transit staff has the ability to periodically establish temporary committees, work groups, task forces or advisory boards to assist with the review of any fare increase proposals, changes in service, as well as short- or long-term plans and programs, including the merits of such proposals. These **ad hoc committees** will represent the community and organizations with an interest in public transportation, prior to finalizing recommendations.
6. Conduct **regional open house meetings and/or focus groups** to solicit public input and consider recommendations to the proposed service changes or short- or long-term planning programs. The open house meetings will include a staff presentation of proposed plans, service changes and/or fare increases. It will also include an opportunity for input and comment from any interested individuals in attendance. Records of the open house meetings are retained by Link Transit.
7. Following the conclusion of the open house meetings and/or focus groups, the Link Transit Board of Directors will conduct a **formal public hearing** to consider both the staff recommendations and the public comment. The final decision regarding any service change, fare increase, or plan update or change will be made by a simple majority vote of the Board of Directors. Where possible, the effective date of the service change or fare increase shall be 30 days after the date of the public hearing.

Link Transit maintains records of the public participation process including, but not limited to, notice and minutes of the open house, customer service information on board vehicles, record of outreach conducted, public comment received, and minutes of the public hearing.

[4] Derived from *Link Transit Title VI Plan for the Federal Transit Administration and Washington State Department of Transportation*, December 31, 2018 – December 31, 2021.

6 RECOMMENDATIONS

The Link Transit CSA Preferred Scenario was developed using public and agency input, market conditions, and existing ridership data. Initially, three scenarios were developed that represented different principles of route planning and areas of emphasis. Following a public outreach and comment period on these three scenarios, a fiscally constrained Preferred Scenario was developed to address operational issues, future growth, industry-standard best practices for route design, and established project goals.

The CSA project seeks to improve transit service to better serve existing and potential riders, new developments, and essential services in the community. After hearing from community members and key stakeholders through an online survey and one-on-one interviews, the service planning team developed a Preferred Scenario to best meet the needs of the community. The Preferred Scenario is designed for implementation with available resources.

This chapter of the report is separated into four sections:

- **Scenario Development** discusses the process by which the initial three potential service scenarios were developed, as well as the themes each scenario was meant to highlight.
- **Preferred Scenario** describes the details of the preferred scenario, including route alignments, operating hours, and frequencies. This section includes maps of the Preferred Scenario.
- **Transit Vision** details some of the unfunded priorities for Link Transit that should be explored as the agency is able to access additional resources.
- **Financial Implications** estimates the short-term capital and operating cost implications of the Preferred Scenario.

SCENARIO DEVELOPMENT

To develop a recommended Preferred Scenario of service changes for Link Transit, the project team first developed three potential service scenarios. These three scenarios were refined with Link Transit staff and shared with the public. The public was able to review the scenarios in detail and complete an online survey that allowed them to identify which scenario they preferred, why, and what they did and did not like about proposed individual route changes. The purpose of the three scenarios and public survey was not to select one of the three scenarios as a whole, but to identify which aspects of each scenario resonated with the community, which did not, and why. Feedback and input received from the scenarios informed the development of the Preferred Scenario.

Three Scenarios with Different Priorities

The three scenarios developed for outreach to the public were each built on a general theme and met resource constraints dictated by Link Transit staff. The three themes revolved around different types of improvements and route planning principles:

- **Scenario 1: Frequency —** focused on improving service in places where the most people ride, by increasing frequency, span of service, and changing where some routes operate.
- **Scenario 2: Coverage —** focused on providing coverage to many parts of Chelan and Douglas County by operating new routes, changing where some routes operate, and providing more DART service. It also improved frequency and span of service on some routes.
- **Scenario 3: Directness —** focused on connecting destinations in Chelan and Douglas counties without transfers. It also improved frequency and span of service on some routes

Detailed route maps of the three scenarios are in Appendix B of this report. Feedback on these scenarios was gathered through an online survey, interviews with key stakeholders, and input from Link Transit staff. This feedback was used to develop the Preferred Scenario. More detail on feedback received is in Chapter 3 of this report. Open-ended comments from the online survey are available in Appendix D.

PREFERRED SCENARIO

Project Priorities

As described in more detail in Chapter 3, the Link Transit Board of Directors developed seven priorities to guide the development of service scenarios and recommendations for how Link should allocate future resources to improve transit service. These priorities are:

- Increase ridership and productivity while balancing geographic coverage
- Provide lifeline service for those who need it most
- Offer high-quality service to connect the region's communities
- Provide fast and direct service to make transit competitive with driving
- Explore service alternatives for locations difficult to serve with fixed-route transit
- Encourage affordability of the transit system for guests
- Evaluate and responsibly deliver what was promised to voters in Vision 2020

Best Practices for Route Design

While it is unlikely that a single service type will meet the competing mobility needs of all transit riders in Chelan and Douglas Counties, there are certain best practices that can be applied to nearly all transit services to improve the overall passenger experience.

- **Service should be simple:** First and foremost, service should be designed so it is easy to use and intuitive to understand. This applies not only to the routing and scheduling of service, but also to the information presented to customers at the stop and on passenger information materials.
- **Routes should operate along a direct path:** The fewer directional changes a route makes, the easier it is to understand. Conversely, circuitous alignments are disorienting and difficult to remember. Routes should not deviate from the most direct alignment unless there is a compelling reason, such as to provide service to a major ridership generator. In such cases, the benefits of operating the route off the main route must be weighed against the inconvenience caused to passengers already on board.
- **Fixed-route deviations should be minimized:** As described above, service should be as direct as possible. Consistent with this idea, the use of route deviations—traveling off the most direct route—should be minimized. However, there are instances when deviating service from the most direct route is appropriate—for example, to provide service to major shopping centers, employment sites, schools, and medical centers. In these cases, the benefits of the deviation must be weighed against the inconvenience caused to passengers already on board. Generally speaking, route deviations on fixed-route service should be implemented only if:
  - The deviation will result in an increase in overall route productivity.
  - The number of new passengers served is equal to or greater than 25% of the number of passengers who would be inconvenienced by the additional travel time on a deviated trip.

  In most cases, route deviations should be provided on an all-day basis. Exceptions are during times when the sites that the route deviations service have no activity—for

example, route deviations to major employment centers where shift workers may not need access between shift changes.

- **Major routes should operate along arterials:** Key corridor and mainline routes should operate on major roadways and avoid deviations to provide local circulation. Riders and potential transit users typically have a general knowledge of an area's arterial road system and use that knowledge for geographic points of reference. The operation of bus service along arterials makes transit service faster and easier for riders to understand and use.
- **Routes should be symmetrical:** Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from. In cases where such operation is not possible due to one-way streets or turn restrictions, routes should be designed so opposite directions parallel each other as closely as possible.
- **Service design should maximize service:** The distance and travel time of a route determine how efficiently a bus can operate. Service should be designed to maximize the time a vehicle is in service and minimize the amount of time it is out of service. Since the length of the route and the time it takes to make each trip impacts how long a layover is required at each end and how many buses are needed to provide the service, it is often more efficient to extend a route to pick up a few more passengers and limit the amount of layover time.

These best practices offer a foundation for improving transit service throughout the region.

Preferred Scenario Overview

The Preferred Scenario was developed using public and agency input, market conditions, and existing ridership data. Key operational and service themes addressed by the Preferred Scenario include:

- **Increasing overall service and coverage** in accordance with the voter-approved **Vision 2020** plan
- **Increasing service on Sundays**
- **Simplifying routes** and making them more direct
- **Increasing frequency** on the most transit-supportive corridors
- **Increasing access** to important destinations
- Improving **service efficiency** while **maintaining coverage** in low-density rural communities

Route Numbering

The Preferred Scenario uses a slightly different numbering system than Link Transit's current route network. Routes in the Preferred Scenario are proposed to be separated as:

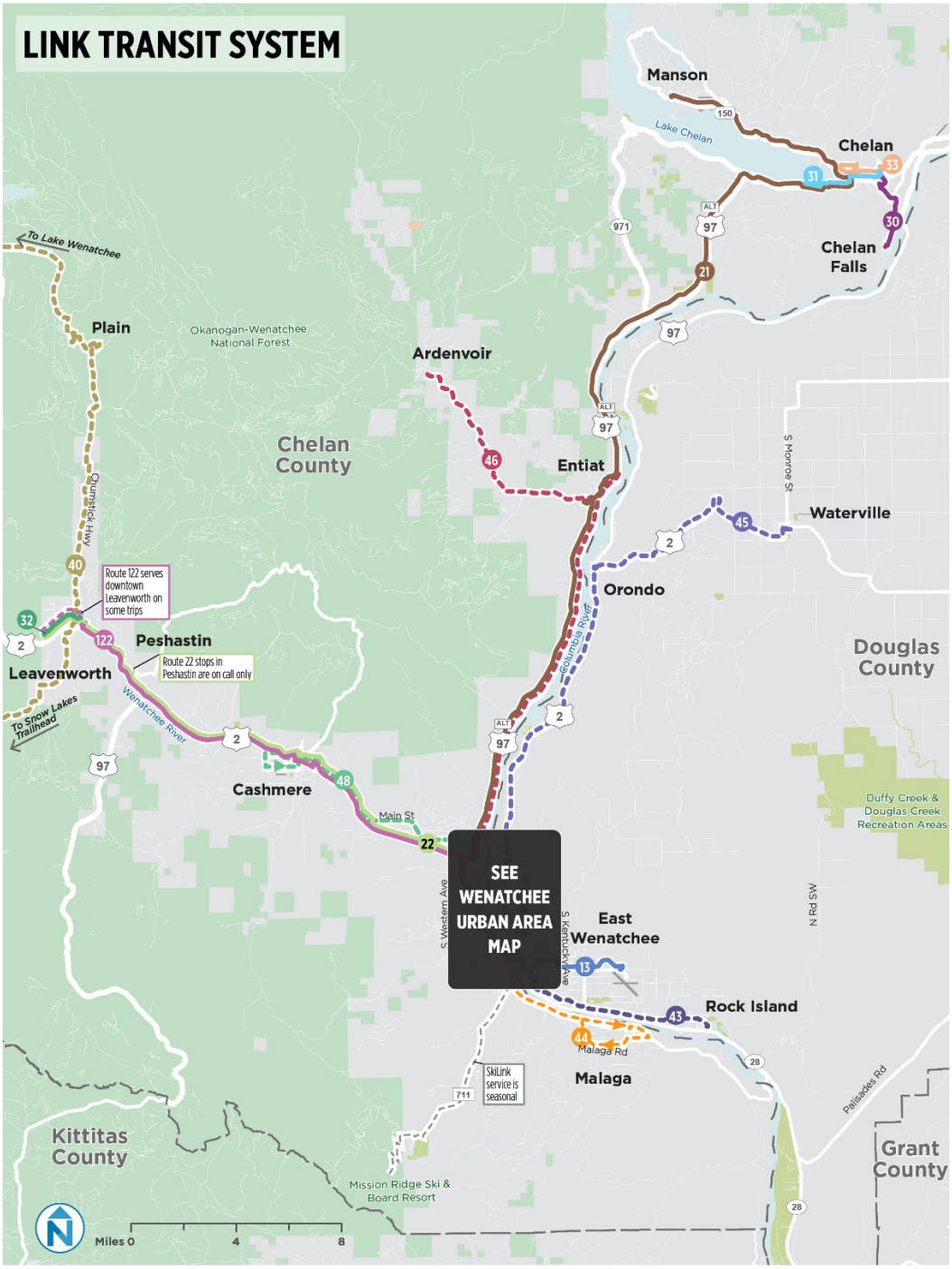
- **Routes 1 through 19** are Wenatchee and East Wenatchee, with routes numbered 1 through 9 generally operating in Wenatchee and routes 10 through 19 generally operating in East Wenatchee.
- **Routes 20 through 29** are intercity routes that are not route-deviated.

- **Routes 30 through 39** are local routes in small cities, such as Chelan and Leavenworth.
- **Routes 40 through 49** are intercity route-deviated services.
- **Routes 100 and higher** are intercity express routes that make limited stops.

Preferred Scenario Details

The following maps and tables describe the Preferred Scenario in detail. Figure 6-1 through Figure 6-3 show the proposed alignments of the Preferred Scenario, and Figure 6-4 details the proposed frequencies and service spans. Following these figures, a 'Key Preferred Scenario Themes' and 'Route-Level Recommendations' section provides additional information about the draft service recommendations.

Figure 6-1 Preferred Scenario Map (Link Transit System Extent)



Preferred Alternative Routes

- 1 Boodry to Walmart
- 2 Costco to Walmart
- 3 CWH/Saddle Rock
- 4 WVC
- 5 Cherry/Western to Walmart
- 6 Walla Walla Point Park
- 7 Washington/Western to Valley North
- 8 Miller
- 9 South Wenatchee
- 11 4th/Kentucky
- 12 East Wenatchee/Fred Meyer
- 13 Eastmont HS/Grant Road/Pangborn
- 18 East Wenatchee
- 21 Chelan/Manson
- 22 Leavenworth
- 30 Chelan Falls Shuttle
- 31 Chelan South Shuttle
- 32 Leavenworth Shuttle
- 33 Chelan North Shuttle
- 40 Icicle/Plain/Lake Wenatchee DFR*
- 43 Rock Island DFR*
- 44 Malaga DFR*
- 45 Waterville DFR*
- 46 Ardenvoir DFR*
- 48 Sunnyslope/Cashmere DFR*
- 122 Leavenworth Express

Multiple Routes | T Transfer Station | High-Frequency Corridor | SkiLink (Seasonal Service)

*Sources: Chelan County, Douglas County, Link Transit, U.S. Census Bureau, and Washington State. Map created May 2021. *DFR = Deviated fixed route*

Figure 6-2 Preferred Scenario Map (Wenatchee Urban Area Extent)

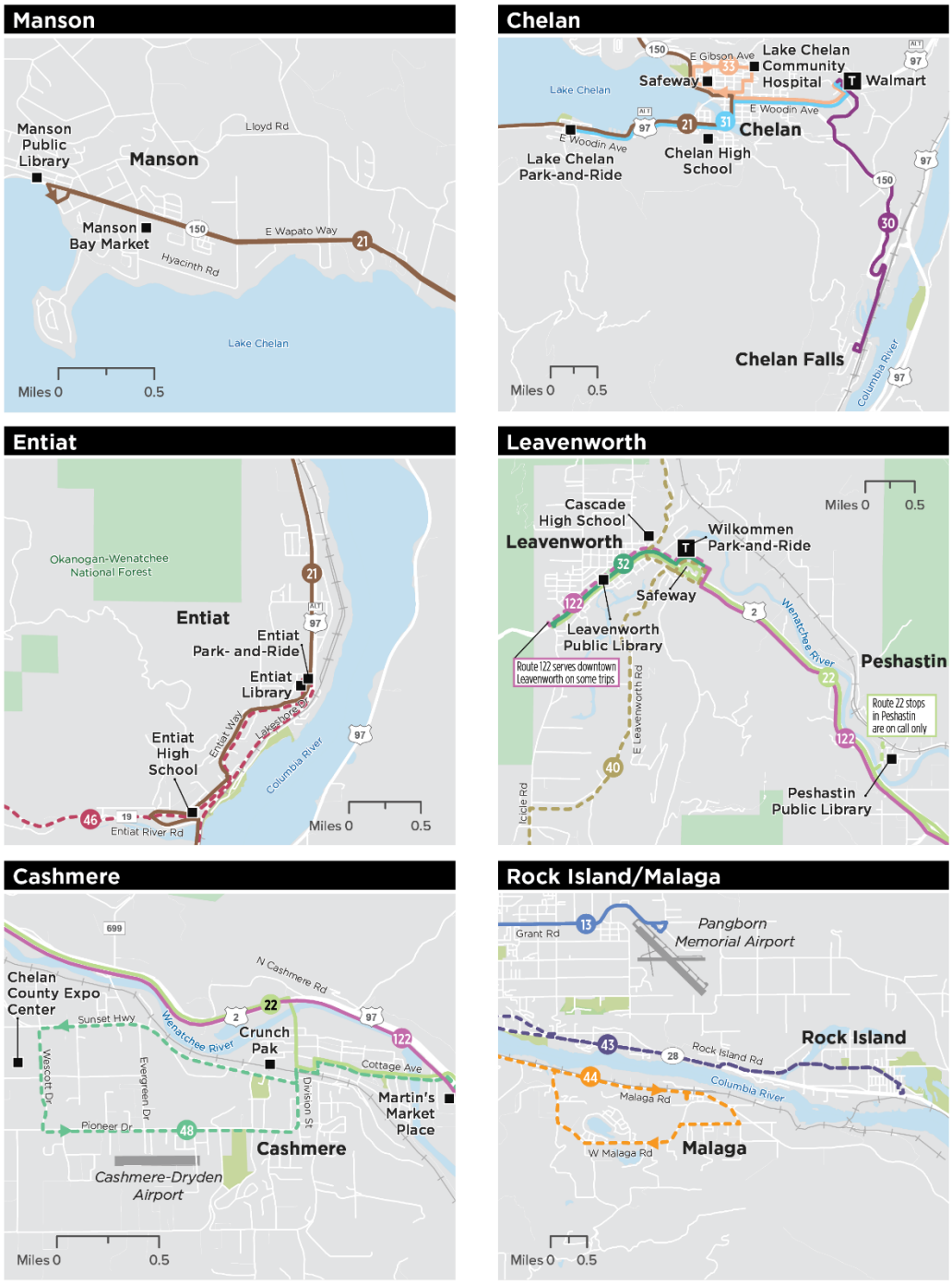
Preferred Alternative Routes

- 1 Boodry to Walmart
- 2 Costco to Walmart
- 3 CWH/Saddle Rock
- 4 WVC
- 5 Cherry/Western to Walmart
- 6 Walla Walla Point Park
- 7 Washington/Western to Valley North
- 8 Miller
- 9 South Wenatchee
- 11 4th/Kentucky
- 12 East Wenatchee/Fred Meyer
- 13 Eastmont HS/Grant Road/Pangborn
- 18 East Wenatchee
- 21 Chelan/Manson
- 22 Leavenworth
- 30 Chelan Falls Shuttle
- 31 Chelan South Shuttle
- 32 Leavenworth Shuttle
- 33 Chelan North Shuttle
- 40 Icicle/Plain/Lake Wenatchee DFR*
- 43 Rock Island DFR*
- 44 Malaga DFR*
- 45 Waterville DFR*
- 46 Ardenvoir DFR*
- 48 Sunnyslope/Cashmere DFR*
- 122 Leavenworth Express

Multiple Routes | T Transfer Station | High-Frequency Corridor | SkiLink (Seasonal Service)

*Sources: Chelan County, Douglas County, Link Transit, U.S. Census Bureau, and Washington State. Map created May 2021. *DFR = Deviated fixed route*

Figure 6-3 Preferred Scenario Map (Small Cities Extent)



Preferred Alternative Routes

- 1 Boodry to Walmart
- 2 Costco to Walmart
- 3 CWH/Saddle Rock
- 4 WVC
- 5 Cherry/Western to Walmart
- 6 Walla Walla Point Park
- 7 Washington/Western to Valley North
- 8 Miller
- 9 South Wenatchee
- 11 4th/Kentucky
- 12 East Wenatchee/Fred Meyer
- 13 Eastmont HS/Grant Road/Pangborn
- 18 East Wenatchee
- 21 Chelan/Manson
- 22 Leavenworth
- 30 Chelan Falls Shuttle
- 31 Chelan South Shuttle
- 32 Leavenworth Shuttle
- 33 Chelan North Shuttle
- 40 Icicle/Plain/Lake Wenatchee DFR*
- 43 Rock Island DFR*
- 44 Malaga DFR*
- 45 Waterville DFR*
- 46 Ardenvoir DFR*
- 48 Sunnyslope/Cashmere DFR*
- 122 Leavenworth Express

Multiple Routes | T Transfer Station | High-Frequency Corridor | SkiLink (Seasonal Service)

*Sources: Chelan County, Douglas County, Link Transit, U.S. Census Bureau, and Washington State. Map created May 2021. *DFR = Deviated fixed route*

Figure 6-4 Preferred Scenario Service Summary Table

Proposed Route	Proposed Service Summary	Frequency: Proposed Weekday	Frequency: Proposed Night/Wknd	Proposed Service Span
1 Boodry to Walmart	A new route connecting residential communities in South Wenatchee with downtown Wenatchee, residential communities in northwest Wenatchee, and the Wenatchee Walmart. This route contains much of the existing Route C. The combination of this route and the proposed Route 2 would create a high-frequency transit corridor on Wenatchee Avenue, with buses arriving for travel up and down Wenatchee Avenue every 15 minutes.	30	60	5:00 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
2 Costco to Walmart	A new route connecting commercial destinations in East Wenatchee (e.g., Costco, Safeway, Wenatchee Valley Mall) with downtown Wenatchee and the Wenatchee Walmart. This route contains much of the existing Route A. The combination of this route and the proposed Route 1 would create a high-frequency transit corridor on Wenatchee Avenue, with buses available for travel up and down Wenatchee Avenue every 15 minutes.	30	60	5:00 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
3 Saddle Rock	A new route connecting downtown Wenatchee with Wenatchee High School, Central Washington Hospital, and the Saddle Rock Trailhead. This route would operate in both directions on Okanogan Avenue, Russell Street, and S Miller Street.	30	60	5:30 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
4 WVC	A route connecting Wenatchee Valley College (WVC) with the riverfront and downtown Wenatchee. This route contains much of the existing Route B, with improvements for directness and reduced trip times for many riders. Sunday service is added.	30	60	5:30 am - 9:00 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
5 Cherry/ Western to Walmart	A shortened version of the existing Route 5 offering more direct service, connecting downtown Wenatchee with residential neighborhoods to the west and the Wenatchee Walmart. The route would operate on Western Avenue, providing service in both directions on nearly all the Western Avenue corridor.	30	60	6:00 am - 8:00 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
6 Walla Walla Point Park	A new high-frequency route serving Columbia Station, the riverfront, Pybus Public Market, Town Toyota Center, and Walla Walla Point Park, operating in both directions on the riverfront.	20	60	8:00 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
7 Washington/ Western to Valley North	A revised version of the existing Route 7 that operates in both directions on Washington Street, Western Avenue, 9th Street, and Miller Street, and turns around at Columbia Station and Valley North Center. By operating on the same roads in both directions, the route will reduce trip times for riders and be a more attractive service. WVC will be more accessible due to changes in alignment on this route. Sunday service is added and the route operates three hours later on weeknights.	30	60	5:30 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
8 Miller	A revised version of the existing Route 8 that removes the deviation to Wenatchee High School and Central Washington Hospital, providing faster, more direct trips for many riders. The route would travel in both directions on Orondo Avenue, Miller Street, and N Wenatchee Avenue, and would turn around at Olds Station, instead of serving Stemilt, where very little ridership is generated.	30	60	5:00 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
9 South Wenatchee	A revised version of the existing Route 1 that eliminates the route's large loop and no longer serves Saddlehorn Avenue, reducing trip times for many riders, improving operational safety, and making the route easier to understand. The route connects South Wenatchee with downtown Wenatchee via S Mission Street and a small terminal loop on S Mission Street, Terminal Avenue, and Methow Street.	30	60	5:30 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)

Proposed Route	Proposed Service Summary	Frequency: Proposed Weekday	Frequency: Proposed Night/Wknd	Proposed Service Span
11 4th/ Kentucky	A revised version of the existing Route 11 that operates in both directions, instead of as a loop, which will reduce time riders spend traveling out of direction. This route serves downtown Wenatchee, Wenatchee Valley Mall, Safeway, and Eastmont High School. On weekdays, the route would be offset with Route 13, meaning buses will arrive every 30 minutes between downtown Wenatchee, the Wenatchee Valley Mall, Safeway, and Eastmont High School.	60	60	6:30 am - 8:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
12 East Wenatchee/ Fred Meyer	A significantly revised version of the existing Route 12 that incorporates elements of Route A. The route connects downtown Wenatchee to the Fred Meyer, East Wenatchee Municipal Campus, and high-density housing on 9th Street NE, Eastmont Avenue, and 11th Street NE. Buses will arrive twice as often on weekdays, and its service span would increase by three hours on weekdays. Saturday and Sunday service area also added.	30	60	5:30 am - 9:00 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
13 Eastmont High School/ Grant Road/ Pangborn	A new route connecting downtown Wenatchee with East Wenatchee commercial destinations, Eastmont High School, the Grant Road Corridor, and Pangborn Airport. The route would operate in both directions on nearly all its alignment, including for extended stretches on Wenatchee Avenue and Grant Road.	60	60	5:00 am - 8:00 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
18 East Wenatchee	A revised version of the existing Route 18 that expands the number of destinations accessible in Wenatchee by realigning the southern Wenatchee portion of the route to turn around at WVC and Central Washington Hospital, instead of Columbia Station. The route will no longer deviate to serve Stemilt facilities north of Olds Station, and will meet Sunset Highway at 35th Street NE, instead of 33rd Street NE. The route will serve WVC, Central Washington Hospital, East Wenatchee commercial destinations, Douglas County residential neighborhoods, and Olds Station. Weekday evening and weekend buses will arrive more often.	30	30-45	5:00 am - 9:30 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
21 Chelan/ Manson	A revised version of the existing Route 21 that serves more local destinations in Entiat and continues to connect Wenatchee, Entiat, Chelan, and Manson. Buses on weekends will arrive twice as often and one additional weekday evening trip will be added.	30/60	90	4:30 am - 10:30 pm (M-F) 6:30 am - 8:30 pm (Sat) 6:30 am - 8:30 pm (Sun)
22 Leavenworth	A revised version of the existing Route 22 that reduces rider trip times by streamlining the route. The Peshastin stop will be on-call only for most trips and the route will turn around at Icicle Quik Stop (instead of Wilkommen Park-and-Ride) but otherwise the alignment will not change and the route will continue to serve Leavenworth, the Big Y Park-and-Ride, Cashmere, Olds Station, and Wenatchee. Weekend buses would arrive twice as often and weekday service would operate two hours later, until 12:00 a.m. Weekend service spans would also increase.	60	60	5:00 am - 12:00 am (M-F) 8:00 am - 10:00 pm (Sat) 8:00 am - 8:00 pm (Sun)
30 Chelan Falls Shuttle	A new route connecting Chelan Falls with fruitpacking sheds and the Chelan Walmart via SR 150. This route would enter Chelan Falls, providing much better access than the existing Route 20.	60	60	7:00 am - 8:00 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
31 Chelan South Shuttle	A new route that connects the Lakeside Park-and-Ride with downtown Chelan and the Chelan Walmart via Woodin Avenue. This route incorporates some of the existing seasonal Route E.	60	60	7:00 am - 8:00 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
32 Leavenworth Shuttle	A revised version of the existing Route D with no alignment change but a span of service that will begin three hours earlier every day. This route operates high-frequency service between Icicle Quik Stop and Wilkommen Park-and-Ride, traveling in both directions on US 2.	20	20	8:00 am - 7:00 pm (M-F) 8:00 am - 7:00 pm (Sat) 8:00 am - 7:00 pm (Sun)

Proposed Route	Proposed Service Summary	Frequency: Proposed Weekday	Frequency: Proposed Night/Wknd	Proposed Service Span
33 Chelan North Shuttle	A new route that connects downtown Chelan, the residential neighborhood to the north, Lake Chelan Community Hospital, and the Chelan Walmart. This route would operate in both directions on Woodin Avenue and with a small terminal loop north of downtown Chelan.	60	60	7:00 am - 8:00 pm (M-F) 7:30 am - 5:30 pm (Sat) 9:30 am - 5:30 pm (Sun)
40 Icicle/Plain/ Lake Wenatchee DFR	A new deviated fixed route connecting the Snow Lakes Trailhead, Wilkommen Park-and-Ride, Plain, and Lake Wenatchee State Park. This route would deviate up to ¾ of a mile to pick up and drop off riders.	Five round trips	Four round trips	8:00 am - 6:00 pm (M-F) 9:00 am - 5:00 pm (Sat) 9:00 am - 5:00 pm (Sun)
43 Rock Island DFR	A deviated fixed route based on the existing Route 23 that connects downtown Wenatchee, East Wenatchee commercial destinations, and Rock Island. The scheduled alignment would be changed to avoid the current left turn from Rock Island Road onto SR 28, for safety reasons. This route would deviate up to ¾ of a mile to pick up and drop off riders. Sunday service is added.	Eight round trips	Four round trips	6:30 am - 7:30 pm (M-F) 8:00 am - 5:00 pm (Sat) 8:00 am - 5:00 pm (Sun)
44 Malaga DFR	A deviated fixed route based on the existing Route 24 that connects downtown Wenatchee, South Wenatchee, and Malaga. The scheduled alignment would no longer serve Central Washington Hospital, giving riders on undeviated trips a faster, more direct trip. This route would deviate up to ¾ of a mile to pick up and drop off riders. About one fewer trip per day will operate but Sunday service would be added.	Four round trips	Four round trips	6:30 am - 7:00 pm (M-F) 9:00 am - 5:00 pm (Sat) 9:00 am - 5:00 pm (Sun)
45 Waterville DFR	A deviated fixed route based on the existing Route 25 that connects downtown Wenatchee, East Wenatchee commercial destinations, Orondo, and Waterville. The scheduled alignment would travel in both directions on NW Cascade Avenue and Sunset Highway instead of N Baker Avenue, to have better proximity to riders. This route would deviate up to ¾ of a mile to pick up and drop off riders. Sunday service would be added.	Six round trips	Four round trips	5:00 am - 7:30 pm (M-F) 8:30 am - 6:00 pm (Sat) 8:30 am - 6:00 pm (Sun)
46 Ardenvoir DFR	A deviated fixed route based on the existing Route 26 that connects downtown Wenatchee, Olds Station, Entiat, and Ardenvoir. The scheduled alignment would be extended to downtown Wenatchee, which provides more mobility for riders than the existing Route 26. This route would deviate up to ¾ of a mile to pick up and drop off riders. One fewer trip will operate on weekdays but service on Saturday and Sunday would be added.	Four round trips	Three round trips	6:30 am - 7:30 pm (M-F) 8:00 am - 5:00 pm (Sat) 8:00 am - 5:00 pm (Sun)
48 Sunnyslope/ Cashmere DFR	A deviated fixed route based on the existing Route 28 that connects Cashmere, Sunnyslope, Olds Station, and downtown Wenatchee. The Route 28 riverfront deviation would be eliminated, providing faster, more direct trips for many riders. This route would deviate up to ¾ of a mile to pick up and drop off riders. Sunday service would be added.	90	90	6:30 am - 6:30 pm (M-F) 6:30 am - 5:00 pm (Sat) 8:00 am - 5:00 pm (Sun)
122 Leavenworth Express	A new route that complements Route 22 by providing express service between Leavenworth and downtown Wenatchee, with stops at the Big Y and future Cashmere Museum park-and-rides, and future Olds Station PUD worksite. Two trips per day would extend to Central Washington Hospital to provide service at hospital worker shift changes. As timing allows, the route will also extend to Icicle Quik Stop, serving downtown Leavenworth. The express nature of this route makes it highly competitive with auto travel.	90	Two round trips	5:00 am - 12:30 pm; 1:30 pm - 9:00 pm (M-F) 5:00 am - 8:00 am; 6:00 pm – 9:00 pm (Sat) 5:00 am - 8:00 am; 6:00 pm – 9:00 pm (Sun)
SkiLink	Seasonal service only. No changes recommended.			

Note: Frequencies are in minutes. A slash between frequency numbers indicates that frequency changes throughout the day, typically with on- and off-peak periods. For example, 30/60/30 indicates three periods of varying frequencies: one period of 30-minute frequency service, followed by a period of 60-minute frequency service, followed by a period of 30-minute frequency service.

Key Preferred Scenario Themes

The existing Link Transit system is a blend of urban local routes, zero-fare urban shuttle routes, circulator services in small cities, and intercity bus service. The system balances productive core routes with lower-productivity routes providing important coverage and lifeline transit service in low-density communities. The Preferred Scenario balances coverage and productivity goals and proposes changes in the following key thematic areas:

Increase Service and Coverage in Accordance with Vision 2020

Vision 2020 was a public outreach-driven planning effort that culminated in a January 2020 ballot measure to increase the transit-dedicated sales tax and improve Link Transit service. The ballot measure passed, and the CSA has been conducted in alignment with crowdsourced Vision 2020 goals, which include increasing service on weekends, providing service in new places, and providing service in different ways to increase efficiency.

Increase Service on Sundays

Link Transit has received consistent public support for increasing weekend service, including during the Vision 2020 outreach process. Although the Preferred Scenario increases the amount of service operated on all days of the week, increases on the weekends are the greatest. Figure 6-5 highlights these increases: the Preferred Scenario will increase Saturday service by 54% and Sunday service by 169%.

Figure 6-5 Existing to Preferred Scenario Change in Revenue Hours by Day of Week

Day of Week	Existing Service	Preferred Alternative	Percent Change
Weekday	87,400	117,600	+35%
Saturday	7,800	12,000	+54%
Sunday	3,900	10,500	+169%
Total	**99,100**	**140,100**	**+41%**

Simplify Routes

Some Link Transit routes currently operate in loops or using variable inbound/outbound alignments, which forces riders to travel out-of-direction and/or take longer trips. These loops can also be confusing. The Preferred Scenario shifts some Link Transit routes to bi-directional alignments, which are easier to understand and allow riders to take shorter trips. This should increase ridership along bi-directional corridors.

Increase Frequency on the Most Transit-Supportive Corridors

Market analysis conducted as part of the CSA Existing Conditions Report indicated that the greatest demand for transit is in the Wenatchee core and the East Wenatchee commercial district. The Preferred Scenario proposes high-frequency transit corridors on Wenatchee Avenue between the N Wenatchee Avenue Walmart and Columbia Station, as well as between Columbia Station and Wenatchee Valley Mall. Providing all-day 15-minute frequency on these corridors will increase community mobility and access to shopping, jobs, social services, and high-density residential neighborhoods.

Increase Access to Important Destinations

Public outreach and key stakeholder interviews revealed that transit access to many important destinations in Chelan and Douglas counties could be improved. The Preferred Scenario improves access to many of these destinations through proposed changes to alignment, service span, and frequency. Some important major destination access improvements are:

- **Central Washington Hospital:** Transit access to the hospital is improved through dedicated Route 122 trips to and from Leavenworth that match shift times, all-day service from Columbia Station via Route 3, and one-seat ride service from East Wenatchee via Route 18.
- **Chelan Walmart and Lake Chelan Community Hospital:** Year-round fixed-route service to these destinations is proposed via routes 30, 31, and 33. These routes will connect people living in Chelan and Chelan Falls with medical, shopping, and jobs opportunities.
- **N Wenatchee Avenue Walmart:** The N Wenatchee Avenue Walmart is an important shopping destination for Wenatchee-area residents. This store is currently served directly only by the Route 5. The Preferred Scenario proposes this Walmart as a mini-transfer center and turnaround point for routes 1, 2, and 5. This change would provide shopping and jobs access to more Chelan and Douglas county residents.
- **Pangborn Airport:** A route serving Pangborn Airport was one of the most requested new services in the Transit Study public outreach process. The Preferred Scenario includes a new Route 13 to Pangborn Airport, providing access to jobs in the airport area and most flights.
- **Walla Walla Point Park and Town Toyota Center:** Although existing Link Transit service operates near both these locations, existing access is challenging due to the street network and connectivity across the railroad tracks. Public outreach and key stakeholder interviews revealed significant interest in serving these destinations. The Preferred Scenario includes a dedicated route with 20-minute all-day frequency that serves these destinations, along with Columbia Station and Pybus Public Market. This route could be considered for adjustment to serve special events at Town Toyota Center.

Improving Service Efficiency and Maintaining Coverage

Link Transit operates several lifeline transit services in rural or low-density communities such as Malaga, Ardenvoir, Sunnyslope, and unincorporated neighborhoods. Although these services are not generally productive or efficient relative to Link Transit's urban service, the agency is committed to providing service in many low-density areas. To balance competing goals of efficient transit service and coverage in low-density communities, the Preferred Scenario proposes making several routes deviated fixed routes. A deviated fixed route operates with scheduled timepoints but allows riders to request deviations from the general alignment for both drop-offs and pick-ups. This service also doubles as ADA paratransit, eliminating the need to require complementary ADA paratransit for rural fixed routes.[1]

Route-Level Recommendations

A East Wenatchee

This route is proposed to be consolidated into the Route 1, which would provide the same connections but would no longer serve Fred Meyer. Service to Fred Meyer from Wenatchee would be provided by the proposed Route 12.

[1] Federal Transit Administration. November 4, 2015. Circular 4710.1. pp. 7-10—7-11 <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710.1.pdf>

B Riverfront/WVC

This route is proposed to be consolidated into the proposed routes 4, 6, and 7. Route 6 would provide service along the riverfront, and Route 4 would provide service to WVC. Route 7 would provide coverage on 9th Street, east of WestSide High School, where the proposed Route 4 would turn around.

C Downtown Wenatchee

This route is proposed to be consolidated into routes 1 and 2, which would provide 15-minute service on the Wenatchee Avenue corridor. The parking lot service at Valley North Center that Route C currently provides would be provided by Route 7, and service to Wenatchee Valley Medical Center that Route C currently provides would be served by routes 21, 22, 46, 48, and 122.

D Leavenworth

This route is proposed to be re-named the Route 32 Leavenworth Shuttle (see below for more detail).

E Chelan Shuttle

This seasonal route is recommended to be consolidated into the proposed year-round Route 31 (see below for more detail).

1 Boodry to Walmart

The proposed Route 1 is a new route that connects the Boodry Street/Chapman Road neighborhood in South Wenatchee with Columbia Station and the Wenatchee Walmart. The proposed route generally operates on the Wenatchee Avenue corridor, with stops at Columbia Station in both directions (the northbound stop would be on Wenatchee Avenue, adjacent to Columbia Station). In North Wenatchee, the route deviates to Maple Street, N Western Avenue, and Maiden Lane, providing additional coverage and connecting North Wenatchee residents with direct connections to the Valley North Center and downtown Wenatchee.

The proposed Route 1 would operate every 30 minutes on weekdays and every 60 minutes on weeknights, with 60-minute service on Saturdays and Sundays. On weekdays, Route 1 would be offset with Route 2, providing 15-minute service on the Wenatchee Avenue corridor. Due to the high frequency provided by the combined routes 1 and 2, Route 1 would not lay over at Columbia Station.

2 Costco to Walmart

The proposed Route 2 is a new route that connects commercial destinations in East Wenatchee with downtown Wenatchee and the Wenatchee Walmart. The proposed route would operate on the Wenatchee Avenue corridor and serve Wenatchee Valley Mall, Safeway, and Costco in East Wenatchee. The route would turn around at the Wenatchee Walmart and the park-and-ride south of the Rock Island Road at 3rd Street E intersection. This route would replace the service provided by the existing Route A but would no longer serve the Fred Meyer, which would be served by the proposed Route 12.

The proposed Route 2 would operate every 30 minutes on weekdays and every 60 minutes on weeknights, with 60-minute service on Saturdays and Sundays. On weekdays, Route 2 would be offset with Route 1, providing 15-minute service on the Wenatchee Avenue corridor. Due to the high frequency provided by the combined routes 1 and 2, Route 2 would not lay over at Columbia Station.

3 Saddle Rock

The proposed Route 3 is a new route that connects downtown Wenatchee with Wenatchee High School, Central Washington Hospital, and the Saddle Rock Trailhead. The route would operate bi-directionally primarily on Okanogan Avenue, Russell Street, and S Miller Street.

The proposed Route 3 would operate every 30 minutes on weekdays and every 60 minutes in late evening on weeknights. The route would operate every 60 minutes on Saturdays and Sundays. This route would interline with the proposed Route 6 on nights and weekends, offering riders making this transfer a one-seat ride.

4 Wenatchee Valley College

The proposed Route 4 would connect downtown Wenatchee, the Columbia riverfront, and WVC. The route would operate on N Worthen Street, 5th Street, N Western Avenue, and 9th Street, and would turn around at WestSide High School. This route would cover much of the existing Route B alignment, but would operate bi-directionally, instead of as a loop, in the WVC area and on Worthen Street. This bi-directional alignment will provide riders traveling to and from WVC a faster, more direct trip. The proposed Route 4 would not serve the Riverside 9 Apartment Homes, which are currently served by Route B, although these apartments would be served by the proposed Route 6.

The proposed Route 4 would operate every 30 minutes on weekdays, every 60 minutes on weeknights, and every 60 minutes on Saturdays and Sundays. This is a decrease in frequency over the existing Route B, although the proposed routes 7 and 18 would also serve WVC, giving riders overall headways of less than 30 minutes and expanding the number of neighborhoods that can connect with WVC via a one-seat ride. The proposed Route 4 would interline with Route 12 at nights and on weekends, providing one-seat ride trips for riders transferring between these routes.

5 Cherry/Western to Walmart

The existing Route 5 is a long, primarily bi-directional route that weaves throughout Wenatchee, connecting downtown Wenatchee with residential neighborhoods, WVC, Wenatchee Valley Medical Center, Valley North Center, and the Wenatchee Walmart. Due to the length and indirectness of this route, many riders travel out-of-direction for significant amounts of time.

This route is proposed to be shortened into a more direct service, connecting downtown Wenatchee with residential neighborhoods to the west and the Wenatchee Walmart. The route would operate on Western Avenue, providing bi-directional service on nearly all the corridor. By eliminating the 5th Street and Maple Street deviation, riders on the route will see reduced travel times.

The proposed Route 5 would operate every 30 minutes on weekdays, every 60 minutes on weeknights, and every 60 minutes on Saturdays and Sundays. These frequencies will offer service 30 minutes less frequently on Saturdays but will add service on Sundays, where it does not currently exist. The proposed Route 5 would end two hours earlier than existing service on weekdays.

6 Walla Walla Point Park

The proposed Route 6 is a new route that would serve the Columbia Riverfront, connecting Columbia Station, Pybus Public Market, Town Toyota Center, and Walla Walla Point Park. These destinations were important to both survey respondents and key stakeholders in the community, and the proposed Route 6 could also be adjusted to serve major events at Town Toyota Center. The route would serve destinations that the existing Route B serves, such as the Riverside 9 apartments.

The proposed Route 6 would operate every 20 minutes on weekdays, every 60 minutes on weeknights, and every 60 minutes on Saturdays and Sundays. This route would interline with Route 3 on weeknights and weekends, providing transferring riders with a one-seat ride. Sunday service on this route would be new for people living in riverside apartments, as the current Route B does not operate on Sundays.

7 Washington/Western to Valley North

The existing Route 7 is a large loop connecting downtown Wenatchee to mostly residential neighborhoods to the west. Due to the looping nature of the route, many riders must ride out-of-direction to access destinations, and rider trips can take much longer than they would via auto. Route 7 is also the lowest-productivity local route in Wenatchee.

The proposed Route 7 provides bi-directional service connecting downtown Wenatchee, WVC, and Valley North Center. The route operates primarily on Washington Street, Western Avenue, 9th Street, and Miller Street, and turns around at Columbia Station and Valley North Center. The proposed bi-directional nature of the route will reduce trip times for riders and make it a more attractive service. The proposed route also adds a connection to WVC, which previously required a greater walking distance to be accessed from this route.

The proposed Route 7 would operate every 30 minutes on weekdays, every 60 minutes on weeknights, and every 60 minutes on Saturdays and Sundays. The existing Route 7 does not operate on Sundays, so the proposed Route 7 represents a dramatic improvement in mobility for riders on the weekends. The proposed Route 7 would also begin operating a half-hour earlier and operate three hours later into the evening on weekdays. The proposed route would operate a half-hour earlier in the morning on Saturdays. This route would interline with the proposed Route 9, providing one-seat rides for travelers making that transfer.

8 Miller

The existing Route 8 operates bi-directionally on the west side of the Columbia River, connecting Stemilt facilities with Olds Station, Valley North Center, Wenatchee Valley Medical Center, Wenatchee High School, Central Washington Hospital, and downtown Wenatchee. The portion of the route that serves Wenatchee High School and Central Washington Hospital is a significant deviation for riders traveling in the north-south direction, increasing their travel times and forcing them to travel out of direction.

The proposed Route 8 removes the deviation to Wenatchee High School and Central Washington Hospital, providing faster, more direct service between downtown Wenatchee and points north. Service to Wenatchee High School and Central Washington Hospital would still be available via proposed routes 3, 18, and 122 (on hospital trips only). The proposed route would travel bi-directionally on Orondo Avenue, Miller Street, and N Wenatchee Avenue, and would turn around at Olds Station, instead of serving Stemilt, where very little ridership is generated.

The proposed Route 8 would maintain its current frequencies and operate every 30 minutes on weekdays, every 60 minutes on weeknights, and every 60 minutes on weekends. The proposed Route 8 would start a half-hour earlier on weekdays, to allow the first trip to collect passengers and arrive at Columbia Station before the scheduled westbound Amtrak Empire Builder arrives.

9 South Wenatchee

The proposed Route 9 is an alteration of the existing Route 1. The existing Route 1 connects South Wenatchee with Columbia Station and operates as a large one-way loop, which requires many riders to travel out-of-direction to reach their destinations. The existing Route 1 loop also extends to Saddlehorn Avenue, which adds travel time to many trips but sees relatively few boardings. The current westbound

crossing of the S Mission Street at Terminal Avenue intersection is concerning to many operators due to the high speed of vehicles entering the intersection from the south and limited operator visibility.

The proposed Route 9 adjusts the existing Route 1 to operate primarily bi-directionally, with a small terminal loop on S Mission Street, Terminal Avenue, and Methow Street. The route would no longer serve Saddlehorn Avenue, which would impact approximately five riders but would benefit far more than five riders by providing a faster and more direct trip. The proposed Route 9's alignment would eliminate the safety concern at the S Mission Street at Terminal Avenue intersection.

The proposed Route 9 would maintain its current frequencies and operate every 30 minutes on weekdays, every 60 minutes on weeknights, and every 60 minutes on Saturdays and Sundays. The route's operating span on these days would not change dramatically. This route would interline with the proposed Route 7, providing one-seat rides for travelers making that transfer.

11 4th/Kentucky

The existing Route 11 connects downtown Wenatchee with East Wenatchee residential and commercial districts, Eastmont High School, and the East Wenatchee Municipal Campus. The route currently operates bi-directionally in Wenatchee but as a large, meandering loop in East Wenatchee, forcing many riders to make trips out-of-direction. Aside from the seasonal Route E Chelan Shuttle, Route 11 has the lowest productivity of any urban route in the Link Transit system.

The proposed Route 11 realigns the route to serve many of the same destinations but bi-directionally, which allows riders to avoid traveling out-of-direction. The route would continue to serve downtown Wenatchee, Wenatchee Valley Mall, Safeway, and Eastmont High School, but would no longer serve the East Wenatchee Municipal Campus (the campus would be served by the proposed Route 12, however). The route would travel on S Wenatchee Avenue, the Sellar Bridge, 5th Street NE, Eastmont Avenue, 3rd Street SE, Kentucky Avenue, 3rd Street NE, N Iowa Avenue, and 5th Street NE, before making a small terminal loop around the Sterling and Kenroy schools.

The proposed Route 11 would continue to always operate with 60-minute headways and would retain nearly the same operating span on weekdays, Saturdays, and Sundays. On weekdays, the route would be offset with Route 13, which would provide 30-minute frequency between downtown Wenatchee, the Wenatchee Valley Mall, Safeway, and Eastmont High School.

12 East Wenatchee/Fred Meyer

The existing Route 12 is a one-way loop that operates entirely in Douglas County and serves Safeway, Wenatchee Valley Mall, the East Wenatchee Municipal Campus, and various East Wenatchee public schools. The looped nature of the route means many riders must travel out of direction to access their destinations, which increases travel time. The route also takes a meandering course through East Wenatchee, making it entirely uncompetitive with auto travel.

The proposed Route 12 alters the existing route considerably by connecting downtown Wenatchee to the Fred Meyer, East Wenatchee Municipal Campus, and high-density housing on 9th Street NE, Eastmont Avenue, and 11th Street NE. The remainder of the existing Route 12's major destinations would be served by the proposed Route 11, which will offer travelers faster, more direct connections between commercial, educational, and recreation destinations in East Wenatchee. The proposed Route 12 would also replace the consolidated Route A's service to Fred Meyer from downtown Wenatchee.

The proposed Route 12 would operate twice as often during weekdays, with buses arriving every 30 minutes. The route would operate every 60 minutes on weeknights and every 60 minutes on weekends. The proposed Route 12 would begin operation an hour earlier and continue operating two hours later than the existing Route 12 on weekdays, with service from 5:30 a.m. to 9:00 p.m. The route would also add

service on Saturdays and Sundays, operating from 7:30 a.m. to 5:30 p.m. on Saturdays and 9:30 a.m. to 5:30 p.m. on Sundays. This route would interline with the proposed Route 4 on nights and weekends, providing a one-seat ride for travelers transferring between those routes.

13 Eastmont High School/Grant Road/Pangborn

The proposed Route 13 is a new route that connects downtown Wenatchee with East Wenatchee commercial destinations, Eastmont High School, the Grant Road Corridor, and Pangborn Airport. The route would operate bi-directionally on nearly all its alignment, including for extended stretches on Wenatchee Avenue and Grant Road. The route would turn around at Columbia Station and at the Pangborn Airport terminal. This route responds to community feedback that strongly favored an airport route.

This route would always operate with 60-minute headways on weekdays, Saturdays, and Sundays. The route would operate from 5:00 a.m. to 8:00 p.m. on weekdays, from 7:30 a.m. to 5:30 p.m. on Saturdays, and 9:30 a.m. to 5:30 p.m. on Sundays. The route would serve the 1:25 p.m. flight arrival and 2:05 p.m. departure from Pangborn Airport on all days, and the 6:25 a.m. departure on weekdays. The route would not serve the 11:51 p.m. arrival. On weekdays, the route would be offset with Route 11, which would provide 30-minute frequency between downtown Wenatchee, the Wenatchee Valley Mall, Safeway, and Eastmont High School.

18 East Wenatchee

The existing Route 18 complements Route 8 and serves as a Douglas County connection to both Olds Station and downtown Wenatchee. The existing route travels from downtown Wenatchee to Wenatchee Valley Mall, through residential communities in East Wenatchee and unincorporated Douglas County, across the Odabashian Bridge, and to Olds Station. Much of the route operates bi-directionally. The left turn onto Sunset Highway from 33rd Street NE was noted as a safety concern by many operators. Some portions of the route deviate from the general direction of travel, causing trip times for some riders to be longer than necessary.

The proposed Route 18 increases the number of Wenatchee destinations available to East Wenatchee residents via this route, by realigning the southern Wenatchee portion of the route to turn around at WVC via Central Washington Hospital, instead of Columbia Station. The proposed route will continue to serve Wenatchee Valley Mall and points north but would no longer deviate to serve Stemilt, north of Olds Station, as that deviation increased travel time and served very few riders. The route is proposed to access Sunset Highway via 35th Street NE, instead of 33rd Street NE, under the assumption that a planned roundabout will be installed at that intersection.

Route 18 is proposed to operate every 30 minutes on weekdays and every 45 minutes on Saturdays and Sundays. This would be an increase in frequency on weekday evenings and weekends, from existing 60-minute headways. The route is proposed to begin operating a half-hour earlier and stop operating a half-hour later on weekdays.

20 Orondo/Chelan

This route is proposed to be eliminated, due to low ridership and duplication of other service. The existing Route 20 operates on US 97 between Olds Station, Orondo, and Chelan. Riders on this route that board between Wenatchee and Orondo will still have access to service on the proposed Route 45, and riders in Chelan and Chelan Falls will have improved access to transit via the proposed Route 30, which will enter Chelan Falls; the existing Route 20 stops almost a mile outside of town. Approximately three riders living between Orondo and Chelan Falls will no longer have access to service due to elimination of this route.

21 Chelan/Manson

The existing Route 21 connects Manson, Chelan, Entiat, Olds Station, and downtown Wenatchee, operating primarily on SR 150 and US 97A. The route has the third-highest ridership in the Link Transit system and is competitive with auto travel for many of its origin-destination pairs.

The proposed Route 21 recommends minimal changes to the alignment; the route is proposed to operate on Entiat Way in Entiat, instead of entering and exiting US 97A twice. This change would improve operational safety on the route and increase access for some Entiat residents but will add a few minutes of travel time.

The proposed Route 21 would continue to operate on weekdays, Saturdays, and Sundays, but frequencies on weekends would roughly double, from every three hours to every 90 minutes. The proposed Route 21 would add an additional weekday evening trip, extending the operating span to 10:30 p.m.

22 Leavenworth

The existing Route 22 connects Wilkommen Park-and-Ride with Peshastin, the Big Y Park-and-Ride, Cashmere, Olds Station, and downtown Wenatchee. The route primarily travels bi-directionally on US 2/97. One of the most common rider complaints about this route is that the deviations into Peshastin, Cashmere, and Olds Station increase the travel time and make it uncompetitive with auto travel, particularly for riders traveling between Leavenworth and Wenatchee. In addition, because the existing Route 22 currently turns around at Wilkommen Park-and-Ride, many riders are forced to transfer to and from the existing Route D to travel into downtown Leavenworth.

The proposed Route 22 is complemented by the proposed 122 Leavenworth Express, which would provide express service between Leavenworth and Wenatchee, addressing rider concerns regarding travel time. The proposed Route 22 would remain largely the same, although it would turn around at the Icicle Quik Stop instead of Wilkommen Park-and-Ride, allowing riders in Leavenworth to access the route without using the proposed Route 32 Leavenworth Shuttle. Most stops in Peshastin would be on-call only, although the 5:00 a.m., 6:00 a.m., and 7:00 a.m. trips would stop in Peshastin as a matter of course, to serve existing ridership. By changing most stops in Peshastin to on-call only, riders will not be delayed by the time-consuming deviation into Peshastin if there are no passengers boarding or alighting in town.

The proposed Route 22 would operate every 60 minutes on weekdays, Saturdays, and Sundays; this would double the frequency of the route on weekends, when it currently operates every two hours. The proposed Route 22 would also operate two hours later in the evening on weekdays, until 12:00 a.m. This change would support service workers with late shifts that live down the Wenatchee River Valley and work in Leavenworth. Saturday service would begin an hour later, at 8:00 a.m., and end two hours later, at 10:00 p.m. Sunday service would begin one hour later, at 8:00 a.m. Earlier weekend service would be provided on Route 122.

23 Rock Island

This route is proposed to be operated as a deviated fixed-route service numbered 43 (see below for details).

24 Malaga

This route is proposed to be operated as a deviated fixed-route service numbered 44 (see below for details).

25 Waterville

This route is proposed to be operated as a deviated fixed-route service numbered 45 (see below for details).

26 Ardenvoir

This route is proposed to be operated as a deviated fixed-route service numbered 46 (see below for details).

28 Cashmere

This route is proposed to be operated as a deviated fixed-route service numbered 48 (see below for details).

30 Chelan Falls Shuttle

The proposed Route 30 is a new route that would connect Chelan Falls and the Chelan Walmart, with stops at fruitpacking sheds. The route would turn around at the Chelan Walmart and on the Chestnut Street/Chelan Avenue loop in Chelan Falls. The proposed Route 30 would interline with the proposed routes 31 and 33, allowing riders a one-seat ride to locations throughout the Chelan/Chelan Falls area and a connection to Route 21 in downtown Chelan. This route, in addition to the proposed routes 31 and 33, would provide year-round access to the Walmart, fulfilling rider service requests.

This route would operate with hourly headways between 7:00 a.m. and 8:00 p.m. on weekdays, from 7:30 a.m. to 5:30 p.m. on Saturdays, and from 9:30 a.m. to 5:30 p.m. on Sundays.

Under this proposal, the existing Apple Line stop on SR 150 should be moved south to allow riders to transfer with the proposed Route 30.

31 Chelan South Shuttle

The proposed Route 31 is a new route that would consolidate some of the seasonal Route E alignment into a bi-directional connection between the Lakeside Park-and-Ride in Chelan, downtown Chelan, and the Chelan Walmart. Most of the route would travel on Woodin Avenue. This route, in addition to the proposed routes 30 and 33, would provide year-round access to the Walmart, fulfilling rider service requests.

This route would operate with hourly headways between 7:00 a.m. and 8:00 p.m. on weekdays, from 7:30 a.m. to 5:30 p.m. on Saturdays, and from 9:30 a.m. to 5:30 p.m. on Sundays. The proposed Route 31 would interline with the proposed routes 30 and 33, allowing riders a one-seat ride to locations throughout the Chelan/Chelan Falls area.

32 Leavenworth Shuttle

Route 32 Leavenworth Shuttle is the proposed new name and number for the existing Route D. No alignment changes are proposed to the route, which would continue to operate between Icicle Quik Stop and Wilkommen Park-and-Ride. This route would provide feeder service to the proposed routes 40 and 122 and would also serve as a downtown circulator.

The proposed Route 32 would continue to operate every 20 minutes on every day of the week, although the proposed route would begin operations three hours earlier, at 8:00 a.m.

33 Chelan North Shuttle

The proposed Route 33 is a new route that would serve downtown Chelan, residential neighborhoods north of downtown Chelan, Lake Chelan Community Hospital, and the Chelan Walmart. The route would operate bi-directionally on E Woodin Avenue and as a small terminal loop in the neighborhood north of downtown Chelan. This route would provide access to shopping and employment destinations and would also fulfill community requests for access to healthcare services in the Chelan area.

This route would operate with hourly headways between 7:00 a.m. and 8:00 p.m. on weekdays, from 7:30 a.m. to 5:30 p.m. on Saturdays, and from 9:30 a.m. to 5:30 p.m. on Sundays. The proposed Route 33 would interline with the proposed routes 30 and 31, allowing riders a one-seat ride to locations throughout the Chelan/Chelan Falls area.

40 Icicle/Plain/Lake Wenatchee Deviated Fixed-Route

The proposed Route 40 is a new deviated fixed route that would operate on a defined alignment with scheduled timepoints but would be able to deviate ¾ of a mile from the alignment to pick up and drop off passengers. This route would operate between the Snow Lakes Trailhead parking lot on Icicle Creek Road, Wilkommen Park-and-Ride, Plain, and Lake Wenatchee State Park. This route was requested by many community members during multiple public outreach efforts.

The proposed Route 40 would operate five round trips between Lake Wenatchee State Park and Snow Lakes Trailhead each weekday, four round trips each Saturday, and four round trips each Sunday. The span of service on this route would be from 8:00 a.m. to 6:00 p.m. on weekdays and from 9:00 a.m. to 5:00 p.m. on weekends.

43 Rock Island Deviated Fixed-Route

The existing Route 23 to Rock Island is a fixed-route service that connects downtown Wenatchee, commercial destinations in East Wenatchee, and Rock Island via Rock Island Road and SR 28. The route sees relatively high productivity compared to other Link Transit intercity routes but makes a left turn onto SR 28 that several operators mentioned as a safety concern.

The proposed Route 43 is a deviated fixed route that would operate on a similar alignment as the existing Route 23 but would be able to deviate ¾ of a mile from the alignment to pick up and drop off passengers outside the urban area. The most significant alignment change would be outbound operation on SR 28 instead of Rock Island Road, west of the current left turn. This change would reduce safety concerns regarding this turn.

The proposed Route 43 would continue to operate eight round trips each weekday, four round trips on Saturday, and would also now operate four round trips on Sunday. There would be no significant change to the operating span for this route, except for the addition of Sunday service.

44 Malaga Deviated Fixed-Route

The existing Route 24 to Malaga is a fixed-route service that connects downtown Wenatchee, Central Washington Hospital, South Wenatchee, and Malaga, operating bi-directionally on Orondo Avenue, S Miller Street, Crawford Avenue, and Malaga Road, with a terminal loop through Malaga. This route is the second-lowest productivity intercity route in the Link Transit system.

The proposed Route 44 is a deviated fixed route that would operate on a similar alignment as the existing Route 24 but would travel directly to and from downtown Wenatchee via Wenatchee Avenue, without deviating to serve Central Washington Hospital. This route would be able to deviate ¾ of a mile from the alignment to pick up and drop off passengers outside the urban area. If deviations are not requested, this

alignment will be considerably more direct than the current Route 24 alignment, providing riders with shorter trip times.

The proposed Route 44 would better distribute resources over the course of the week than the existing Route 24, due to the route's current low ridership. The proposed route would operate only four round trips each weekday, which is a reduction of 1.5 round trips from the current Route 24. The route would also operate only three round trips on Saturday, which is a reduction of one round trip. Route 44 would add three round trips on Sunday, when no service is currently offered. This route would be interlined with Route 46, providing one-seat rides for travelers making that transfer.

45 Waterville Deviated Fixed-Route

The existing Route 25 to Waterville is a fixed-route service that connects downtown Wenatchee, commercial destinations in East Wenatchee, residential neighborhoods in East Wenatchee and unincorporated Douglas County, Orondo, and Waterville. The route is relatively productive compared to other Link Transit intercity services.

The proposed Route 45 is a deviated fixed route that would operate on a similar alignment as the existing Route 25 but would travel bi-directionally on NW Cascade Avenue and Sunset Highway instead of N Baker Avenue, due to there being nearly zero ridership on N Baker Avenue. This re-alignment would only be possible if the planned roundabout at 35th Street NE and Sunset Highway is completed. This route would be able to deviate ¾ of a mile from the alignment to pick up and drop off passengers outside the urban area.

The proposed Route 45 would maintain the current six round trips offered each weekday and the current four round trips offered each Saturday, but would also add four round trips on Sunday. These trips would operate on the same schedule as existing Saturday service, between 8:30 a.m. and 6:00 p.m.

46 Ardenvoir Deviated Fixed-Route

The existing Route 26 to Ardenvoir is a fixed-route service that connects Olds Station, Entiat, and Ardenvoir on a bi-directional alignment using US 97A, Entiat Way, and Entiat River Road. This route is the most unproductive route in the Link Transit system, excluding the seasonal Route E. Riders traveling to downtown Wenatchee must also transfer at Olds Station.

The proposed Route 46 is a deviated fixed route that would operate on a similar alignment as the existing Route 26 but would serve downtown Wenatchee, in addition to Olds Station, providing a one-seat ride for travelers from Entiat and Ardenvoir and access to additional transfer opportunities. This route would be able to deviate ¾ of a mile from the alignment to pick up and drop off passengers outside the urban area.

The proposed Route 46 would operate four round trips on weekdays, which is one fewer inbound trip than is currently offered, but would operate three round trips on Saturdays and Sundays, providing additional mobility to people living in the Ardenvoir and Entiat areas on the weekends. This route would be interlined with Route 44, providing one-seat rides for travelers making that transfer.

48 Sunnyslope/Cashmere Deviated Fixed-Route

The existing Route 28 is a fixed-route service that connects Cashmere, Sunnyslope, Olds Station, and downtown Wenatchee. The route operates a terminal loop through Cashmere, bi-directionally on Easy Way/Easy Street/Ohme Garden Road, bi-directionally through Olds Station, and using a couplet and bi-directional service in downtown Wenatchee, with a deviation to serve Pybus Public Market and the riverfront. The riverfront deviation causes travel times to increase for many riders making trips to destinations aside from the riverfront.

The proposed Route 48 will operate on nearly the same alignment but will eliminate the riverfront deviation to decrease travel times for riders, instead accessing Columbia Station via the Chelan Avenue/Mission Street northbound/southbound couplet. The route will be a deviated fixed-route service that can deviate ¾ of a mile from the alignment to pick up and drop off passengers outside the urban area.

The proposed Route 48 would continue to operate every 90 minutes each day of the week and would add service on Sunday, when it is not currently offered. Operating spans would not change on weekdays or Saturdays and Sundays. Service would be offered from 8:00 a.m. to 5:00 p.m.

122 Leavenworth Express

The proposed Route 122 is a new express route that would connect Leavenworth and downtown Wenatchee, with a potential future connection to Olds Station when the Chelan County PUD relocation is complete. The route would turn around at Wilkommen Park-and-Ride and Columbia Station, and would make highway stops at the Big Y Park-and-Ride and the future Cashmere Museum Park-and-Ride. On inbound trips, stops in Wenatchee would be drop-off only, and the 5:00 a.m. and 7:45 p.m. trips would extend to Central Washington Hospital, to serve hospital staff changing shifts. This route addresses rider complaints about the long travel times on Route 22, while also facilitating commute travel between Leavenworth and Wenatchee. The route is suggested to board and alight passengers using the future Cashmere Museum Park-and-Ride via a highway stop; infrastructure improvements at the Cotlets Way at US 2/97 intersection would be needed to support this.

The proposed Route 122 would operate every 90 minutes on weekdays and would operate two round trips on Saturdays and Sundays. The route would operate from 5:00 a.m. to 12:30 p.m. and 1:30 p.m. to 9:00 p.m. on weekdays, and from 5:00 a.m. to 8:00 a.m. and 6:00 p.m. to 9:00 p.m. on weekends to meet demand for Central Washington Hospital shifts.

SkiLink

No change is proposed for this seasonal route.

Service Packages

The Preferred Scenario describes the overall roadmap for service improvements for the Link Transit system. However, due to factors such as vehicle acquisition timeline and operator availability, it may not be feasible for the agency to implement all recommended changes at once. Figure 6-6 shows potential packages of service that can be combined and implemented as feasible. These packages are meant to provide a menu of options for Link Transit to consider during the implementation phase rather than a prioritized recommendation.

Figure 6-6 Preferred Scenario Service Packages for Implementation

Service Improvement Type	Applicable Routes	Preferred Scenario Revenue Hours
Weekday Existing Service Coverage		
Urban Area	Route 1, Route 2, Route 3, Route 4, Route 5, Route 7, Route 8, Route 9, Route 11, Route 12, Route 18	62,400
Intercity	Route 21, Route 22	21,600
Deviated Fixed-Route	Route 43, Route 44, Route 45, Route 46, Route 48	11,500
Leavenworth Shuttle	Route 32	2,000
Weekday Additional Service Span		
Urban Area	Route 1, Route 2, Route 8, Route 18	800
Intercity	Route 21, Route 22	2,300
Leavenworth Shuttle	Route 32	800
Weekday Express Service/Service to New Areas		
Wenatchee-Leavenworth Express Service	Route 122	3,800
Service to New Areas	Route 6, Route 13, Route 30, Route 31, Route 33, Route 40	12,300
Weekend Service		
Saturday Service	All	12,000
Sunday Service	All	10,500
Total		**140,000**

UNFUNDED PRIORITIES AND SUPPLEMENTAL SERVICE

The Preferred Scenario will significantly increase the amount of transit service operated in Chelan and Douglas counties but is fiscally constrained based on anticipated available revenue. Because the Preferred Scenario is fiscally constrained, it does not contain the full expanse of service improvements the community has voiced support for. The CSA's outreach process uncovered significant public support for expansions of and improvements to service that would require additional resources, both in terms of operating funds and one-time or ongoing capital expenditures. This section identifies these unfunded transit improvements.

- **Late-night service:** Although the proposed Preferred Scenario expands the operating hours of many routes, most Link Transit service ends between 7:00 p.m. and 9:00 p.m. on weekdays. Increasing this span of service later into the evening is supported by the public, key stakeholders, and Link Transit planning staff. Later evening service provides people access to shift work that ends in the late evening, late-night recreational activities such as dining and concerts, and transportation for unexpected late-night trips. For many riders, knowing there are late-night buses available provides confidence they will be able to get home if a meeting, appointment, or shift runs later than expected. Link Transit should continue to monitor demand for late-night service and implement late-night operating hours in a prioritized fashion. The proposed routes 21 and 22 can serve as a good pilot program for late-night transit service.
- **Potential future service expansion:** Although Link Transit's services cover most communities in the agency's Public Transportation Benefit Area (PTBA), several locations that are not served have been identified by community members as priority future service areas. These include:
  - **Wenatchee foothills:** The area to the west of Western Avenue in Wenatchee is largely single-family housing, although some multi-family housing exists and is planned for the area. As Wenatchee continues to grow, undeveloped farmland and unoccupied parcels in the Wenatchee foothills will likely continue to be developed into single- and multi-family housing. Although the generally low density of land use and unconnected street network make traditional fixed-route transit service provision here challenging, Link Transit should regularly evaluate opportunities to provide alternative service in the Wenatchee foothills.
  - **Fancher Heights:** Although the idea of an Uber/Lyft partnership in Fancher Heights was not a popular element of the scenarios shared with the public as part of the CSA, several community members and key stakeholders believe transit service to Fancher Heights is important. Although the isolated nature of the neighborhood (there are only two access points from Eastmont Avenue), community demographics, and auto-oriented land use make traditional fixed-route transit service provision challenging,[2] Link Transit could consider offering this service again in the future.
  - **Lake Chelan State Park:** Lake Chelan State Park is a popular recreation destination in the Chelan area but is located approximately 10 miles from downtown Chelan and six miles from the nearest Link Transit fixed route, making dedicated, productive service to this isolated destination challenging. Several community members identified transit access to the state park as an important need in the Chelan area, particularly for youth without access to a vehicle. Link Transit should consider future opportunities to serve this destination, particularly after the agency learns how similar proposed outdoor recreation-based services to Lake Wenatchee State Park, Snow Lakes Trailhead, and Saddle Rock Trailhead perform.

[2] Link Transit has offered fixed-route service in Fancher Heights in the past but the service was not productive and was eliminated.

  - **Quincy:** Key stakeholders and community members noted that many Chelan and Douglas County residents travel to and from Quincy. Many of these people may be commuting to the growing cluster of server farms in the Quincy area, and others are traveling for non-work purposes. Because Quincy is not in Chelan or Douglas counties or the Link Transit PTBA, an agreement with Grant Transit or other government agencies would likely need to be arranged to support a transit connection across counties. This type of inter-county arrangement is not uncommon in Washington State: Yakima Transit offers commuter service between Yakima (Yakima County) and Ellensburg (Kittatas County); Clallam Transit operates service from Port Angeles (Clallam County) to Bainbridge Island (Kitsap County); and Community Transit offers significant commuter service between Snohomish County and Seattle, in King County.

In addition to the unfunded service priorities described above, Link Transit has an opportunity to provide supplemental service that addresses some of the agency's long-term strategic issues and priorities. These services involve moving people throughout Chelan and Douglas counties using models other than fixed-route bus or demand-response cutaway.

- **Vanpool and/or Worker-Driver service:** Although outreach uncovered public desire for transit service to employment centers such as fruitpacking sheds, ski resorts, and other large employment sites, fixed-route service would likely be challenging to implement for these travel markets, given changing shift times, seasonal schedules, and unique origin-destination patterns. Vanpool or Worker-Driver service, however, may be an efficient and effective way to provide commute services to these destinations, and should be further explored by Link Transit. Peer agencies provide similar service successfully: in Kitsap County, Worker-Driver service has provided efficient transportation to NBK-Bremerton for decades, and Ben Franklin Transit provides vanpool service to the Hanford Site in Benton County.
- **Volunteer driver service:** Link Transit currently has plans to implement volunteer driver service, which is an efficient means of providing public transportation for trip purposes and communities that are difficult or inefficient to serve with fixed-route public transit. In a volunteer driver program, the agency reimburses volunteer drives on a mileage basis for providing transportation to specific customers (e.g., seniors or people with disabilities) or the general public. Link Transit should continue to move forward with this program as a way to efficiently provide public transportation in challenging markets.

FINANCIAL IMPLICATIONS

Improving and expanding transit service in Chelan and Douglas counties will require additional financial resources. This section of the report discusses the additional capital and operating costs required to fund the Preferred Scenario and several unfunded priorities discussed above and in Chapter 4 of this report.

Preferred Scenario

The Preferred Scenario significantly increases the amount of transit service available to people traveling in Chelan and Douglas counties. Figure 6-7 shows the number of annual fixed-route revenue hours operated in Link Transit's current system, the number proposed to be operated in the Preferred Scenario, and the change between the two. Overall, the Preferred Scenario proposes a 43% increase in annual revenue hours operated. Of the total 41,042 annual revenue-hour increase proposed as part of the Preferred Scenario, nearly half are deviated fixed-route service, most of which is converted from existing fixed-route service such as the Route 23 Rock Island and Route 24 Malaga.

Figure 6-7 Change in Annual Operating Costs, Existing System to Preferred Scenario

	Existing		*Preferred Scenario*		*Change*	
	Revenue Hours	Operating Cost	Revenue Hours	Operating Cost	Revenue Hours	Operating Cost
Fixed-Route Service	99,000	$12,930,000	122,000	$16,592,000	+23,000	+$3,662,000
Deviated Fixed-Route Service	N/A		18,000	$2,431,000	+18,000	+$2,431,000
Total	**99,000**	**$12,930,000**	**140,000**	**$19,023,000**	**+41,000**	**+$6,093,000**

Note: Hours and costs are rounded to the nearest thousand.

The Preferred Scenario is projected to increase the peak vehicle requirement for Link Transit from 30 to 33 vehicles in 2022. Link Transit's current fleet replacement schedule does not project enough heavy-duty transit buses to implement the Preferred Scenario in 2022. The agency is expected to have the required cutaway bus fleet, but will be short by up to five heavy-duty transit buses to operate the proposed service.[3] Figure 6-8 includes the capital cost estimates to purchase five new BEBs, which are estimated to cost $1,000,000 each, inclusive of the vehicle and required supportive charging infrastructure.

Figure 6-8 Change in Capital Costs, Existing System to Preferred Scenario

			New Vehicles Needed	
Vehicle type	Available	Needed	Vehicles	Cost
Cutaway bases	18	7	0	$ -
Heavy-duty transit buses	21	26	5	$5,000,000
Total	*39*	*33*	*5*	*$5,000,000*

[3] Link Transit could potentially use a cutaway bus on the proposed Route 6 Walla Walla Point Park, which would reduce the number of vehicles required to four.

Unfunded Priorities

As a part of the outreach process conducted during this study, several unfunded priorities were documented (see 'Unfunded Priorities' section above and Chapter 4 of this report). These priorities include service to new places, extended operating hours, and new transit infrastructure. This section of the report estimates operating and capital costs for these potential transit improvements at a high level.

Unfunded Priority Service Expansions

The public and key stakeholders identified several potential future service expansions that were not included in the Preferred Scenario due to resource constraints. These improvements could be implemented in the future as new resources become available. Figure 6-9 shows high-level estimates for the operating and capital costs required to implement these improvements. Operating costs are based on estimates of the number of annual revenue hours required to operate the service, and capital costs are based on an assumed $1,000,000 cost for a BEB and requisite electricity supply equipment. Capital cost estimates are not reduced based on potential federal grant contributions for acquisition. Details on these cost estimates and what they include are provided in sections below.

Figure 6-9 Transit Vision Service Expansions Cost Estimates

Service Expansion	Annual Operating Costs	One-Time Capital Costs
Late-night service	$2,600,000	$0
Wenatchee foothills service	$600,000	$1,000,000
Fancher Heights service	$600,000	$1,000,000
Lake Chelan State Park service	$600,000	$1,000,000
Quincy commuter service	$200,000	$1,000,000
Total	**$4,600,000**	**$4,000,000**

Note: Cost estimates rounded to nearest $100,000.

Late-Night Service Costs Estimates

Late-night service allows people who work shifts that start or end at night to use transit to access work, and for people to make shopping, recreation, or other trips at a later hour. Figure 6-10 shows the annual costs in revenue hours and dollars to extend each route to midnight on every weeknight (five nights a week). No additional vehicles would be required to provide this service.

Figure 6-10 Late-Night Service Costs Estimates to Continue Weekday Service to 12:00 a.m., by Route

Route	Preferred Scenario Wkdy. Span End	Additional Annual Revenue Hrs. to Continue Service to 12:00 a.m.	Annual Cost to Continue Service to 12:00 a.m.
1 Boodry to Walmart	9:30 p.m.	640	$90,000
2 Costco to Walmart	9:30 p.m.	640	$90,000
3 Central Washington Hospital/Saddle Rock	9:30 p.m.	640	$90,000
4 Columbia Station/WVC	9:00 p.m.	768	$100,000
5 Cherry/Western to Walmart	8:00 p.m.	1,024	$140,000
6 Walla Walla Point Park	9:30 p.m.	Interlined w/ Route 3	
7 Washington/Western/9th to Valley North	9:30 p.m.	640	$90,000
8 Miller	9:30 p.m.	640	$90,000
9 South Wenatchee	9:30 p.m.	Interlined w/ Route 7	
11 4th/Kentucky	8:30 p.m.	896	$120,000
12 East Wenatchee/Fred Meyer	9:00 p.m.	Interlined w/ Route 4	
13 Eastmont HS/Grant Road/Pangborn	8:00 p.m.	1,024	$140,000
18 East Wenatchee Crosstown	9:30 p.m.	1,920	$260,000
21 Chelan/Manson	10:30 p.m.	768	$100,000
22 Leavenworth/Peshastin/Cashmere	12:00 a.m.	0	$0
122 Leavenworth Express	9:00 p.m.	768	$100,000
30 Chelan Falls Shuttle	8:00 p.m.	Interlined w/ Routes 31 and 33	
31 Chelan South Shuttle	8:00 p.m.	1,024	$140,000
32 Leavenworth Shuttle	7:00 p.m.	1,280	$170,000
33 Chelan North Shuttle	8:00 p.m.	Interlined w/ Routes 30 and 31	
40 Icicle/Plain/Lake Wenatchee DFR	6:00 p.m.	1,536	$210,000
43 Rock Island DFR	7:30 p.m.	1,152	$160,000
44 Malaga/South Wenatchee DFR	7:00 p.m.	1,280	$170,000
45 Waterville DFR	7:30 p.m.	1,152	$160,000
46 Ardenvoir DFR	7:30 p.m.	Interlined w/ Route 44	
48 Sunnyslope/Cashmere DFR	6:30 p.m.	1,408	$190,000
	Total	***19,200***	***$2,600,000***

Note: Route-level estimates rounded to nearest $10,000. Total rounded to nearest $100,000.

Wenatchee Foothills Service

In both existing service and the Preferred Scenario, no fixed-route transit service operates west of Western Avenue in Wenatchee. The cost estimate in Figure 6-11 to provide a fixed route west of Western Avenue assumes service would operate seven days a week, with reduced operating span and frequencies on weekends. Mid-day service would operate every half-hour, and early morning and late evening service would operate every hour. This route would connect the Wenatchee foothills neighborhood with Wenatchee Valley College and Columbia Station, in downtown Wenatchee. One additional vehicle would be required to operate this service. This cost could be approximately halved, with no impact to frequency, if the route could be interlined with another route during its 60-minute headway periods.

Figure 6-11 Annual Cost Estimate for Wenatchee Foothills Route

Day of Week	Operating Span	Frequencies (mins.)	Peak Vehicles Required	Annual Operating Cost
Weekdays	6:00 a.m. to 8:00 p.m.	60/30/60	1	$489,000
Saturdays	7:30 a.m. to 5:30 p.m.	60	1	$71,000
Sundays	9:30 a.m. to 5:30 p.m.	60	1	$56,000
			Total	**$600,000**

Note: Costs rounded to nearest $10,000. Total rounded to nearest $100,000.

Fancher Heights Service

In both existing service and the Preferred Scenario, no fixed-route transit service operates in the Fancher Heights neighborhood of unincorporated Douglas County. The cost estimate in Figure 6-12 to provide a fixed route in Fancher Heights assumes service would operate seven days a week, with reduced operating span and frequencies on weekends. Mid-day service would operate every half-hour, and early morning and late evening service would operate every hour. This route would connect the Fancher Heights neighborhood to the mini transfer center at Wenatchee Valley Mall, where transfers to downtown Wenatchee and other destinations would be possible. One additional vehicle would be required to operate this service. This cost could be approximately halved, with no impact to frequency, if the route could be interlined with another route during its 60-minute headway periods.

Figure 6-12 Annual Cost Estimate for Fancher Heights Route

Day of Week	Operating Span	Frequencies (mins.)	Peak Vehicles Required	Annual Operating Cost
Weekdays	6:00 a.m. to 8:00 p.m.	60/30/60	1	$489,000
Saturdays	7:30 a.m. to 5:30 p.m.	60	1	$71,000
Sundays	9:30 a.m. to 5:30 p.m.	60	1	$56,000
			Total	**$600,000**

Note: Costs rounded to nearest $10,000. Total rounded to nearest $100,000.

Lake Chelan State Park Service

In both existing service and the Preferred Scenario, no transit service is available to or from Lake Chelan State Park in unincorporated Chelan County. The cost estimate in Figure 6-13 to provide a fixed route to the park assumes service would operate seven days a week, with reduced operating span on weekends. One bus would be dedicated to serving the park every 45 minutes, making a connection between downtown Chelan and Lake Chelan State Park, with potential stops at the Lakeside Park-and-Ride, Slidewaters, the Lady of the Lake dock, and other locations. One additional vehicle would be required to operate this service.

If implemented, this route has potential to being operating as a pilot seasonal service to gauge demand and ridership. Additionally, due to the high levels of tourism in the Chelan area in the summer, the hours of operation on this route could be adjusted to have longer hours of service on weekends and less service on weekdays.

Figure 6-13 Annual Cost Estimate for Lake Chelan State Park Route

Day of Week	Operating Span	Frequencies (mins.)	Peak Vehicles Required	Annual Operating Cost
Weekdays	6:00 a.m. to 8:00 p.m.	45	1	$489,000
Saturdays	7:30 a.m. to 5:30 p.m.	45	1	$71,000
Sundays	9:30 a.m. to 5:30 p.m.	45	1	$56,000
			Total	**$600,000**

Note: Costs rounded to nearest $10,000. Total rounded to nearest $100,000.

Quincy Commuter Service

Several key stakeholders and many members of the public suggested implementing a commuter-type public transit service between Wenatchee and Quincy. The cost estimate in Figure 6-14 to provide a fixed route between Columbia Station and the Quincy Valley Medical Center assumes service would operate on weekdays only, with four daily round trips between Columbia Station and Quincy Valley Medical Center, with stops at an East Wenatchee Park-and-Ride and Rock Island Park-and-Ride in both directions. One additional vehicle would be required to operate this service and it is assumed Grant Transit would pay half the annual operating costs.

Figure 6-14 Annual Cost Estimate for Quincy Commuter Service

Day of Week	Operating Span	Frequencies (mins.)	Peak Vehicles Required	Annual Operating Cost
Weekdays	6:00 a.m. - 10:30 a.m.; 3:00 p.m. - 7:30 p.m.	Four Daily Round Trips	1	$320,000
Saturdays	No weekend service.			
Sundays				
			Subtotal	$320,000
			Grant Transit Share	($160,000)
			Total	**$160,000**

Note: Costs rounded to nearest $10,000.

Priority Near-Term Infrastructure Projects

Several near-term infrastructure projects were identified as a part of this study. These improvements include projects that have been identified in previous plans, such as the N Wenatchee Avenue transfer station and the Rock Island Park-and-Ride, but also include new infrastructure improvements that support a successful implementation of the Preferred Scenario. Figure 6-15 describes pullout and access improvements that would support the Preferred Scenario. Although none of these improvements are *necessary* to implement the Preferred Scenario, their implementation would dramatically improve implementation outcomes.

Figure 6-15 Transit Vision Infrastructure Projects and Descriptions – Pullouts and Access Improvements

Capital Improvement	Project Description
Pullouts and Access Improvements	
N Wenatchee Avenue Layover Space	Route recommendations proposed as part of the Preferred Scenario de-emphasize the use of Columbia Station for vehicle charging and layover. For these recommendations to become fully effective and operationally feasible, new layover and charging space should be constructed in the vicinity of Walmart on N Wenatchee Avenue. There is potential for a transfer hub with a sheltered waiting area for riders to be developed in conjunction with layover space or at another time in the future.
Peshastin Bridge and US 2 Pedestrian/Bicycle Crossing	A pedestrian/bicycle crossing of the Wenatchee River is needed in Peshastin; the current roadway has no active transportation infrastructure. A Wenatchee River crossing and improved US 2 crossing at this location would allow Link Transit to serve Peshastin using US 2 highway stops, greater increasing reliability and reducing travel times for riders. A pullout for Link Transit vehicles traveling in both directions would improve transit operations.
Entiat US 97A Pedestrian Crossing	A HAWK or similar pedestrian crossing treatment on US 97A in Entiat would allow riders to safely cross the highway. This would make accessing transit safer and easier in Entiat.
Grant Road Crosswalks at Nevada and Mary Avenues	New residential development and the Preferred Scenario Route 13 will likely increase the number of people accessing transit on Grant Road. Adding crosswalks will make it easier and safer for people to make transit trips in this area. Increasing residential development may soon warrant the installation of these crosswalks, regardless of the status of transit service on this portion of Grant Road.
S Wenatchee Avenue northbound bus stops at Columbia Station	The Preferred Scenario proposes having some northbound trips through Columbia Station stop on S Wenatchee Avenue, adjacent to Columbia Station, instead of entering and exiting the transit center each stop. This would increase speed and reliability for these routes, reducing travel times for riders. To implement these stops, curb space on S Wenatchee Avenue between Thurston Street and Kittitas Street would need to be reprogrammed.

Figure 6-16 shows transit hub and park-and-ride improvements that would support the Preferred Scenario. More information on park-and-ride demand and recommendations can be found in Chapter 4 of this document. Although none of these capital improvements are *necessary* to implement the Preferred Scenario, several of them are essential for passenger comfort and protection from the elements, such as the Chelan Walmart mini transfer hub.

Figure 6-16 Transit Vision Infrastructure Projects and Descriptions – Transit Hubs and Park-and-Rides

Capital Improvement	Project Description
Transit Hubs and Park-and-Rides	
N Wenatchee Avenue Mini Transfer Hub	A mini transfer hub on N Wenatchee Avenue has been proposed during prior transit studies. As the Olds Station and north Wenatchee areas change, a transfer hub at this location would allow riders to transfer among routes traveling up and down the Columbia River and Wenatchee River valleys and circulating locally in the Wenatchee urbanized area. This transfer hub should have a sheltered waiting area for riders and be located proximate to layover space suggested in Figure 6-15.
Chelan Walmart Mini Transfer Hub	A mini transfer hub at the Chelan Walmart would allow riders to transfer between routes circulating among Chelan and Chelan Falls, and could potentially serve riders on long-distance routes from Wenatchee or on the Apple Line intercity bus. This transfer hub would ideally include a sheltered waiting area and layover space for transit vehicles. Good pedestrian access through the Walmart parking lot to the Walmart front door should also be prioritized.
Downtown Chelan Mini Transfer Hub	A mini transfer hub in downtown Chelan would allow riders to transfer among routes traveling to and from Wenatchee and Manson and routes circulating locally in Chelan and Chelan Falls. This transfer hub would ideally include a sheltered waiting area and pullouts for transit vehicles.
Icicle Quik Stop Layover Area	The layover and turnaround at the Icicle Quik Stop on US 2 is currently informal. Formalizing this infrastructure would make transit operations at this location safer and more efficient. This infrastructure could be shared with intercity bus services, such as the Northwest Trailways Spokane/Wenatchee/Seattle/Tacoma route.
Wenatchee Valley College Mini Transfer Hub	Wenatchee Valley College is a top transit destination in the Link Transit system. Improving transit access at this destination would benefit riders making the over 100 average weekday boardings that currently occur at this location, as well as people that might ride transit if the waiting or transfer experience was improved. This transfer hub would include a larger, sheltered waiting area, and could include an improved turnaround for transit vehicles that terminate at Wenatchee Valley College.
Rock Island Park-and-Ride	Link Transit has already acquired the property for a Rock Island park-and-ride, which could serve as a layover and transfer point for vehicles. A park-and-ride at this location would ideally include a sheltered waiting area for passengers, driver and/or passenger restrooms, and parking stalls. This facility could also include charging infrastructure for personal and transit vehicles.
Orondo Park-and-Ride	The Preferred Scenario recommends eliminating Route 20, which serves Orondo, north of US 2/US 97 intersection. Because of this, there may be demand from current or future riders for a park-and-ride near this intersection. This could also serve as a park-and-ride for passengers traveling to and from Waterville, or on the Apple Line intercity bus, which stops at the 76 gas station.

7 IMPLEMENTATION

Major service changes can take six months or more to implement. Having a detailed workflow in place, with people or teams named for each specific task, helps to ensure critical deadlines are met along the way. The process of implementing a service plan involves many departments working together, sometimes simultaneously and sometimes consecutively. This chapter outlines what to expect in terms of workflow and timeline and has two main components:

- **Framework:** The policies and procedures that set rules or guidance on what service looks like.
- **Service Change Process:** The steps used to get the buses on the road.

FRAMEWORK

Because people rely on the bus, changes to the system should be based on criteria for doing things differently. When adding or modifying service, there are guidelines and constraints that must be factored in. These activities occur outside of the service change process but directly impact what service on the road can look like. Policies and procedures developed as part of the framework implementation phase, as well as other steps necessary for service implementation, include the following:

- Service Guidelines and Performance Measures
- Public Outreach Process
- Labor Contracts
- Vehicle Acquisition
- Bus Stops and Capital Improvements
- Operator Recruitment

Service Guidelines and Performance Measures

Performance management strategies are a suite of policies that include program objectives, service standards, performance measures, and evaluation methodology and criteria. Agencies will differ in their definitions and wording, but performance management strategies are generally defined based on the following general categories:

- A ***performance measure*** describes the process by which existing services are evaluated. Examples include measures of ridership productivity, on-time performance, and passenger safety.
- A ***standard*** is the expectation that a measure is intended to achieve for existing services. Transit operators' approaches to the design and application of standards vary depending upon local conditions and expectations.
- A ***guideline*** serves as a framework for the provision, design and allocation of routes, schedules and stops. An example guideline might be that a rapid bus route requires a combination of employment and residents totaling at least 30 persons per acre within ½ mile of service.

Link Transit's performance standards were last updated in 2013.[1] These standards classify Link Transit fixed routes as 'Urban Fixed Routes', 'Regional Fixed Routes', 'Non-Urbanized Small Community Services', 'Urban Electric Trolleys and Low Emission Propane Vehicles', and 'DART' but are outdated, as Link no longer classifies its routes as such. Performance standard adherence indicates routes with potential for improvement through adjustment to alignments, enhancements to customer convenience, improved marketing, or other modifications to increase the route's attractiveness for riders.

Prior to implementation of the Preferred Scenario service change, it is recommended that Link Transit update the existing Performance Measures and Guidelines document. During this process, the agency could consider the following elements:

- Policies that address **minimum ridership guidelines** to help planners communicate when changes might better serve the community.
- Policies that address **crowding or maximum loads on buses** to help communicate when more resources are needed or where more service needs to be prioritized.
- **Route categories** to help planners and schedulers determine which vehicles belong where, and when, as well as helping Marketing better brand or reach the community.
- **Actionable plans and strategies** that help guide what to do with poorly performing routes within a route category can reviewed on a quarterly and/or annual basis. The goal is not to have drastic solutions to poorly performing routes, but to help define what is meant by a route designated as performing poorly, so that the appropriate changes can be made to best serve the community.
- Policies could also be developed for **bus stop placement**, such as whether Link Transit prefers bus stops to be before or after an intersection, although these changes can occur outside the service change process with additional community input or as part of the process to be completed with a future scheduled service change.
- Policies that detail when a **shelter or bus stop amenity** should be considered. This can also happen outside the service change process but should be clear enough to answer questions from the public and allow for a functional process to make changes seamless and trackable.

Timeline: *Can be revised at any time but should not change more than annually so that trends can be tracked.*

Lead Team: *Planning, with feedback from Operations, Administrative Services (Safety), and Maintenance.*

Public Outreach Process

After Board approval of the plan, Link Transit's Marketing department should develop an outreach plan to communicate and gather additional feedback on the CSA recommendations, which represent a significant service change for the agency. A public outreach process that ensures the public is fully aware of updates to service, as well as how to participate in the process, is necessary for a smooth transition. Communication with the public is one of the most important aspects of a service change.

As it becomes available, information about changes to routes and implementation dates should be disseminated through multiple channels to reach as many people as possible. Guest Services will need to be able to answer questions and give accurate information, so the flow of information between departments needs to be ongoing.

[1] Link Transit. 2013. *Fixed Route Performance Measures and Guidelines 2013 Update.*

Timeline: *Ongoing.*

Lead Team: *Marketing, working with Planning, Operations, and Guest Services.*

Labor Contract

Union rules set policies on when driver breaks can happen and what driver shifts can look like. This matters because it impacts how the buses are scheduled. If a bus only needs to be refueled every 18 hours, the limiting factor is then driver breaks. Scheduling new or modified service must keep Union rules in mind.

Timeline: *After a new labor contract goes live (scheduled every three years), before a new service change becomes effective.*

Lead Team: *Planning, will confirm with the Union to make sure all driver schedules are in compliance.*

Vehicle Acquisition

The number of vehicles in an agency's fleet is a constraint in how service is allocated. The planning process is meant to determine how many vehicles would be needed to right-size the system. The service change process entails schedulers using existing vehicle information, such as rider capacity, size of bus, and frequency of service to maximize the efficiency of service. The purchase of new vehicles can take significant time and should be planned for well in advance.

Timeline: *New vehicle acquisition can take up to two years; Link Transit should aim to maximize the use of existing vehicles in the near-term.*

Lead Team: *Procurement, Maintenance, Operations, Planning, Finance.*

Bus Stops and Capital Improvements

Changes to bus stops can include shelters, bus stop signs, benches, trash cans, and real-time information. The service guidelines mentioned above can include what criteria must be met to get an amenity at a bus stop. Working with local jurisdictions can also entail partnerships for sidewalks, curb cuts, safety enhancements like lighting, and crosswalks.

Link Transit will also need to move forward with pursuing options for larger capital improvements, which may include property negotiations and pursuit of additional transfer hubs and layover locations. Additional recommendations related to these elements are available in Chapter 6.

Timeline: *Ongoing.*

Lead Team: *Planning and Finance teams can confirm locations with Maintenance and Operations, as well as informing Procurement to make any new purchases.*

Operator Recruitment

How many bus operators a system has can be a limiting factor of the level of service that can be provided. With the retirement of bus operators around the country, attrition is something that all agencies need to be mindful of for future planning. An approved service expansion may require a phased approach, depending on whether new drivers need to be hired. Hiring and training CDL drivers will take a minimum of eight weeks of training. This can be done as part of the service change process or external to the process, so that the full on-boarding is done prior to the training on the specific routes that happen right before the effective start date.

Timeline: *Ongoing.*

Lead Team: *Administrative Services with assistance from Operations.*

SERVICE CHANGE PROCESS

Service recommendations that reflect significant changes can take from two to six months to implement, in addition to activities discussed previously in the framework process that cannot be conducted concurrently. To move from an approved plan to putting service on the road entails many consecutive actions, and the variation in timing depends on the magnitude of the changes. Given that the CSA recommendations reflect significant changes and expansion of service, Link Transit should ensure sufficient time is available for the service change process.

The overarching activities of a service change include:

1. **Route and bus stop modifications** are entered into the scheduling software. Any changes to layover locations, stops, running or cycle times (how long the bus takes to go one way, or round-trip including recovery time), frequency, or new operator rules are also included.

   Timeline: *Four to six weeks, depending on how complicated the service change is.*

   Lead Team: *Planning.*

2. The software is then used to cut the route into trips. **Vehicle blocks** are created based on vehicle requirements, operating constraints, and labor rules. There can be dozens of iterations to look for the most efficient use of the vehicles. Next the **driver work assignments** are cut for the operators. This also requires iteration.

   Changes to the number of vehicles, capacity of vehicles, or range of vehicles in the case of electric buses can all impact service even if there are no other service changes. Service plans that require a modification to the number of vehicles or operators/staff required to run the service should be anticipated in advance and can be expected to be phased in at a later service change date.

   Timeline: *Up to four weeks, depending on magnitude of changes to vehicles and the number or types of work assignments.*

   Lead Team*: Planning.*

3. Drafts of the driver assignments are then sent to the **Union and Operations for review**.

   Timeline*: Two to four weeks, to allow for revisions, discussion, and changes.*

   Lead Team*: Union reps, Operations, Planning.*

4. Once the schedules are set and approved, **new schedules are developed for print and web**. This includes changes to maps that are published at a system-level and route-level. Updates to website started. Translation for Title VI materials also happens here. Getting the word out about the date of service changes should happen with a minimum of six weeks before the start date so that people whose daily lives will be changed have time to plan accordingly. Advertising the service change and date through as many channels as possible can start as soon as the runs and blocks are finalized.

   General Transit Feed Specification (GTFS) can also be run with an effective start date in the future that can go live at the appropriate time.

   Timeline*: Four weeks to finalize content, some ongoing efforts to disseminate through the effective start date and at least two weeks after. Print times may vary.*

   Lead Team*: Marketing, Planning.*

5. Updates to **turn sheets** for the operators and **route sheets** for driver training.

   ***Timeline**: Two weeks, but can be concurrent to the new schedules and maps being developed.*

   ***Lead Team:** Service Planning.*

6. Update **destination sign codes**, upload to all buses the night before service.

   ***Timeline**: One week.*

   ***Lead Team:** Service Planning, IT, Maintenance.*

7. Identify the list of work orders needed for **removing, adding, and updating bus stop signs** and where the work orders need to be placed so that they can be scheduled. Changes to other amenities can take place at the same time or be phased in after the service change, as time and staffing resources allow.

   ***Timeline**: Two weeks, but can overlap with turn sheet and map edits.*

   ***Lead Team:** Planning, Maintenance, Facilities.*

8. Operators will pick the **work assignments**.

   ***Timeline**: Union has a two-week bidding process.*

   ***Lead Team:** Operations.*

9. **Training** begins for operators and Guest Services representatives.

   ***Timeline**: One week for Guest Services; time for operators based on any Union policy or Memorandum of Understanding (MOU) for operators and extra board.*

   ***Lead Team:** Guest Services, Operations.*

10. The night before the service change, all bus stop signs should be finished or have temporary signs up. The destination signs on the buses should go live. New operator paddles should be in the right location for a Sunday start.