

WASCO COUNTY  
**TRANSIT**  
**DEVELOPMENT PLAN**  
THE LINK PUBLIC TRANSIT



JUNE 2022

## ACKNOWLEDGEMENTS

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The development of this plan was guided by the Project Management Team (PMT), Advisory Committee (AC), and members of the public. Each individual devoted their time and effort to provide valuable input and feedback and their participation was instrumental in the development of the plan.

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## INTRODUCTION

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Wasco County currently contracts with the Mid-Columbia Economic Development District (MCEDD) as operator of The LINK Public Transit to provide intercommunity and demand-response service within the county and connecting to regional destinations. MCEDD also receives its own direct grants to provide deviated fixed-route and demand-response service in Wasco County.

MCEDD currently provides one inter-county route to Hood River, a shuttle to South County, a shopping shuttle between The Dalles and Hood River, two loop routes in The Dalles, and Dial-a-Ride services within Wasco County.

This Transit Development Plan (TDP) evaluates a program of service improvement alternatives and presents options to pursue over the 20-year plan horizon, including planned service modifications.

### Plan Development

A series of technical memoranda were developed during the TDP process and provided the building blocks for the project, addressing existing conditions and performance. As work progressed, future conditions were evaluated and mobility needs and opportunities were identified. The Project Management Team (PMT) guided the preparation of these technical memoranda in coordination with the Advisory Committee (AC) and input from community meetings. These interactions helped guide the development of the Transit Development Plan as well as build necessary consensus and support. Members of these groups are listed in the Acknowledgements section. The memoranda developed during the process are provided in Appendix A and include:

- Memo #1: Public Involvement Plan
- Memo #2: Existing System
- Memo #3: Unmet Transit Needs and Transit-Supportive Development Strategies
- Memo #4: Evaluation Framework
- Memo #5: Future Service Opportunities

- Memo #6: Goals, Policies, and Practices
- Memo #7: Future Service Design and Supporting Programs

The ideas presented in the memoranda have been refined throughout the plan development process and therefore are not identical to those presented in this plan. A summary of the recommendations in this plan can be found in Figure 1.

## Public Involvement

The project process included several touchpoints where stakeholders and the public could provide input.

### *Project Webpage*

MCEDD created and maintained a Project Webpage on the MCEDD website that provided project information, schedule, technical memoranda, and opportunities to provide input.

### *Stakeholder Outreach Events*

Two rounds of virtual outreach events were held with small groups of stakeholders. The first round introduced the project, solicited comments about how well existing transit services addressed community needs, and generated ideas for future or improved services. The second round gathered input on service opportunities.

### *Online/On-board Survey*

A questionnaire was provided both online and on-board during the summer of 2021. The survey asked about peoples' origins and destinations, reasons why they take transit, and ideas for improving transit service. The survey response provided an important picture of how and where people are using the system.

### *Open House*

An open house was held in the Spring of 2022. This open house included a livestreamed virtual meeting and an in-person event at the Transit Center. The open house provided information about draft service opportunities and solicited the public's input on those opportunities.

## Updating the Plan

The TDP should be updated periodically to reflect changing needs, as well as lessons learned from implementing the plan's short-, medium-, and long-term recommendations. These updates will allow the County to monitor progress toward implementing projects, update the financial outlook, and verify the population, land use, and growth trends used to determine and prioritize service enhancements. Wasco County needs to update its STIF plan every two years per the STIF rules, but such a plan does not necessitate updating the TDP. The County and local jurisdictions can supplement the TDP by considering transit improvements and walking and biking access to transit in their other planning efforts.



# WASCO COUNTY TRANSIT DEVELOPMENT PLAN RECOMMENDATIONS

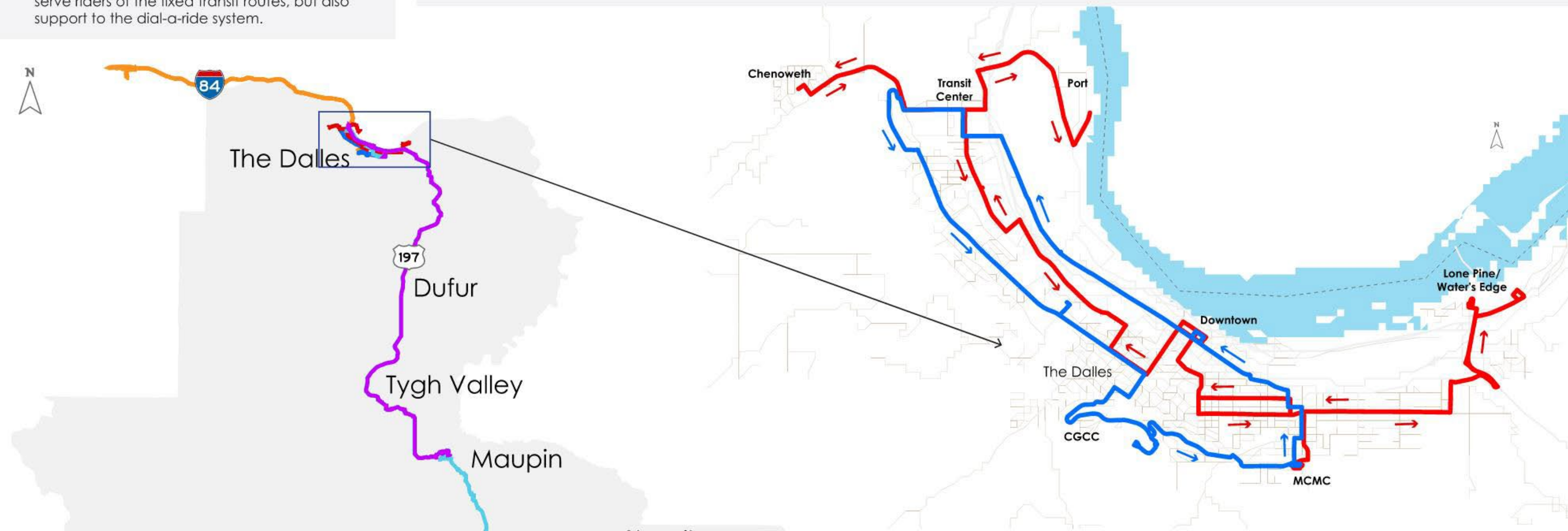


## Continuous Improvements

- The LINK should use the proposed monitoring program and new technologies to continuously assess community needs and service performance, and update the plan's recommendations as needed.
- In addition to the plan's route recommendations, providing information and technology improvements (trip planning apps, real-time vehicle arrival information) and enhancing the vehicle fleet (electric/hybrid fuels) will help improve rider experience and service reliability.
- These recommendations are meant to not only serve riders of the fixed transit routes, but also support to the dial-a-ride system.

## Short-Term Improvements

- **Extend the Intercity Express Route between The Dalles and Hood River:** Extending The Dalles–Hood River service to connect to Columbia Gorge Community College (CGCC) campuses at both ends of the route could help students, faculty, and staff travel between campuses.
- **Expand Out-and-Back Route to Maupin:** The LINK could serve Maupin more frequently by replacing the existing South County service, rather than providing as much by-request dial-a-ride service. The more consistent schedule would make it easier for people to plan trips.
- **Convert the Red Line from a loop to an out-and-back route and revise the Blue Line to serve 2nd Street:** The revised Red Line is intended to meet riders' need to travel between Water's Edge, the Transit Center/Chenoweth, and destinations in between. To reduce travel time, the route alternates between stopping at the Port (which is located near a health clinic and transitional housing) and stopping in Chenoweth. It also provides access to the high school, Mid-Columbia Medical Center, the Veterans Service Office, Goodwill, and neighborhoods throughout the city. Once the Red Line is converted from a loop to an out-and-back route, the Blue Line can be modified to serve 2nd Street rather than the Port. This change would increase the overall area served by transit while shortening the Blue Line's total length and the time it takes riders to get to their destination. In addition, **add stops to the Blue Line**. Frequent stops along the route makes it easier to catch the bus at permanent stops rather than having to schedule pick-ups and drop-offs in advance.





### Mid-Term Improvements

- **Create New Out-and-Back Route to Madras:** With additional funding sources and inter-county coordination, The LINK could investigate providing a new intercity express route with stops in Madras, Maupin, Tygh Valley, Dufur, and The Dalles. This route could be a modification to the South County Shuttle, with fixed time-points and potential deviation areas or zones where riders can request a more direct pick-up or drop-off at the curb, reducing the resources needed to implement the route. This service would support transfers to Cascades East Transit services in Warm Springs/Madras, Central Oregon Breeze, and bus routes in The Dalles, providing transit connections from Wasco County to central and eastern Oregon.
- **Create New Out-and-Back Route Connecting Warm Springs Reservation, Madras, Shaniko, and Antelope:** The LINK could further investigate demand to provide a new route with stops in the Warm Springs Reservation, Madras, Antelope, and Shaniko. The route could be operated to provide two trips per day, two times per month. This route would need a bus to be based in this area to reduce the travel time and cost for a vehicle to come from The Dalles, potentially through a partnership with Cascades East Transit. The service would have zones where riders can request pick-ups and drop-offs off of the normal route.

### Long-Term Improvements

- Monitor future development near the Port and revise the **Red Line** as needed
- Add new downtown express service in The Dalles or accomplish via **The Dalles to Hood River** extension
- Upgrade the **Downtown Transit Stop** to a transit center
- **Expand service hours** on routes

The following capital improvements could improve the experience of riding the bus and support the recommended changes described above:



Secure funding to replace vehicles according to their expected useful life to increase service reliability and decrease maintenance costs



Upgrade the Downtown Transit Stop to have more amenities, such as covered areas and more bike racks



Pursue charging and alternative fueling facilities to support the purchase of hybrid or fully electric vehicles, which not only provides environmental benefit but can lower fueling and maintenance costs



Provide additional route signage, benches, and transit shelters at bus stops that are commonly used



Improve branding through new vehicle wraps and signs at bus stops



Pending the availability of charging and alternative fueling facilities and funding grants, purchase hybrid or fully electric vehicles



The following technology improvements could improve the experience of riding the bus and support the service opportunities described above:



Support mobile apps and online resources to help plan trips. For example, integrate route information into Google Maps so that the public can get information about how to travel between destinations using transit.



Provide real-time vehicle arrival information that shows riders where the bus is, and whether the bus is on-time. Real-time information helps improve the ridership experience by reducing passenger wait times, providing confidence that a bus has not been missed, and generally creating a more informed and comfortable rider.



Provide additional education and support for understanding ways to pay transit fares. The LINK currently provides mobile ticketing through The GORge Pass and for The LINK.

## GOALS, POLICIES, AND PRACTICES

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A set of TDP goals and policies were developed to serve as a framework to guide Wasco County's future transit planning and investments. The goal and policy language were drawn from a number of resources, including the goals, policies, objectives, and strategies identified in relevant federal, state, and local plans and documents. In particular, the MCEDD Gorge Regional Transit Strategy and the Wasco County Coordinated Human Services Public Transportation Plan (2020–2024) helped shape the proposed goals and policies. These plans were developed recently and specifically for Wasco County and the region, with a focus on increased coordination and serving those who are transportation-disadvantaged.

This TDP project's objectives, as well as "best practices," were developed based on input from the Advisory Committee and reflected in the goal statements for the evaluation framework. Proposed city and county transit-supportive policies also influenced the TDP's policy language.

The TDP's goals and policies are as follows:

**Goal 1: Customer-Focused Services** – Provide services that are safe, attractive, and convenient for all riders.

Policy 1A. Facilitate access to transit service for all community members, with a focus on services for community members who may be transportation-disadvantaged due to age, abilities, and/or income.

Policy 1B. Improve safety for transit riders through transit facility design such as lighting and transit stop location.

Policy 1C. Improve safety for transit riders through coordination with other agencies regarding pedestrian and bicycle crossings near transit stops and complete, low-stress walking and biking connections to transit stops.

Policy 1D. Focus transit service on destinations that are important to community members, particularly those who are transportation-disadvantaged, including employment centers, training and education facilities, stores and shopping centers, human and health services, and recreation locations.

Policy 1E. Improve convenience through expanded fare payment options, fare integration with other transit systems in the region, and mobile tools and apps.

Policy 1F. Determine customer needs through direct outreach, consultation with service providers, and findings from other planning efforts.

Policy 1G. Improve transit education and marketing, particularly through outreach to transportation-disadvantaged and underserved groups that focuses on bilingual marketing and outreach and travel training.

**Goal 2: Accessibility and Connectivity** – Improve access and connections within and between communities in the county as well as key destinations outside the county.

Policy 2A. Coordinate with local planning and roadway authorities to ensure that transportation system-related improvements such as pedestrian and bicycle crossings, transit



stop infrastructure, and ADA-accessible connections to transit stops are incorporated into planned projects.

Policy 2B. In coordination with local jurisdiction partners, facilitate first- and last-mile connections to transit stops, such as making arrangements with shared mobility facilities and services (e.g., taxis, shuttles, bike sharing, and other mobility sharing).

Policy 2C. Coordinate with the local jurisdiction and property owners on potential park-and-rides and transit hubs where multiple modes could connect.

Policy 2D. Support improvements in access and connections to transit that are appropriate for the context and size of the community and its existing and planned transit service.

Policy 2E. Adopt transit stop design and construction standards, including amenities that must be provided at major transit stops, to serve as a planning and coordination tool.

**Goal 3: Coordination** – Collaborate with public and private partners to maximize services.

Policy 3A. The transit service provider should participate in the review of land use proposals that may impact transit service or existing or planned transit uses and improvements.

Policy 3B. Coordinate with local jurisdictions and development applicants regarding any transit-related improvements, such as shelters, benches, and/or lighting, that are identified in adopted transportation and transit plans.

Policy 3C. Continue to explore and develop connections between transit and other existing and potential transportation services, such as taxis, The Dalles Downtown tourism shuttle, and ride hailing services, and emerging technologies such as micromobility services (e.g., scooter and bike sharing).

Policy 3D. Continue and strengthen collaborations with other transit service providers in the region, human and health service providers, and major employers to expand the efficiency and reach of transit service.

Policy 3E. Ensure decisions regarding future transit service and coordinated transportation improvements align with the TDP and key policy documents including the latest Wasco County Human Services Public Transportation Coordinated Plan and the Gorge Regional Transit Strategy.

**Goal 4: Health** – Foster public health by increasing use of active travel and improving access to the outdoors, health care, healthy food, and similar healthy places.

Policy 4A. Support safe and complete walking and biking connections to existing and planned transit stops so that community members and visitors have active transportation options to access transit.

Policy 4B. Increase transit access to health-supporting destinations such as grocery stores, parks and open spaces, community spaces, health care, and human services.

Policy 4C. Improve transit access to local and regional recreation destinations for community members and visitors.

Policy 4D. Integrate transit into emergency response planning to bolster the resiliency of communities in Wasco County.



**Goal 5: Sustainability** – Foster environmental, economic, and fiscal sustainability through transit investments.

Policy 5A. Promote and rely on transit to reduce single-occupancy vehicle trips and greenhouse gas emissions and to increase energy conservation.

Policy 5B. Encourage the use of transit as a way to conserve land, including as a way to reduce land needed for parking in cities and at trailheads in Wasco County.

Policy 5C. Where recreation destinations are experiencing over-use, consider transit service to help regulate access and protect the resource.

Policy 5D. Promote transit service as a tool in economic development, including business and employee recruitment and retention, community revitalization, and tourism enhancement.

Policy 5E. Establish stable and effective transit funding through the following: establishing diverse sources; strategically leveraging local funding to compete for state and federal funding; and securing efficiencies by coordinating services with other transit and transportation service providers.

## NEEDS SUMMARY

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Transit needs were identified through the following methods:

1. Conducting an onboard and online survey that was available from July to August 2021. A total of 49 responses were received related to bus use, locations where people would like to use transit, tools that would make riding the LINK more convenient, improvements the LINK transit service needs, and barriers to using transit in Wasco County.
2. Reviewing other planning processes in the area, including the Coordinated Human Services Transportation Plan Update.
3. Analyzing the existing transit system, including reviewing historic ridership data.
4. Conducting outreach calls to community organizations, agencies, and businesses, such as the Wasco County Business Alliance.

Through this process, the following needs were identified:

- **Improve efficiency of route service:** The two existing transit routes in The Dalles largely travel east–west in a counterclockwise loop direction. Adding more north–south connections, converting routes from loops to out-and-back lines, and adding or shifting a route to serve clockwise travel could improve the efficiency of passengers' trips.
- **Increase service frequency, extend service hours, and provide weekend service:** The highest-priority improvements for survey respondents to the first survey were increased frequency (how often a bus goes to a stop), extended service hours, and weekend service. Survey respondents also ranked "service to more destinations" highly. Non-riders stated that they do not use transit services due to service coverage (where the bus goes), frequency, and/or hours of operation that do not meet their needs.
- **Improve bus stop amenities and access:** Individual bus stops on existing and proposed transit routes could be improved with amenities, sidewalk access, park-and-ride access, and more.

- **Update vehicle fleet:** The LINK recently replaced several vehicles that were beyond their useful service life and will need to continue to replace vehicles as they reach the end of their useful service life. Cleaner fuel sources, such as electricity, could be considered for future vehicle purchases and facilities.
- **Increase education and marketing:** Bus stops are not widely used by riders, in part due to The LINK operating as a dial-a-ride system for more than two decades, leading to many riders being unfamiliar with how to plan a trip by catching the bus at an existing bus stop. The survey also identified a lack of awareness of The LINK's shuttle services. A lack of information about service is cited in non-riders' survey responses as a barrier to using transit service. Establishing trip-planning tools for users and marketing the availability of stops would help improve the usage of The LINK's services.
- **Update tools and technology:** Tools that respondents felt would increase the convenience of their trips include more fare payment options, mobile trip-planning tools, real-time vehicle arrival information, and more bicycle racks. Difficulty planning trips was cited in non-riders' responses to the first survey as a barrier to using transit service.

Additionally, new and/or modified transit routes and services can be tailored to serve a diverse set of transit markets in Wasco County. The table below summarizes the existing and potential future service types to address transit market needs in Wasco County.

**Table 1: Service Types to Address Transit Market Needs**

Transit Market	Local Fixed-Route	Shuttle/Deviated Fixed-Route	Intercity/Express	Vanpool	Demand-Response
Existing Transit Users within The Dalles	Potential	Existing	—	—	Existing
	Potential new stop locations could support a transition from deviated-fixed route to fixed-route without deviations (or with fewer deviations than currently made). This change could make it easier for people who need to take trips daily (such as to go to work) or who have spontaneous trips (like going to a restaurant) without having to schedule the trip in advance. Existing users have a need for expanded service hours and weekend service.				
Increasing Development inside The Dalles	Potential	Existing	—	—	Existing
	Upcoming development in The Dalles can generally be served by the same routes. New stops could be added to existing routes and/or new routes could be added to serve developing areas of The Dalles.				
Transit-Dependent Populations in Rural Areas	—	Existing	—	—	Existing
	Continuing to provide shuttle services and demand-response services to rural areas is likely the most efficient way to meet the needs of this market.				
Growing Populations inside Urban Growth Boundaries	—	Existing	Existing (CAT)	Potential	Existing
	Population growth primarily affects The Dalles, where the greatest population growth is expected. Some growth is expected in Mosier and Maupin, while limited growth is expected in unincorporated areas. Partnering with other agencies in the Gorge TransLink Alliance to expand transit services between populations within Urban Growth Boundaries and encouraging use of vanpools can help serve growing populations in these areas.				

Transit Market	Local Fixed-Route	Shuttle/Deviated Fixed-Route	Intercity/Express	Vanpool	Demand-Response
Users Making Personal/Miscellaneous and Recreational Trips	Potential	Existing	Existing	Existing (private)	Existing
	Adding stop locations and expanding service hours for existing services can improve access for users who want to make personal and recreational trips to locations within Wasco County outside of typical working hours.				
Tourism and Service Industry	Potential	Existing (private)	Existing (CAT)	—	Existing
	There is currently an existing private shuttle between hotels and restaurants in The Dalles. The LINK provides weekday, and the CAT provides weekend, service between The Dalles and Hood River, with connections to Portland. Additional shuttle service and intercity services to connect tourists and workers in the industry could meet the needs for these markets and support a “Safe Ride Home” program.				

More information about these needs and how they were identified is provided in [Memo #3: Unmet Transit Needs and Transit-Supportive Development Strategies.](#)

**Figure 2. Transit Needs**





## FUTURE SERVICE OPPORTUNITIES AND SERVICE PLAN

Future routing service opportunities are identified by timeframe. The prioritization of these opportunities considered several factors, including evaluation results, funding availability, and other factors influencing decision-making, including other services and capital purchases.

Table 2 shows recommendations for short-term, mid-term, and long-term implementation of the recommended service opportunities.

- **Short-term (0–5 years) plan** includes items that are low cost to implement, have high ridership potential, and improve connectivity to other providers. No new buses are needed for these opportunities.
- **Medium-term (5–15 years) plan** includes items that are low-to-medium cost and improve travel time, connectivity, and access. Some of these opportunities require purchasing additional buses.
- **Long-term (15+ years) plan** includes items that are medium-to-high cost to implement, have moderate to higher ridership potential, increase connectivity, and increase service availability and frequency.

The intent of these implementation tiers is to provide a plan for implementing service opportunities that considers the complexity and capital requirements. The **unconstrained** column in the table outlines additional opportunities The LINK could implement if and when additional funding becomes available.

**Table 2: Recommended Service Opportunities**

Route	Short-Term	Medium-Term	Long-Term	Unconstrained
<b>Red Line</b>	Convert the Red Line from a loop to an out-and-back line and add stops	--	Adjust route to serve future development near the Port	--
<b>Blue Line</b>	Add stops and reduce Blue Line frequency to allocate time to Red Line. Revise Blue Line for future development at the same time as converting the Red Line.	--	--	Add a clockwise version of the Blue Line
<b>Downtown The Dalles Express Route</b>	--	--	--	Create new out-and-back route in The Dalles (via 6th Street and 7th Street)
<b>Service Enhancements in The Dalles</b>	Provide dial-a-ride service on Sundays		--	Extend service hours in The Dalles. Provide weekend service in The Dalles.
<b>Hood River</b>	Extend The Dalles – Hood River service to connect to CGCC	--	--	Increase service frequency between The Dalles and Hood River

Route	Short-Term	Medium-Term	Long-Term	Unconstrained
South County – Maupin	Expand South County route to Maupin, operating 2 days/week; 2 trips/day	--	--	--
South County – Madras	--	Create route to Madras, operating 2 days/week; 2 trips/day	--	Increase service frequency to more days per week
South County – Warm Springs Reservation, Madras, Shaniko, Antelope	--	Provide service 2 days/month; 2 trips/day	--	Increase frequency of service to more days per month
Information and Technology	Provide real-time vehicle arrival information	Monitor the reliability of real-time vehicle arrival software and trip planning software. Monitor and consider implementing emerging technologies.		--
Education and Marketing	Provide continued education and marketing; update LINK branding on buses, stops and signs. Provide information about where the service goes, how to ride the bus/use stops, and how to pay fares.			--
Capital Plan	Add bus shelters and route information to bus stops  Replace vehicles at the end of service life	Purchase new buses  Electrify vehicle fleet	Purchase new buses  Add a second transit center in Downtown The Dalles	--

### Short-Term Service Plans

Short-term service plans include service opportunities that could be implemented within the next five years. Under the fiscally constrained scenario, The LINK cannot make changes that increase service costs in the short-term unless they receive discretionary STIF or FLAP funding for service to extend/expand South County. Within the Dalles, the recommended Blue Line and Red Line changes reallocate existing resources and provide minimal increases to dial-a-ride service, staying within existing funding sources.

### Update Existing Routes in The Dalles

Existing routes within The Dalles can be modified to better serve existing travel patterns and identified needs. Generally, these route modifications provide additional connections to/from employment and residential areas. Recommended updates to the deviated-fixed route services are shown in Figure 3<sup>1</sup> on page 15 and described below.

<sup>1</sup> The grey circles show a ¼-mile walking-distance radius around potential transit stop locations. Transit stops along the deviated fixed-route lines are needed every ¼ – ½ mile. Stop locations shown in the map are approximate and need to be further refined to confirm that there is available space for transit stop amenities and there is a safe place for a bus to stop.

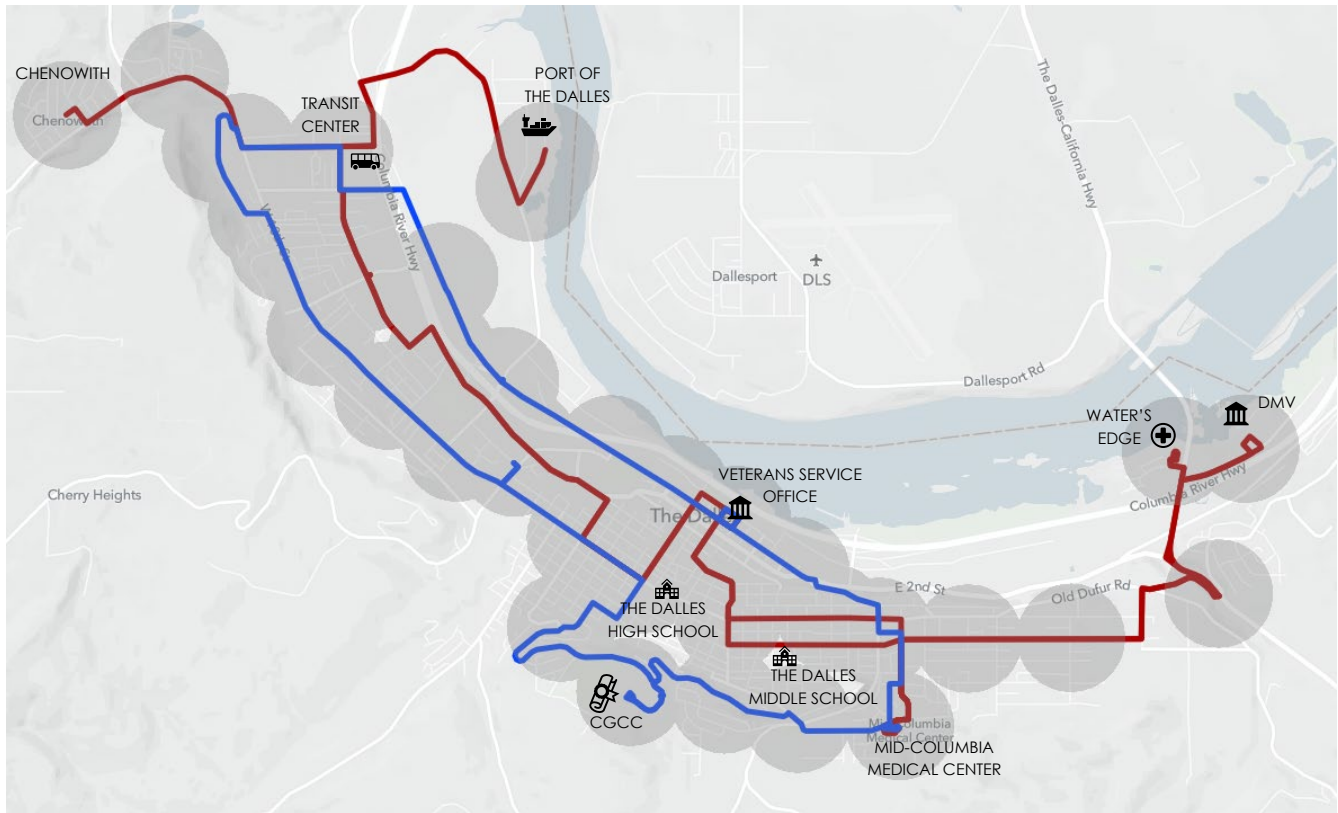
- Add stops to the Blue Line
  - The Blue Line is currently the more established deviated-fixed route within The Dalles. Maintaining the established route or similar in the short-term can help decrease the impact changes have on existing ridership.
  - Frequent stops along the route can encourage riders to catch the bus at fixed stops rather than requesting deviations and using dial-a-ride. They also facilitate more frequent connections to other services. These stops can initially be placed with minor amenities, such as signage and possibly a simmi seat, and include buses stopping in traffic where safe, while stop locations are being refined.
- Convert the Red Line from a loop to an out-and-back route and revise the Blue Line to serve 2<sup>nd</sup> Street
  - Currently, both of The LINK's routes operate as counterclockwise loops. Converting the Red Line from a loop to an out-and-back route can facilitate direct travel through The Dalles and support faster connections to locations and other routes.
  - The route is intended to meet existing riders' need to travel between Water's Edge and the Transit Center/Chenoweth. To reduce travel time, the route alternates between stopping at the Port (which is located near a health clinic and current transitional housing) and stopping in Chenoweth. It also provides access to the high school, Mid-Columbia Medical Center, the Veterans Service Office, Goodwill, and neighborhoods throughout the city.
  - Once the Red Line is converted to an out-and-back route, the Blue Line can be modified to serve future development along 2<sup>nd</sup> Street rather than the Port. This change would increase the overall area served by transit while shortening the Blue Line's total length.
  - Frequent stops along the route can encourage riders to catch the bus at fixed stops rather than requesting deviations and using dial-a-ride. They also facilitate more frequent connections to other services.

The **Bus Stop Design Guidance** in the Capital Plan discusses best practices in locating bus stops and recommended amenities based on activity, neighboring land uses, and other factors.

Under a fiscally constrained scenario, these modifications require reallocating service from the Blue Line to the Red Line so that both routes can operate at hourly headways. Additionally, under a constrained scenario it would be feasible to provide dial-a-ride service on Sundays from 9:00 AM to 4:00 PM or to provide an additional hour of dial-a-ride service each weekday. Ground testing conceptual schedules to ensure timing and driver breaks, reworking staff schedules, and potential hiring additional staff would be needed to make these changes.

Under a fiscally unconstrained scenario, the Blue Line could maintain its existing headway, which ranges between 30 and 60 minutes depending on the time of day. In addition, a clockwise version of the Blue Line could be added so that people could travel from the resource center located near the transit center back to destinations along 2<sup>nd</sup> Street without having to take the full loop.

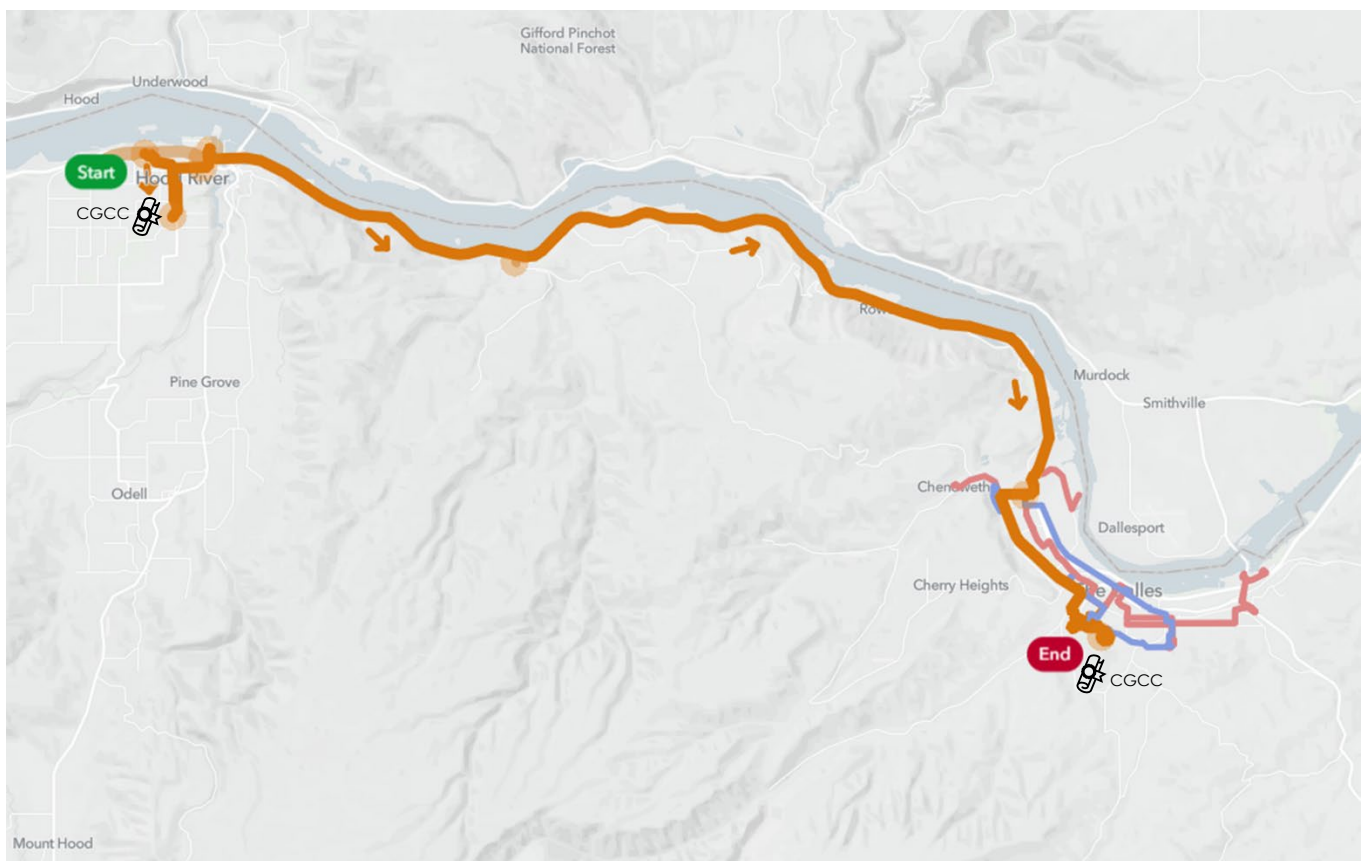


**Figure 3: Convert the Red Line from a Loop to an Out-and-Back Line and Revise Blue Line to Serve 2<sup>nd</sup> Street**

### ***Extend the Intercity Express between The Dalles and Hood River***

Extending The Dalles–Hood River service to connect to Columbia Gorge Community College (CGCC), as shown in Figure 4, could help students, faculty, and staff use the intercity route to travel between campuses. This connection could also be achieved by interlining<sup>2</sup> The Dalles – Hood River Intercity Express with the local fixed-route in Hood River and the Blue Line in The Dalles. Based on existing service hours and resources, under a fiscally constrained scenario, the college campuses would be served 2–3 times per day. Alternatively, this route could interline with local services to downtown instead or on alternating runs of the service, depending on connections with the Blue and Red Routes which serve CGCC and downtown, respectively. This route could also extend toward Rosauer's in Hood River and enhance connections with CAT's Upper Valley route, which currently only connects with the The Dalles – Hood River route on two of its runs per day.

**Figure 4: Extending The Dalles – Hood River Service to Connect to CGCC**



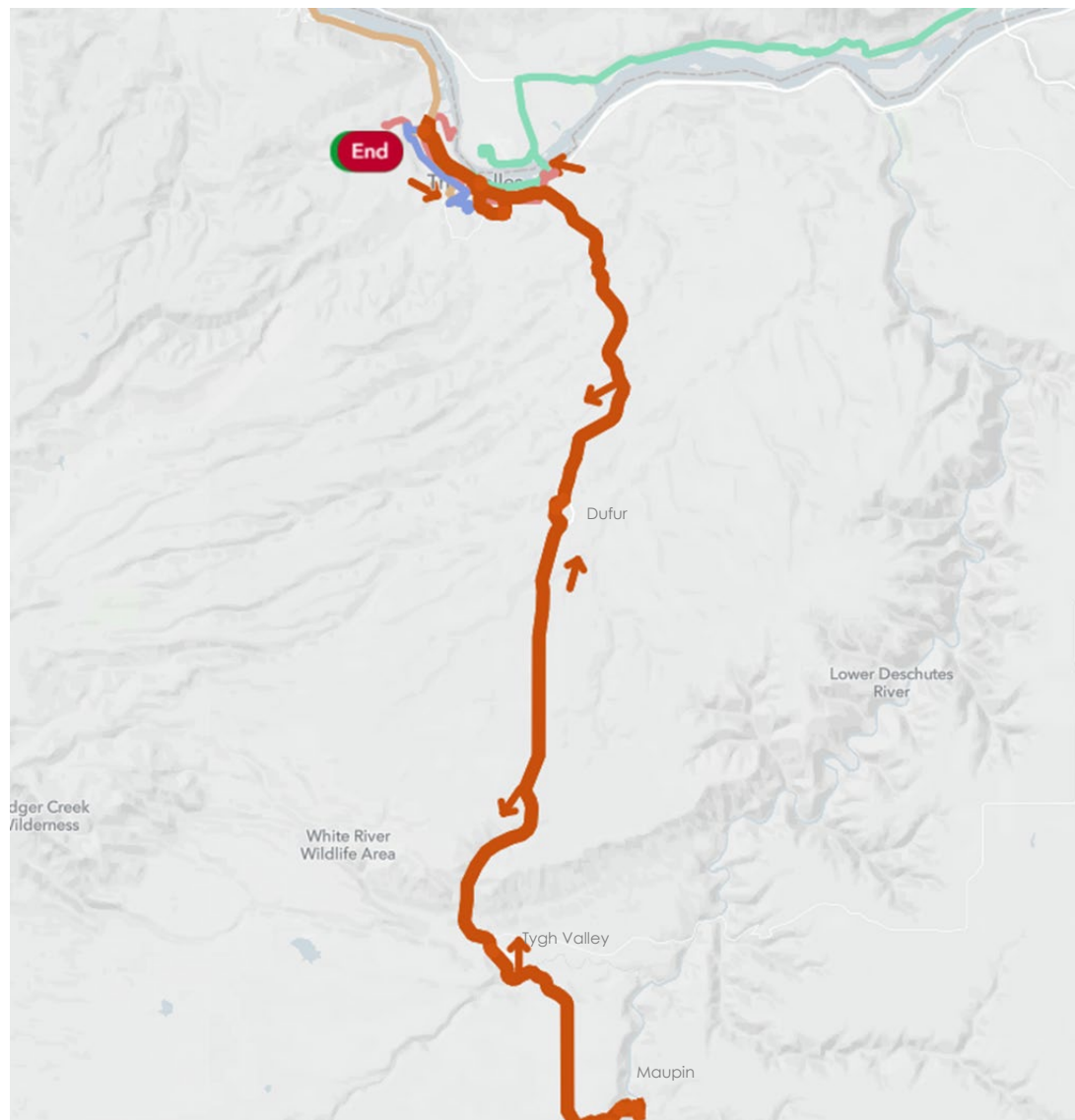
<sup>2</sup> Interlining is using the same bus to travel to regional destinations, such as Hood River, after it completes the local route. Interlining can provide a one-seat ride and not require additional service or vehicles.

### ***Provide Additional Service to and Around South County***

Deviated fixed-route transit service to South County could be expanded. Recommended short-term service expansions and updates are illustrated and described below.

- Replace the South County shuttle with an expanded intercity express route with stops in The Dalles, Dufur, Tygh Valley, and Maupin. The route is illustrated in Figure 5 below, and the potential stop locations are shown in Memo #5: *Future Service Opportunities*.
  - This route would have fixed timepoints and potential deviation areas or zones, reducing the resources needed to implement the route. Deviation areas or interlined local service can support a “dumbbell”-shaped route, providing both local and regional connectivity.
  - Operate the route two consecutive days per week, providing two trips per day. This schedule allows riders to complete their trip within a single day, or to return home on the following day when timing precludes a same-day return.

**Figure 5: Expanded Out-and-Back Route to Maupin**





Under a fiscally constrained scenario, where The LINK does not receive new STIF, FLAP, or other funding, The LINK could provide the route to Maupin by replacing the existing South County service. The more consistent schedule would make it easier for people to plan trips, and deviations could occur for people unable to access the fixed stops.

### ***Information and Technology Updates***

In the short-term, the following information and technology updates are recommended:

- Enhance trip planning support.
  - Online mobile trip planning tools can help the public get travel information at any day or time. Monitoring Google Maps and checking the GTFS data set should be part of a regular routine to ensure that riders are able to utilize this tool to plan routes.
- Provide real-time vehicle arrival information.
  - Real-time information helps improve the ridership experience by reducing passenger wait times, providing confidence that a bus has not been missed, and generally creating a more informed, comfortable, and secure rider. This information can be made accessible via The LINK's website, smartphones, and through "push" technologies such as text messages.
- Provide continued education and marketing.
  - Provide information about where the service goes, how to ride the bus and use stops, and how to pay fares.
- Add bus shelters and route information to bus stops.

### ***Vehicle Fleet Updates***

In the short-term, replace vehicles according to their expected useful life.

- One additional operating vehicle would be needed for the fleet in the fiscally constrained scenario, should South County service expansions receive funding. Additionally, The LINK would continue to need to replace approximately one vehicle a year, on average, based on anticipated mileage.
- Continue to pursue charging and alternative fueling facilities to support the purchase of hybrid or fully electric vehicles in the medium-term.
- In the unconstrained scenario, additional vehicles or faster replacement may be needed, depending on frequency and/or added service hours and resulting mileage.

### Short-Term System Maps and Conceptual Schedule

Table 3 shows a conceptual schedule for the services. Recommendations include shifting the departure times of The Dalles – Hood River route to allow for both the Blue Line and Red Line to complete all or part of their route, and return to the Transit Center for connections to Hood River. To allow enough time for South County residents to conduct errands and appointments in The Dalles, a South County or Madras service would depart The Dalles earlier than other fixed-route services. Alternatively, The LINK could partner with Cascades East Transit (CET) to alternate runs beginning in The Dalles versus Madras or Maupin. The conceptual schedule includes an additional hour of weekday dial-a-ride service (6:00 AM to 7:00 PM) to allow for transfers from the intercity routes back to the local routes. Alternatively, these transfers could be served by fixed-route, potentially reducing the costs of providing the last-mile connections depending on demand.

**Table 3: Weekday Departure and Arrival Times at The Dalles Transit Center**

Time of Day	The Dalles – Hood River	Madras	or	Maupin	Blue Line	Red Line	Dial-a-Ride
<b>Est. Runtime<sup>1</sup></b>	60 minutes	320 minutes		160 minutes	60 minutes	100 minutes	-
<b>Est. Headway<sup>2</sup></b>	-	-		-	60 minutes	60 minutes	-
<b>Early Morning</b>		Departs: 6:00 AM					Begins: 6:00 AM
					7:00 AM	7:00 AM	~
	Departs: 8:00 AM			Departs: 8:00 AM	8:00 AM	8:00 AM	~
	Arrives: 9:00 AM				9:00 AM	9:00 AM	~
<b>Late Morning</b>	Departs: 10:00 AM			Arrives: 10:40 AM	10:00 AM	10:00 AM	~
	Arrives: 11:00 AM	Arrives: 11:20 AM			11:00 AM	11:00 AM	~
					12:00 PM	12:00 PM	~
<b>Early Afternoon</b>		Departs: 1:20 PM			1:00 PM	1:00 PM	~
				Departs: 2:20 PM	2:00 PM	2:00 PM	~
					3:00 PM	3:00 PM	~
<b>Later Afternoon</b>	Departs: 4:00 PM				4:00 PM	4:00 PM	~
	Arrives/ Departs: 5:00 PM			Arrives: 5:00 PM	5:00 PM	5:00 PM	~
	Arrives: 6:00 PM	Arrives: 6:40 PM			6:00 PM	6:00 PM	~
							Ends: 7:00 PM

<sup>1</sup>Runtime is the amount of time it takes a single bus to operate the entire route once.

<sup>2</sup>Headway is the amount of time between transit vehicle arrivals at a stop.

## Medium-Term Service Plans

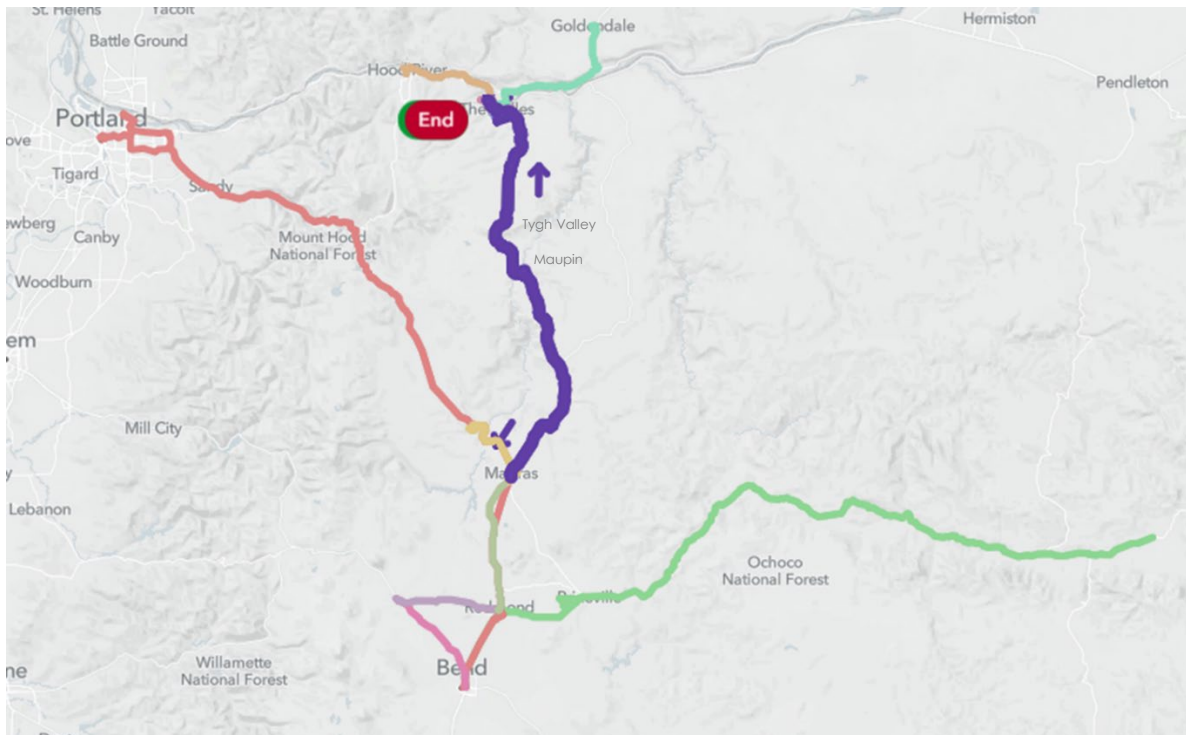
Medium-term service plans include opportunities that could be implemented within the next 5–15 years. These plans include service expansions, which requires hiring additional staff.

### ***Provide Additional Service to and Around South County***

Deviated fixed-route transit service to South County could be expanded to provide connections to around South County. Recommended medium-term service expansions are illustrated and described below.

- Provide a new intercity express route stops in Madras, Maupin, Tygh Valley, Dufur, and The Dalles (shown in Figure 6). Potential stop locations are shown in *Memo #5: Future Service Opportunities*.
  - This route could be a modification to the South County Shuttle, with fixed time-points and potential deviation areas or zones, reducing the resources needed to implement the route. Deviation areas or interlined local service can support a “dumbbell”-shaped route, providing local and regional connectivity.
  - Operate the route two consecutive days per week, providing two trips per day. This schedule allows riders to complete their trip within a single day, or to return home on the following day when timing precludes a same-day return.
  - This service could support transfers to Cascades East Transit services in Warm Springs/Madras, Central Oregon Breeze, and deviated fixed-routes in The Dalles (shown in faded colors in the figure below), providing transit connections from Wasco County to central and eastern Oregon.
  - Under an unconstrained scenario, where The LINK receives ample STIF and FLAP funding, The LINK could provide both the route to Maupin and the route to Madras, providing service to South County four days per week.

**Figure 6: New Out-and-Back Route to Madras**





- A new intercity route with stops in the Warm Springs Reservation, Madras, Antelope, and Shaniko, shown in Figure 7, could be provided. The route could be operated to provide two trips per day, two times per month. This route would need a bus to be based in this area to reduce deadheading, potentially through a partnership with CET. Given the low land use densities, deviations should be provided.
  - This service would only be feasible under the unconstrained scenario given the high cost and challenges associated with the distance from the Transit Center and the low population density in the vicinity of the route. It may also be feasible to pair this service with the weekly service Wheeler County Community Transportation provides between Fossil and The Dalles to help reduce costs and improve intercity connectivity.<sup>3</sup>

**Figure 7: New Out-and-Back Route Connecting Warm Springs Reservation, Madras, Shaniko, and Antelope**



### Service Enhancements in The Dalles

There is an existing need for extended service hours and weekend service. Under a fiscally constrained scenario, it is not feasible to provide weekend service or extended service hours across all services.

Under a fiscally unconstrained scenario, The LINK should provide the following services:

- Extend service hours on all routes to provide deviated-fixed route service Monday – Thursday from 6:00 AM – 8:00 PM and Friday from 6:00 AM to 11:00 PM.

<sup>3</sup> More information about this service is provided in the Wheeler County Coordinated Human Services Public Transportation Plan: <https://digital.osl.state.or.us/islandora/object/osl%3A822851/datastream/OBJ/view>

- Provide a modified version of a deviated fixed-route in The Dalles that serves stores, restaurants, and recreational locations in the Dalles.
- Extend dial-a-ride service hours to provide service Monday – Thursday from 6:00 AM – 8:00 PM, Friday from 6:00 AM to 11:00 PM, Saturday from 9:00 AM to 11:00 PM, and Sunday from 9:00 AM to 8:00 PM.

### ***Information and Technology Updates***

In the medium-term, it is recommended that The LINK continue to monitor and check information and technology to ensure that riders are able to successfully utilize real-time vehicle arrival information and trip-planning tools.

### ***Vehicle Fleet Updates***

In the medium-term, hybrid or fully electric vehicles could be purchased, pending the availability of charging and alternative fueling facilities and funding grants in 5–10 years.

- Additionally, The LINK would continue to need to replace approximately one vehicle a year, on average, based on anticipated mileage.
- In the unconstrained scenario, additional vehicles or faster replacement may be needed, depending on frequency and/or added service hours and resulting mileage.

### **Long-Term Service Plans**

Long-term service plans include opportunities that would likely take 15+ years to implement. These plans include projects that require large capital improvements.

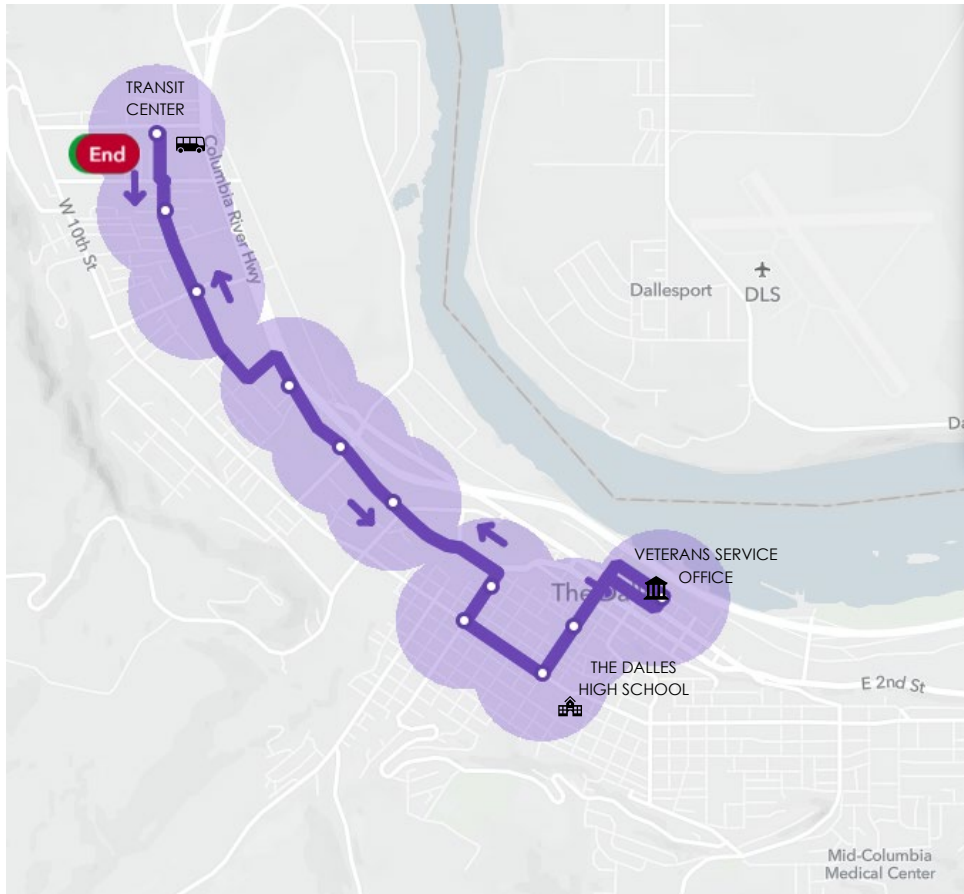
### ***Revise the Red Line to Serve Future Development Near the Port***

There is long-term development planned near the Port. As this development occurs, the Red Line should be revised so that stops connect directly to the hub of this development. Under an unconstrained scenario, another bus should be added to the Red Line so that both Chenoweth and the Port can be served every run while maintaining hour headways or better.

### ***Create a New Out-and-Back Route Serving Downtown The Dalles***

Under a fiscally unconstrained scenario, a new out-and-back route on 6<sup>th</sup> Street and 7<sup>th</sup> Street, as shown in Figure 8, would directly connect major destinations located between the Transit Center and downtown. Major destinations would include neighborhoods, healthcare facilities, The Dalles High School, and grocery stores. This route would overlap with the modified Red Line shown in the short-term service plans, providing increased service frequency in the 6<sup>th</sup>/7<sup>th</sup> Street corridor during peak time periods and providing more frequent connections between downtown and the other transit services that connect at the Transit Center.

**Figure 8: New Out-and-Back Route in The Dalles (via 6<sup>th</sup> Street and 7<sup>th</sup> Street)**



### ***Upgrading the Downtown Bus Stop to be a Transit Center***

Transit centers provide a transfer point for bus routes, while major transit stops are typically provided at major activity centers. In addition to providing greater passenger amenities that improve rider comfort, transit centers and major transit stops provide visibility for the transit service, reminding residents and visitors of the availability of the service within their community. Currently, the only designated transit center is The LINK's facility in northwest The Dalles. In the long-term, upgrading the downtown stop to be a transit center, potentially at the Veteran's Services office in coordination with the city's First Street Project, could improve recognition of The LINK's services and enhance access to and from downtown The Dalles. Upgrading in conjunction with the First Street Project would allow for cost savings in constructing additional seating, bike storage, or covered areas. The LINK should coordinate with the City to understand opportunities to expand this location, or work to identify alternate sites with appropriate space for bus dwelling, amenities, and walking and biking connections.



### ***Service Enhancements in The Dalles***

As noted in the medium-term service plan, there is a need for extended service hours and weekend service. Under a fiscally unconstrained scenario, The LINK should provide the following services:

- Extend service hours on all routes to provide deviated-fixed route service Monday – Thursday from 6:00 AM – 8:00 PM and Friday from 6:00 AM to 11:00 PM. Later evening service may need to be adjusted based on seasonal business hours.
- Provide a modified version of a deviated fixed-route in The Dalles that serves stores, restaurants, and recreational locations in the Dalles on the weekends (determine routing based on feasible service hours). This route could be similar to the route shown in Figure 8, but would need to be modified to also serve residential areas on the eastern side of town. It may also need to provide access for students living on CGCC campus.
- Extend dial-a-ride service hours to provide service Monday – Thursday from 6:00 AM – 8:00 PM, Friday from 6:00 AM to 11:00 PM, Saturday from 9:00 AM to 11:00 PM and Sunday from 9:00 AM to 8:00 PM.

### ***Intercity Service Enhancements***

The need for extended service hours and weekend services includes service for and to the communities and recreational areas throughout Wasco County. Under a fiscally unconstrained scenario, the following service enhancements could be made to intercity routes:

- Increase frequency of service between The Dalles and Hood River.
- Increase the number of days per week service is provided to Madras.
- Increase the number of days per month service is provided to Shaniko and Antelope.

### ***Vehicle Fleet Updates***

- No additional vehicles are needed in the fleet for the fiscally constrained scenario. As noted, The LINK will need to replace approximately one vehicle a year on average.
- In the unconstrained scenario, additional vehicles or faster replacement may be needed, depending on frequency and/or added service hours and resulting mileage.

### ***Service Type***

The LINK currently operates deviated fixed-route, dial-a-ride, and intercity express services. This service model continues to be recommended in the service plans described above. In the future, The LINK could provide fixed-route and complimentary ADA paratransit services instead of providing deviated fixed-route and dial-a-ride services in The Dalles. The remainder of Wasco County would still need to be served with dial-a-ride service due to the dispersed nature of the unincorporated areas and small cities.<sup>4</sup>

Table 4 shows trade-offs involved with providing deviated fixed-route and dial-a-ride services in Wasco County, compared to fixed-route and paratransit services.

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<sup>4</sup> Intercity express route do not trigger complementary ADA paratransit requirements.

**Table 4. Differences between Deviated Fixed-Route and Fixed-Route Requirements**

	Deviated Fixed-Route and Dial-a-Ride	Fixed-Route and Paratransit
<b>Certification of Qualifying Riders</b>	<ul style="list-style-type: none"> <li>• Certifications are optional</li> </ul>	<ul style="list-style-type: none"> <li>• Certifications are required for using ADA paratransit</li> </ul>
<b>Prioritization</b>	<ul style="list-style-type: none"> <li>• Prioritization of dial-a-ride trips is optional. Recommended trip purpose priorities for dial-a-ride are, in descending order: medical, employment, education, nutrition, shopping, recreation, other, same-day medical, same-day non-medical.</li> <li>• For dial-a-ride services, requests can be prioritized for people who meet ADA paratransit eligibility as well as other criteria set by the agency.</li> <li>• Deviations on the fixed-route service must be first-come, first-serve and cannot be prioritized like dial-a-ride.</li> </ul>	<ul style="list-style-type: none"> <li>• Paratransit services are only available to people who are certified for meeting ADA paratransit eligibility<sup>5</sup>. Eligibility categories may include: <ul style="list-style-type: none"> <li>• Individuals who cannot board, ride, or disembark from an accessible vehicle.</li> <li>• People who can use an accessible vehicle, but none is available on their desired route or time of trip (for example, if a wheelchair lift is blocked at a particular stop).</li> <li>• People who have specific impairment-related conditions that prevent their getting to or from a stop.</li> </ul> </li> </ul>
<b>Ride Requests</b>	<ul style="list-style-type: none"> <li>• Requests for dial-a-ride are typically required no later than the day before.</li> </ul>	<ul style="list-style-type: none"> <li>• Requests for paratransit must be honored, as long they occur no later than the previous business day.</li> </ul>
<b>Flexibility</b>	<ul style="list-style-type: none"> <li>• Complimentary ADA paratransit service is not required under this model, and there is flexibility with where and how deviations are provided. Under this model, The LINK is allowed to deny deviation requests once the available capacity has been reached without the risk of displacing regularly scheduled trips.</li> </ul>	<ul style="list-style-type: none"> <li>• Although The LINK's dial-a-ride services meet the requirements for paratransit service necessary to switch to a fixed-route service, this switch would add potential liability to The LINK in cases where ride requests are denied due to capacity constraints, as denied trips will require an increase passenger-carrying capacity or a reduction in "subscription"/regularly scheduled trips for other passengers. Demand on paratransit would need to remain relatively low in order to meet the needs of frequent and infrequent riders.</li> </ul>

The LINK could maintain a deviated-fixed route model while encouraging more use of fixed stops and less demand for deviations and dial-a-ride by implementing the following policies:

- Fare structure: charge more for deviations and dial-a-ride service.
  - Today the cost of a ride on the deviated fixed-routes (with or without deviations) and the cost of a ride on a dial-a-ride vehicle are the same. The LINK should incentivize use of fixed stops by charging a premium fare to request a deviation or use dial-a-ride. There are no limits on the premium fare; however, if the service is complimentary paratransit, the fare

<sup>5</sup> Answers to frequently asked questions about paratransit eligibility, service, and regulations and guidelines are provided by the Federal Transit Administration here: <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/frequently-asked-questions#2>

may not be more than twice the regular fare. The LINK could provide a reduced transit fares for deviations and dial-a-ride to seniors, people with disabilities, or Medicare cardholders to ensure that this policy does not impact vulnerable users. For example, the fare for deviations and dial-a-ride could be double compared to a trip using only fixed stops (such as \$3 instead of \$1.50); however, seniors, people with disabilities, or Medicare cardholders could pay a reduced rate for deviations and dial-a-ride (such as only \$1.5) making it equivalent for them to fixed stops and the LINK could opt to serve some of their these trips with dial-a-ride by choice without a fare impact to the rider. They could also opt for a higher differential with the discounted rate being up to \$3.<sup>6</sup>

- Minimum deviation distance: at least 1/8 mile from the route.
- Maximum deviation distance: no more than 1/4 mile from the fixed route.
- Deviation zones:<sup>7</sup> allow for deviations only at the endpoints of the routes, including Chenoweth, The Port, and Water's Edge/Lone Pine, to reduce the impact deviations would have on the typical schedule while providing deviations in areas that would take additional time and resources to serve through dial-a-ride and are challenging to otherwise serve due to lower land use density and/or lack of sidewalks. However, passengers needing paratransit may still need to be served by dial-a-ride depending on the other end of their trip.
- Maximum deviations per trip: To be determined. Each route's schedule will build in time to accommodate the identified maximum number of deviations without affecting schedule reliability. For example, if after ground-truthing it is found that the Red Line has 10 minutes of additional time to deviate, the average deviation trip near Chenoweth and the Port takes 5 minutes (several minutes to the furthest extent of the zone, brief loading, several minutes back to the route), the maximum deviations per trip should be 2. The Blue Line is likely to have less cushion time, and may need to set a maximum of 1 and within a short distance of the route (ex. Less than 1 mile).

Note that changes to fare structure, service prerequisites (paratransit certification), and service routes/hours may need advance notice to the public before changes are in-place.

Other agencies in Oregon, such as Coos County Area Transportation District, South Clackamas Transit District (SCTD), and the Clackamas County Shuttles, have implemented deviated fixed-route models. These agencies have found that deviation requests are low when frequently spaced (1/2 mile or less) stops are provided, with SCTD noting 2–3 requests per month. The limited deviations allow for efficiency in serving infrequent requests, accommodate gaps in sidewalk networks and other challenges accessing bus stops, and free up dial-a-ride vehicles to serve areas unserved by fixed-route services. Triggers for The LINK to convert from deviated fixed-route to fixed-route may include:

- Deviations cause frequent (more than 1-2 runs per day) on-time performance issues
- Build-out of sidewalk networks allows for safe access to bus stops, where pedestrian connections may be limited today

<sup>6</sup> For more details on fare policies, please see the following links:

[https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/14\\_Half\\_Fare\\_TriennialGuidance\\_FY2011.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/14_Half_Fare_TriennialGuidance_FY2011.pdf); <https://www.transit.dot.gov/may-individual-be-charged-higher-fee-complementary-paratransit-they-would-pay-fixed-route>; <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/premium-charges-paratransit-services>

<sup>7</sup> Complementary paratransit would still be required for any portion of the system that continues to operate as a fixed-route, non-intercity service (see <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/paratransit-requirements-%C2%A75311-funded-fixed-route-service> for more details).

- Deviations in designated zones are highly infrequent (less than 1 per month), and schedule time to accommodate potential deviations could be better used to provide increased fixed-route coverage, better-timed transfers to other services, shorter headways, etc.

## CAPITAL PLAN

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MCEDD currently owns and operates eight buses and three minivans. In 2021, MCEDD purchased five new buses which will be used to replace four of the current buses and add one additional bus to the fleet. The average age of the active fleet is 7.0 years. Of the active fleet, six vehicles are in excellent condition, five are in good condition, two are in adequate condition, and one is in poor condition<sup>8</sup>. Five vehicles are beyond their expected useful lives (EUL) of four or five years; several of these are also past their EUL based on mileage. Table 5 summarizes the fleet information; including the conclusion that two vehicles need to be replaced in the short-term.

In fiscal year 2020, The LINK operated approximately 115,000 vehicle revenue miles, including deviated fixed-route and dial-a-ride services. Historically, The LINK operated approximately 170,000 vehicle revenue miles per year. With EULs of 150,000 miles for the type of vehicle used by The LINK, about one replacement vehicle is anticipated to be needed each year. Vehicles are typically purchased in batches. Therefore, The LINK should purchase three new vehicles every three years to maintain existing service.

In the medium and long-term, vehicles should be replaced with hybrid- or all-electric buses according to the regular vehicle replacement schedule. Higher-voltage electrical connections should be provided at the existing transit center and other major bus stops that connect between services. Other services should be partnered with to implement regional sharing of electric vehicle charging facilities. In the long-term, higher-voltage electrical connections should be included at a new transit center located downtown.<sup>9</sup> Federal and state funds are available for charging infrastructure, and The Dalles has a competitive advantage due to its location along an interstate and the presence of RAISE Areas of Persistent Poverty in the northwest area (including the existing transit center), both of which are prioritized criteria in funding opportunities. Private charging stations are generally anticipated to be at hotels, where visitors can charge during their stay, and employers, as an employee incentive, and may be good candidates for shared charging with The LINK vehicles.

Table 6 summarizes the number of operating vehicles and bus stops needed to provide for the short-term, medium-term, long-term, and unconstrained service plans described in the sections above.

Figure 9 provides design guidance for new and existing stops. The ODOT Highway Design Manual provides additional information on facility design for bus stops, in particular for ADA standards. The minimum required dimension for a boarding pad is 8' x 5' of concrete per door. Additional space and boarding pads where the wheelchair lift takes place are preferred. Bus shelters need larger landing pads to ensure ADA clearance around the shelter and stop, resulting in a landing pad at 2.5' by 4' minimum for the shelter. Additional space may be needed depending on shelter type and subsequent clearance needs. Additional space may also be needed for signs, benches, shelters, and other amenities depending on the clearance from a roadway, distance to crosswalks, and access to traffic signals and other infrastructure. Bus stop placement should also consider nearby bicycle infrastructure,

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<sup>8</sup> This vehicle has been replaced by newer vehicles and is planning on being sold. It is occasionally used while other vehicles are being serviced.

<sup>9</sup> A new transit center downtown is not intended to replace the existing transit center, but rather to provide covered parking spaces for transit vehicles, benches, park-and-ride access, a staff lounge, and other stop improvements near the plaza that the City is planning in the vicinity of the Wasco County Veterans Service Office.



and look for opportunities to enhance the comfort of all users via treatments like bus stop islands between the vehicle lane and bicycle lane. The LINK could work with local jurisdictions to develop a checklist or other streamlined methodology for bus stop improvement installation and clearly document what each agency needs to get improvements on the ground.

**Table 5: Transit Fleet<sup>1</sup>**

Asset Model	Year	Seats	Condition	Odometer	EUL Category	Replacement Need
<b>Van #22</b>	2011	7	Good	108,761	4 yrs/ 100,000 mi	--
<b>Van #28</b>	2012	7	Good	142,700	4 yrs/ 100,000 mi	--
<b>Van #29</b>	2018	4	Good	39,599	4 yrs/ 100,000 mi	--
<b>Cutaway Bus #23</b>	2011	16	Adequate	111,975	5 yrs/ 150,000 mi	Short-term
<b>Cutaway Bus #24</b>	2011	16	Poor	189,772	5 yrs/ 150,000 mi	**
<b>Cutaway Bus #26</b>	2014	12	Adequate	144,846	5 yrs/ 150,000 mi	Short-term
<b>Cutaway Bus #30</b>	2020	12	Good	47,477	5 yrs/ 150,000 mi	--
<b>Cutaway Bus #31</b>	2020	12	Good	21,297	5 yrs/ 150,000 mi	--
<b>Cutaway Bus #32</b>	2020	12	Excellent	24,647	5 yrs/ 150,000 mi	--
<b>#33</b>	2021	12/2	Excellent	13,687	5 yrs/ 150,000 mi	--
<b>#34</b>	2021	12/2	Excellent	12,976	5 yrs/ 150,000 mi	--
<b>#35</b>	2021	12/2	Excellent	11,693	5 yrs/ 150,000 mi	--
<b>#36</b>	2021	12/2	Excellent	11,698	5 yrs/ 150,000 mi	--
<b>#37</b>	2021	12/2	Excellent	9,276	5 yrs/ 150,000 mi	--

<sup>1</sup>Transit Fleet data for Q2, FY2022 (quarter ends 12/31/2021)

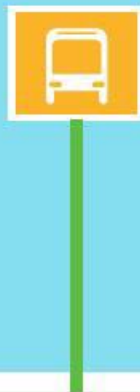
\*\*This vehicle has been replaced by newer vehicles and is planning on being sold. It is occasionally used while other vehicles are being serviced.

**Table 6: Capital Needs**

Capital Needs	Short-Term	Medium-Term	Long-Term	Unconstrained
<b>Vehicles</b>	Replace 2 Vehicles	Purchase 3 vehicles/3 years	Purchase 3 vehicles/3 years	Additional vehicles will be needed based on the amount of additional service provided
<b>Bus Stops</b>	Construct approximately 25 new bus stops	Construct 1-2 new stops	Enhance downtown bus stop to serve as second transit center	--

Figure 9

# DESIGNING BUS STOPS



Safe and comfortable facilities can improve the experience of riding transit and increase ridership by improving stop visibility, providing protection from poor weather, and improving access to transit. The following table shows typical stop amenities, describes their typical costs, and provides the activity levels that typically prompt inclusion of them. Scenarios that may trigger higher levels of amenities include:

- **Land use** – assisted living homes, medical facilities, veteran's resources, and other land uses may increase the need for benches or shelters at stops; low-density areas may see higher bike rack/locker demands due to the longer distance to travel to stops
- **Customer use** – amenities such as trash cans or information cases may be triggered by trash accumulating at stops, bus drivers receiving information requests from riders, or riders directly requesting these improvements
- **Coordination opportunities** – if a local jurisdiction is looking to provide lighting, repaving, etc. on a transit route, installing higher-level bus amenities may be advantageous to reduce cost even if a stop hasn't reached higher activity levels yet

AMENITY	TYPICAL COST *	STOP LEVEL
Signage & route information	\$300 to \$1,000	All stops
Lighting	\$5,000 to \$10,000	All stops
Bench	\$500 to \$1,500	3+ boardings per day
Shelter (small)	\$6,000	20+ boardings per day
Trash can	\$1,000 to \$1,500	Major bus stops/transit centers, as-needed
Bike racks	\$150 to \$300 (two-bike rack)	Major bus stops/transit centers, near bike routes
Information cases (systemwide route information; advertising)	\$1,000 to \$10,000	Major bus stops/transit centers
Bike lockers	\$2,000 to \$3,000 per locker	Major bus stops/transit centers, near bike routes
Shelter/covered area (large)	Varies	Major bus stops/transit centers

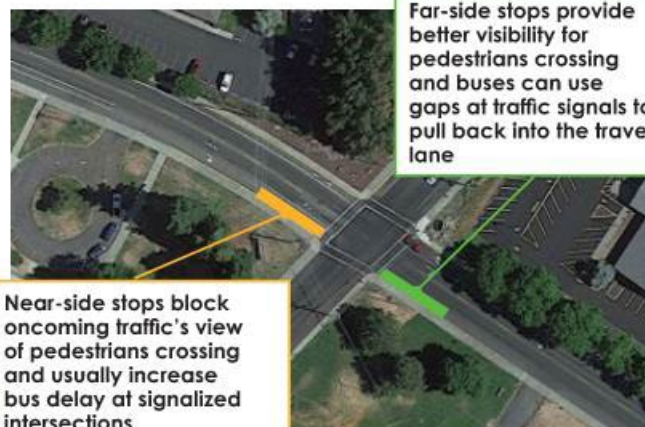
\* Costs reflect capital cost to purchase. Additional costs to implement may include permits, fees, and installation.

## Placement and Pullouts:

Transit stops should be coordinated with roadway agencies to ensure stops are ADA-accessible and connect to low-stress walking and biking facilities and crossings. This coordination should include maintenance considerations, such as emptying trash cans and snowplow operations.

On major roadways with speeds of 35 mph or more, such as state highways, transit agencies may consider bus stops that allow buses to stop out of the traffic lane, to avoid rear-end collisions and discourage unsafe passing of the bus by motorists.

## Near-Side vs. Far-Side?



Near-side stops block oncoming traffic's view of pedestrians crossing and usually increase bus delay at signalized intersections

Far-side stops provide better visibility for pedestrians crossing and buses can use gaps at traffic signals to pull back into the travel lane

## TECHNOLOGY PLAN

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### Information and Technology

Information and technology services can improve the existing ridership experience, attract new ridership by improving ease of transit use, and provide information to The LINK to help plan and operate transit service in the future. The following sections provide high-level cost estimates for and describe potential benefits of information and technology improvements, including real-time vehicle arrival information, fare payment options, online/mobile trip planning tools, and cameras. The impacts to transit ridership vary strongly by provider when implementing these services and thus changes in ridership are not explored for these improvements.

In addition to improving existing service, data gathered from technologies such as real-time vehicle arrival information and AVL (Automatic Vehicle Location) can help in analyzing the performance of existing and future service opportunities. For example, AVL data could be assessed to adjust schedules based on delay points and improve transfer connections.

### Fare Payment Options and Policies

Fare payment options include contactless payment through debit/credit card, smart card-based electronic fare collection systems, mobile ticketing, and more. The LINK provides mobile ticketing through the GOrge Pass fare system and through the Passage app. The LINK joined the GOrge Pass fare system on June 28, 2021, allowing fare reciprocity with CAT, MATS, and Skamania County Transit. The LINK can market these services and gauge feedback on whether they address riders' desire for more fare payment options.

The LINK should incentivize use of fixed stops by updating fare policies to charge a premium fare to request a deviation or use dial-a-ride. The LINK could provide a reduced transit fares to seniors, people with disabilities, or Medicare cardholders for the deviations and use of dial-a-ride to ensure that this policy does not impact vulnerable users.

### Trip Planning Support

Online mobile trip planning tools can help the public get travel information at any day or time. While some providers create proprietary trip planning tools, free and readily available trip planning tools are available and more fitting to The LINK's size and needs. These tools include Google Maps, OneBusAway, Moovit, and Transit. All of these tools depend on the open data format GTFS. Monitoring Google Maps and checking the GTFS data set should be part of a regular routine to ensure that riders are able to utilize this tool to plan routes.

### Real-Time Vehicle Arrival Information

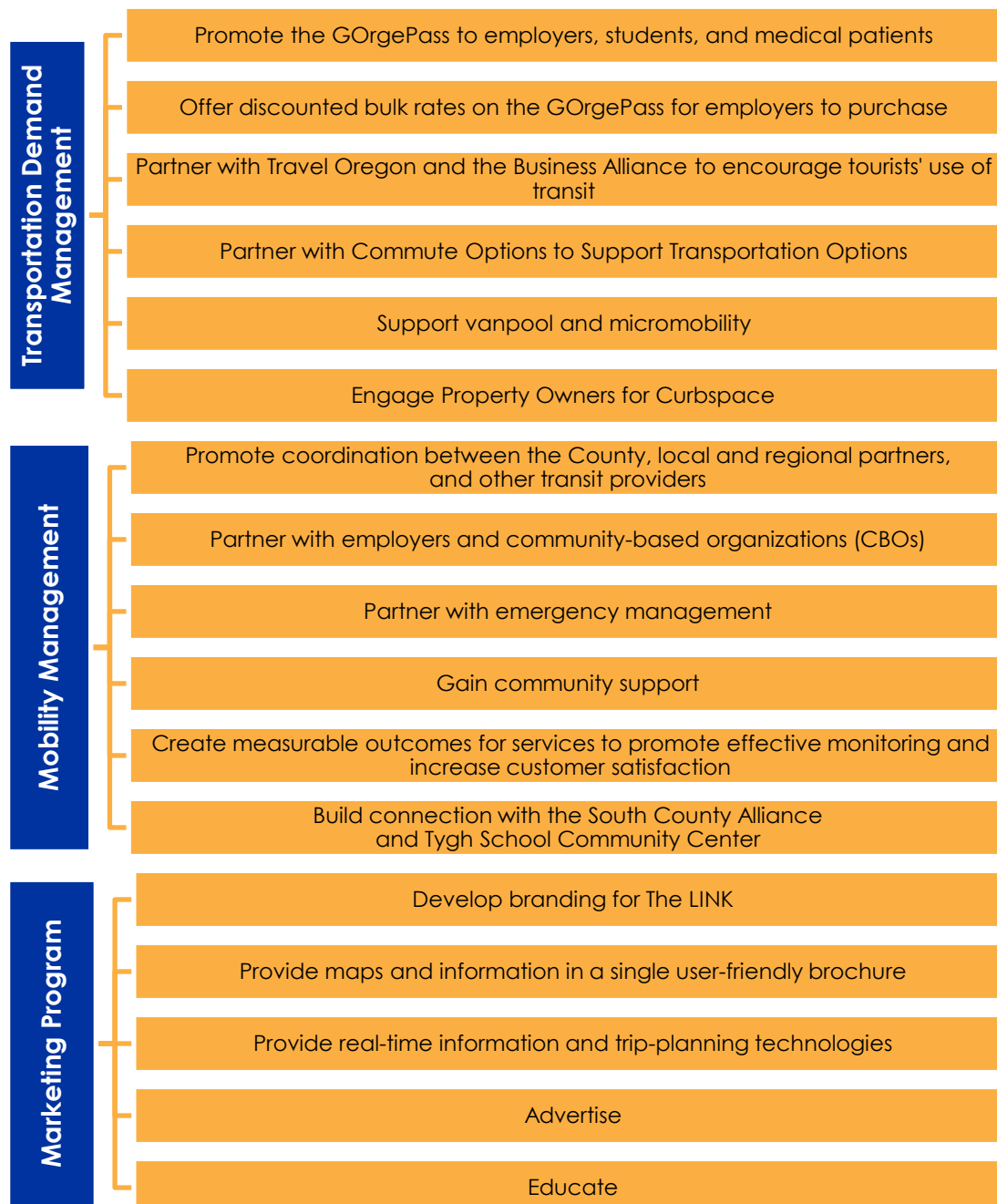
The LINK posts schedules for all routes but does not currently provide real-time vehicle arrival information. Real-time information helps improve the ridership experience by reducing passenger wait times, providing confidence that a bus has not been missed, and generally creating a more informed and comfortable rider. This information can be made accessible via The LINK's website, smartphones, and through "push" technologies such as text messages. *TCRP Synthesis 48: Real-Time Bus Arrival Information Systems* reports costs for AVL system implementation for smaller systems (10–25 Automatic Vehicle Location [AVL]-equipped vehicles), with total capital cost between \$60,000 and \$171,000 and per-vehicle cost between \$3,000 and \$8,100. However, these cost data were collected when the technology was newer; improved system efficiencies have led to decreased costs. These costs should

be explored further with vendors. ODOT encourages providers to buy systems that support GTFS-Realtime (GTFS-rt).

## MANAGEMENT AND MARKETING STRATEGY

A coordinated, targeted, and effective public information and marketing campaign would help publicize and encourage people to use transit. This section provides transportation demand management, mobility management, and marketing program recommendations for The LINK, summarized in Figure 10.

**Figure 10. Management and Marketing Summary**





## Transportation Demand Management Strategies

Transportation Demand Management (TDM) strategies aim to shift behavior towards more efficient use of transportation facilities. While MCEDD and The LINK implement many of these strategies, additional programs and partnerships could help expand transit awareness and use. Target strategies for commuters and commute trips in line with ODOT's Transportation Options Program. The following strategies and partnerships can help shift behavior towards transit use:

- Promote the GOrgePass<sup>10</sup> to employers, employees, students, and medical patients.** Offering incentives to employees, students, and medical patients to take transit can increase awareness and decrease the cost of transit for routine trips. In turn, the number of single-occupancy vehicle trips and the number of parking spaces needed at employment centers, schools, and hospitals could be reduced.
- Offer discounted bulk rates on the GOrgePass for employers to purchase.** Offering discounted bulk rates and buy-one give-one offers on the GOrgePass can encourage employers, schools, and hospitals to promote the GOrgePass to employees, students, and medical patients. The GOrgePass is already heavily discounted, and additional discounts should be limited. For example, a GOrgePass could be offered at a discount for the first year for a rider, encouraging them to try transit and encouraging future purchase and use of the program. Table 7 provides a list of the largest employers in Wasco County that could be considered for partnerships.
- Partner with Travel Oregon and the Business Alliance to encourage tourists' use of transit.** Partnering with tourist and business organizations informs and encourages tourists to use transit when they visit Wasco County. Provide information about the Business Alliance's shuttle on The LINK's website.
- Partner with Commute Options to Support Transportation Options.** Commute Options is dedicated innovative transportation options that connect people of all ages to the places they go – employees to their workplaces, students to their schools, and neighbors within their communities. They champion active transportation and infrastructure improvements, fostering essential partnerships, and educating the community on transportation options and can be used as a resource to support Transportation Options.<sup>11</sup> Like MCEDD, other employers should be encouraged to provide employee benefits to take Commute Options. MCEDD works with Commute Options to provide a commute options employee benefit program to employers in Sherman, Wasco, and Hood River counties. This includes not only vanpools, but also a gift card reward program for other sustainable commutes.
- Support Vanpool and Micromobility.** The LINK can access STIF funding to subsidize vanpools. Additionally, by encouraging micromobility (such as bike share), The LINK can support connections to transit services. Commute Options provides a vanpool management program that can decrease management needs. In particular, seasonal farm workers could benefit from vanpool programs. Farms often employ substantial employees, making the ability to meet minimum vanpool numbers from different communities more likely and providing adequate transportation

\$1 of each GOrgePass goes to the Gorge Equity Fund, which provides support for outdoor equity organizations, search and rescue, and low-income programs.

<sup>10</sup> The GOrge Pass is an annual pass that provides unlimited rides on Columbia Area Transit, Mount Adams Transportation Service, Skamania County Transit, and The LINK.

<sup>11</sup> The ODOT Transportation Options program will change in 2024, at this time The LINK could apply for grants to implement transportation options.

to groups difficult to serve through fixed-route or dial-a-ride services. Additionally, shared charging facilities could be used to support electric bikeshare or scootershare for first/last-mile connections.

**Table 7. Largest Employers in Wasco County**

Employer Size	Employers
<b>Over 500 Employees</b>	Mid-Columbia Medical Center
<b>251–500 Employees</b>	Northern Wasco County School District 21, Oregon Cherry Growers, Fred Meyer
<b>101–250 Employees</b>	Oregon Veteran's Home, Columbia Gorge Community College, Azure Standard, Google, Wasco County, City of The Dalles
<b>50–100 Employees</b>	Cousin's Country Inn, Orchard View Farms, Columbia Basin Care Facility, Powder Pure, Mill Creek Point Assisted Living, Crestline Construction, Northwest Aluminum Specialties-Hydro, Bonneville Power Administration, One Community Health, Columbia Gorge Toyota/Honda Motors, Northern Wasco PUD
<b>25–49 Employees</b>	AmeriTies, Columbia State Bank, Goodwill Industries, Precision Lumber, Dufur School District, South Wasco County School District, Post Office, Sunshine Mill (includes vineyard), Younglife/Big Muddy, Flagstone Senior Center

Source: MCEDD May 2021 Report

## Mobility Management Strategies

Management strategies are those that The LINK and the County can conduct behind-the-scenes for effective implementation.

- Promote Coordination between the County, Local and Regional Partners, and other Transit Providers.** Coordination between The LINK, the County and local partners – including other members of the Gorge TransLink and local jurisdictions – will lead to a comprehensive and efficient system in which users can travel seamlessly inter- and intra-regionally. Partner with Columbia Area Transit (CAT) to support needs for long-haul medical rides to Portland, such as connecting with CAT's hospital van shuttle. Additionally, The LINK can work with regional partners and the state to pursue Non-Emergency Medical Transportation contracts, which have declined in recent years due to changes in regulations that are difficult for rural transit providers to meet. The Gorge TransLink members are undertaking the Gorge Regional Transit Strategy, which will guide regional partnership and investment in transit.
- Partner with Employers and Community-Based Organizations (CBOs).** Continue to work with The Dalles Business Alliance and employers to identify needs and leverage local match opportunities to increase transit funding in Wasco County. Market existing services through employers and CBOs to encourage information-sharing not only to employees and community members, but feedback from transit users back to the County. Continue the partnerships through Gorge Transit Connect to support transit access for low-wage community members, including free transit passes and travel training. The LINK is currently recruiting travel ambassadors through the program.
- Partner with Emergency Management.** Transportation is a critical component of responses to disasters such as wildfires and earthquakes, particularly for people without access to vehicles and who need mobility assistance or require other means to access essentials such as food and medical care. Join emergency operations team meetings to establish strategies for emergency response. As outlined in the Human Services Coordinated Plan, strategies to become a key

stakeholder in Wasco County's Emergency Management planning, response, recovery, and mitigation activities include building relationships with the key emergency management officials, identifying capabilities and limitations of services and resources, inventorying residents and pockets of populations with special needs (physical disabilities, low income, LEP), and engaging the organizations who serve those people with emergency planning efforts.

- **Gain Community Support.** Gain community support by creating and supporting local programs, meeting the needs of many transit markets, promoting the service, and building consensus. Additionally, investment with communities such as tribes and Latino/a/Hispanic populations is critical to trust-building and gathering feedback, especially as these communities have historically been mistreated by government entities. Understanding not only the service needs, but how these populations would like to be engaged, can enhance relationships and build opportunities across Wasco County.
- **Create Measurable Outcomes for Services to Promote Effective Monitoring and Increase Customer Satisfaction.** The Monitoring Program section of this plan identifies ways to monitor performance over time to evaluate the outcomes of providing and expanding service. Engage community members to improve customer satisfaction, retain existing riders, and attract new riders.
- **Build Connection with the South County Alliance and Tygh School Community Center.** Leverage this connection to provide service to populations throughout Wasco County and to support access to service for individuals living in dispersed rural areas. Prioritize access for elderly and people with disabilities within the rural communities. Example coordination includes marketing via the South County Happenings social media pages and attending South County Alliance meetings to understand ongoing needs and advertise services. The LINK's travel trainer could also provide pop-ups at resources such as food banks, Canyon Rim, government offices, and more.
- **Engage Property Owners for Curbspace.** The LINK can pursue dedicated bus pullouts or shared amenities with property owners, both public and private. The LINK already shares amenities at several stops (benches at Mid-Columbia Medical Center, trash cans at the Veteran's Services office). In particular, dedicated bus dwelling space in downtown The Dalles would be beneficial in promoting use of the service over single-occupancy vehicles.
- **Coordinate with utilities for charging infrastructure.** Working toward an electric fleet requires coordination not only with property owners, as previously noted, but also with utility providers themselves. MCEDD regularly coordinates with regional clean energy partners and initiatives through the Mid-Columbia Clean Energy Council. The Link has conducted initial conversations with Wasco County Public Utility District regarding adding Level 2 charging infrastructure to the Bus Barn for overnight bus charging. They can continue these conversations to identify opportunities for additional charging stations, including those open to the public.

## Marketing and Information Strategy

The following describes actions to improve customer service and information that can be implemented in the short-term and that should be maintained on a long-term basis:

- **Expand Branding for The LINK.** Branding is the foundation of the marketing strategy and provides an identity and image to potential customers. It helps create immediate recognition of all aspects of the service. Key elements of visible marketing tools include the name, logo, vehicle colors and graphics, and bus stop signage and facilities. It is important to be consistent with colors and graphics for maximum effect. A distinctive base color used consistently on transit vehicles and facilities becomes the "color of the bus" in the community. Vehicle graphics, bus stop signage,

shelters, and benches enhance transit visibility throughout the community; their style, color, and quality should be consistent. Bus stops and shelters are a convenient place to provide additional information about routes, schedules, and deviation zones.

- **Provide Maps and Information in a Single User-Friendly Brochure.** Printed brochures and pamphlets can be designed and distributed to various target audiences to promote dial-a-ride and deviated fixed-route services. The main element of this kind of promotion is to vary the communication style for distinct target groups while encouraging all to use the same transit service. A printed brochure or pamphlet should include one or more route maps showing all routes with deviation zones, bus stop locations, landmarks, and key destinations clearly depicted. How-to-ride information should also be included, including but not limited to fares, fare media, and how to request a deviation. Contact information that includes a website address, telephone number, and reference to a trip planning app (when available) should be provided.
- **Provide Real-Time Information and Trip-Planning Technologies.** Real-time bus arrival and route information helps improve the ridership experience by reducing passenger wait times at the stop (passengers know when they should leave for the stop) and provides confidence that a bus has not been missed. With the introduction of deviated-route service, bus arrival times at stops become more approximate, depending on whether or not a deviation was made earlier in the trip. With longer headways creating long waits if a bus is missed, real-time information helps reassure riders that their bus is on the way. Information on all transit routes could be provided via The LINK's and the Gorge TransLink's websites, smartphones, "push" technologies such as text messages, and telephone support. ODOT provides support for converting real-time bus arrival information to be compatible with applications such as Google Maps and Transit.
- **Advertise.** Advertising via different media can help attract a range of riders. Display advertising of the dial-a-ride and deviated fixed-route services in free weekday shopping papers and other local papers distributed in the community is a potential tool to introduce and promote service that can generate ridership. Other ways of promoting the service include radio spots; social media such as Facebook and Next Door; and email blasts. Partner with other members of the Gorge TransLink to continue supporting a marketing campaign for the GORge Pass and transit services, such as the activities under the current GORge Pass Marketing work.
- **Educate.** MCEDD provides a Travel Training Program Manager that assists The LINK and CAT in teaching local, rural, and underserved populations how to use available public transit services in Wasco and Hood River counties. As outlined in the Coordinated Human Services Public Transportation Plan, there is a need to develop programs to teach both agency staff and riders how to use public transit (travel training and travel ambassadors). These programs need bicultural messaging and need to be carefully designed to support veteran, Native Americans, older adults and elders, youth, and people with developmental disabilities. The programs could engage people from these groups who are already using the bus system as travel trainers.

## Future Planning Needs

Based on the above strategies, the following planning needs were identified:

- **Public Engagement Plan** – Identify best practices, strategies, and actions to engage communities throughout Wasco County. Provide particular emphasis on tribal and Latino/a/Hispanic populations.
- **Downtown The Dalles Transit Stop Siting** – Coordinate with the City to identify potential location(s) for transit stops, and at least one enhanced transit center.



- **Transit Marketing Plan** – In addition to the GORge Pass Marketing, The LINK could undertake a broader project to establish branding, document partnerships, and evaluate future opportunities in education and marketing of its services.
- **Electrification Plan** – Work with utilities, cities, neighboring transit providers, and property/business owners to establish electric charging and other alternative fuel infrastructure.
- **Emergency Management Plan** – Consider expanding emergency coordination work to include a Memoranda of Understanding for the role of transit in emergency response, depending on the needs of the region.

## FINANCIAL PLAN

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This section provides a financial plan based on funding scenarios associated with potential funding sources.

### Funding Scenarios

The funding scenarios describe existing funding sources, potential new sources, and different funding scenarios using these sources. This section also considers the COVID-19 implications for funding. Funding sources and opportunities are available to The LINK at the federal, state, and local level.

Future funding scenarios consider relatively stable as well as uncertain funding sources. Though the COVID-19 pandemic has reduced ridership and ridership-related transit funding, other funding for transit has increased in recent years. This section considers the following funding scenarios:

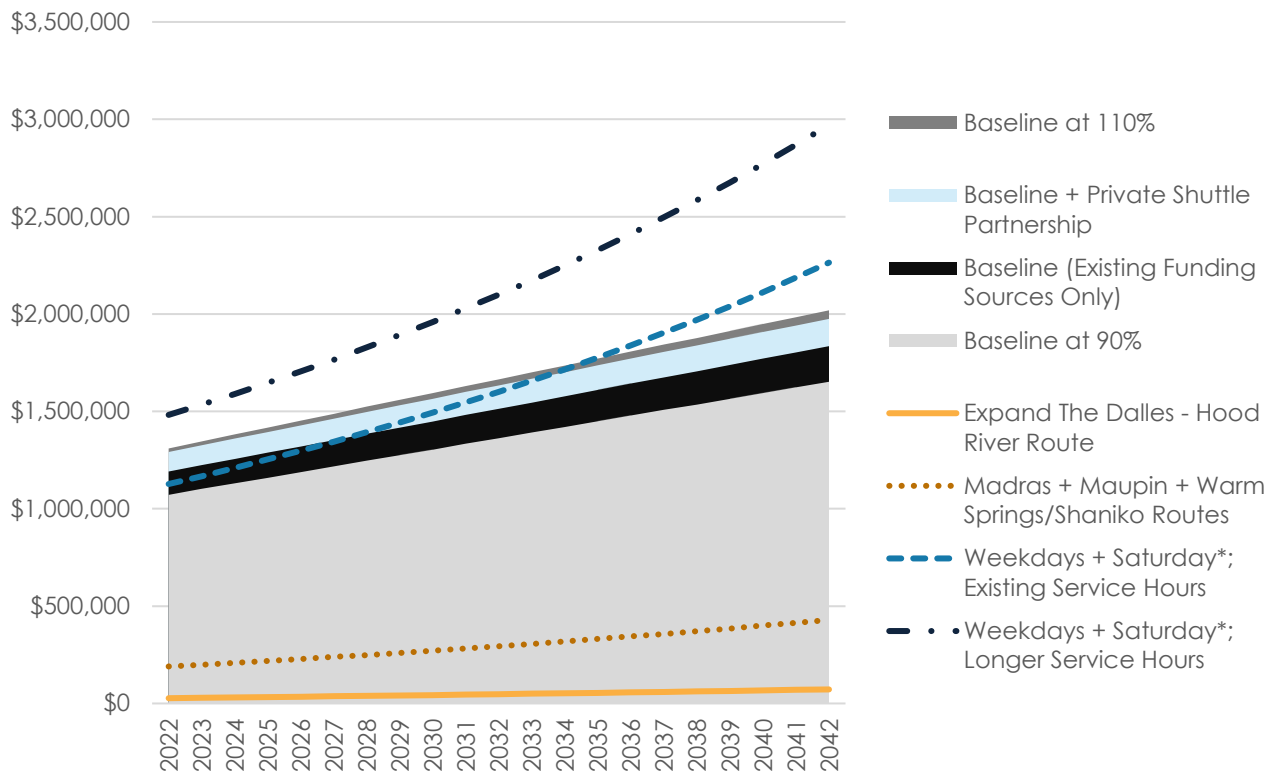
- **Baseline Funding:** This funding scenario projects existing funding sources at the historic rate.
- **Baseline at 90%:** This funding scenario assumes a 10% reduction in existing funding, projected forward at the historic rate. This scenario provides a proxy estimate of reduced ridership and its impacts on fare and formula fund loss, STIF projections, inflation, etc.
- **Baseline at 110%:** This funding scenario assumes a 10% increase in existing funding, projected forward at the historic rate. This scenario provides a proxy estimate of increased ridership, STIF projections, etc.
- **Baseline + STIF Intercommunity + FLAP Grant:** This funding scenario includes existing funding sources plus an additional \$300,000 in STIF Intercommunity and FLAP grant funding. It projects this funding forward at the historic rate. STIF Intercommunity and FLAP grant could be applied to enhancements to the Hood River service and implementation of the Madras and/or Maupin routes. The \$300,000 represents a typical operating funding amount for STIF Intercommunity.
- **Baseline + Private Shuttle Partnership:** This funding scenario includes existing funding sources plus an additional \$100,000 per year from a private shuttle partnership.<sup>12</sup> This funding is projected forward at the historic rate.
- **Unconstrained:** This funding scenario is intended to describe what service opportunities The LINK should pursue where funding is not a limitation.

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<sup>12</sup> Hotels are providing about \$250 per month for a private shuttle service. Assuming that 10 hotels pay this amount for six months of the year, there is an additional \$15,000 available to leverage as a local match. Many state and federal funding sources require a 10–20% local match to receive funding, so \$15,000 could leverage an additional \$75,000 to \$150,000 in state and federal funding. This analysis assumes \$100,000 of funding. Note that the \$15,000 local match is not included in The LINK's budget since it will go directly to paying for the private tourism shuttle service.

Figure 11 shows funding scenarios for Baseline, Baseline at 90%, Baseline at 110% scenarios, and Baseline + Private Shuttle Partnership (shown in the shaded areas). It also includes estimates for the cost of funding existing service, extended service hours, and weekend service (shown with lines).<sup>13</sup> Figure 11 is intended to give a rough idea of the costs to provide service and the potential funding sources, and not to prioritize alternatives. As shown, operating and capital costs are projected to increase at a faster rate than transit funding, and additional funding would be needed to extend service hours or provide weekend service.

**Figure 11: Funding Scenarios and Service Operating Scenarios<sup>1</sup>**



<sup>1</sup>Existing Service Hours includes deviated fixed-route and dial-a-ride services. Existing shuttle services are assumed to be included with the cost of dial-a-ride services. Costs are based on an assumption of \$85/service hour/bus operating cost + cost/mile for vehicles assuming vehicle EUL of 150,000 miles and a vehicle match of \$18,400 per vehicle.

\*Existing and Longer service hours on Saturdays is considered for dial-a-ride only. Providing service hours on all days includes Saturday and Sunday service for both dial-a-ride and deviated fixed-route services. These costs do not include capital investments such as new vehicles, stops, etc.

Figure 12 shows the STIF Intercommunity and FLAP grant funding that could be obtained to run Madras and Maupin Routes two times per day twice a week each. The grey area is the potential funding revenue and the line shows the costs of service(s). It would be possible to run these routes more frequently if there is demand to do so, or funds might be used to expand The Dalles – Hood River service.

<sup>13</sup> Estimates assume an average of 2 dial-a-ride and 2.36 deviated fixed-route buses operating at a given time. Existing shuttle services (the Dalles and Hood River Shopping Bus and South County Shuttle) are assumed to run as part of the 2 dial-a-ride buses.

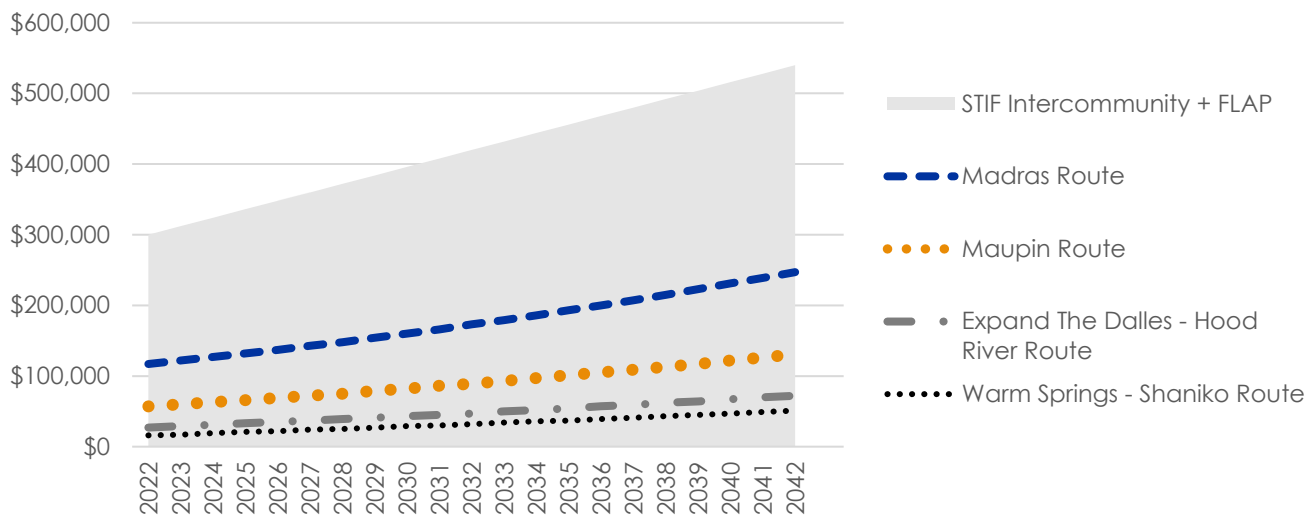
**Figure 12: STIF and FLAP Funding for South County Routes**

Table 8 shows the feasible short-term service opportunities The LINK could pursue by funding scenario. Funding could be increased in the short term by pursuing STIF Intercommunity, FLAP, and increased City contributions or new contributions from other local partners like Wasco County. Although the costs of providing services varies based on volatile fuel prices, electric vehicle fleets can reduce both maintenance and fueling costs and stabilize future budgets.

**Table 8: Feasible Service Opportunities based on Funding Scenario (Example Year 2022)**

Scenario	Funding Amount	Existing Service Cost	Surplus/Deficiency	Feasible Service Opportunities and Capital Improvements <sup>1</sup>
Baseline Funding	\$1,191,000	\$1,127,000	\$64,000	Providing dial-a-ride service on Sundays (operating one vehicle and one dispatcher, including operating costs and capital costs) would cost approximately \$34,000 for one dial-a-ride vehicle. Similarly, running one dial-a-ride or fixed-route vehicle an hour later each day would cost approximately \$27,000. Based on feedback to-date, it is recommended that The LINK add Sunday service.  A bench and route signage could be provided at approximately 12 transit stops for \$30,000. <sup>3</sup> Provide these improvements incrementally at all stops and then add transit shelters to high-use stops.
Baseline at 90%	\$1,072,000		-\$55,000	Reduce service frequency on deviated-fixed routes/number of dial-a-ride vehicles operating at a time to accommodate funding reduction.

Scenario	Funding Amount	Existing Service Cost	Surplus/Deficiency	Feasible Service Opportunities and Capital Improvements <sup>1</sup>
Baseline at 110%	\$1,310,000		\$183,000	Provide dial-a-ride service on Sundays and run one dial-a-ride vehicle an hour later each day, as described above (cost: \$61,000). A bench, route signage, and transit shelter could be provided at approximately 14 transit stops for \$119,000. <sup>4</sup> Provide these improvements at high-use transit stops and provide signage at all other transit stops.
Baseline + Private Shuttle Partnership	\$1,291,000		\$164,000	Provide dial-a-ride service on Sundays and run one dial-a-ride vehicle an hour later each day, as described above (cost: \$61,000). A bench, route signage, and transit shelter could be provided at approximately 12 transit stops for \$102,000. Provide these improvements at high-use transit stops and provide signage at all other transit stops.
STIF Inter-community + FLAP <sup>2</sup>	Up to \$300,000	N/A	Up to \$300,000	Pending total grant funding received, operate the new route to Madras and the new route to Maupin each two times per day two times per week. Operate the new route connecting Warm Springs Reservation, Madras, Shaniko, and Antelope two times per day, twice per month. Total projected annual cost is \$191,000. Use remaining funding to purchase an additional vehicle for the route and to provide a bench and route signage at all stops.
Unconstrained	Unconstrained	\$1,127,000	Unconstrained	Maintain existing headways on the Blue Line and run the Red Line at hourly headways. Expand both deviated fixed-route and dial-a-ride service hours to provide service Monday through Thursday 6:00 AM – 8:00 PM, Friday from 6:00 AM – 11:00 PM, Saturday 9:00 AM – 11:00 PM, and Sunday 9:00 AM – 8:00 PM.

<sup>1</sup> Funding estimates are based on average costs for providing service. Actual costs may vary as additional support staff, drivers, and vehicles may be needed to expand service hours.

<sup>2</sup> Funding for STIF Intercommunity + FLAP is noted separately from Baseline funding.

<sup>3</sup> Installed benches vary in price between \$500 to \$1,500, depending on materials, the quality of the product, and the installation conditions. A new bus stop signage and pole, installed, can range from \$300 to \$1,000.

<sup>4</sup> Shelters typically cost approximately \$6,000 plus installation. Installation costs can be reduced if improvements are coordinated with roadway improvements.



## IMPLEMENTATION PLAN

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This section describes the monitoring program, tracking of land use and development code amendments, process for local land use and transportation policy changes, development code program, and necessary code amendments for integrating the TDP into County and local documents.

### Monitoring Program

The monitoring program will help Wasco County track progress on the TDP goals using proposed performance measures and benchmarks. The program is data-driven and is founded on performance measures that can be tracked on a regular basis through set benchmarks. In many cases, these performance measures are already tracked as part of Federal Transit Administration reporting requirements. This program enables a dynamic system where service adjustments can be implemented and justified following performance evaluations. To evaluate and improve the above service opportunities after implementation, The LINK should continue to monitor the following performance measures for each route:

- **Goal 1: Customer-Focused Services** – Provide services that are safe, attractive, and convenient for all riders.
  - Service frequency
  - Service span
  - Geographic coverage
  - On-time performance (not currently available)
- **Goal 2: Accessibility and Connectivity** – Improve access and connections within and between communities in the service area as well as key destinations outside the service area.
  - Bus stop amenities
  - Bicycle and pedestrian connections
  - Population served
  - Employment served
  - Transit-dependent populations served
  - Number of service request denials
- **Goal 3: Coordination** – Collaborate with public and private partners to maximize services.
  - Connections to other routes/providers
  - System ease of use
- **Goal 4: Health** – Foster public health by reducing vehicle emissions, increasing people's use of active travel, and improving access to healthcare.
  - Access to health-supporting destinations
  - Fleet fuel efficiencies
- **Goal 5: Sustainability** – Foster environmental, economic, and fiscal sustainability through transit investments.
  - Rides per hour
  - Cost per ride
  - Cost per hour

- Total capital costs
- Total annual operating costs

As most metrics are already tracked as part of annual reporting or are otherwise unlikely to change regularly (e.g., fleet fuel efficiencies), all metrics are proposed to be monitored annually. More detail about the benchmarks for these measures can be found in *Memo #6: Updated Goals, Policies, and Practices*.

### Local TDP Adoption

This plan includes recommended transit-supportive policy and development requirement language to implement the TDP at the local level. Once adopted, the recommended language may also support and strengthen future grant proposals, when transit-supportiveness, multimodal transportation, transportation options, community health, and climate change mitigation are criteria for grant awards. The jurisdictions – Wasco County, The Dalles, Mosier, Maupin, and Dufur – should consider the following adoption actions to implement the TDP at the local level.

### Policies (Comprehensive Plan)

The TDP outlines service planning and capital planning recommendations for jurisdictions in the Wasco County service area. Policies in locally adopted plans can play an important role in supporting and implementing these TDP recommendations. Proposed transit-supportive policy statements are discussed in the Policy and Zoning or Development Requirement Amendments section of this plan. Adoption-ready policy statements for Wasco County are provided in Appendix B. Policy statement recommendations for other jurisdictions in the county – The Dalles, Mosier, Maupin, and Dufur – are provided in Appendix C.

Jurisdictions should adopt the service planning, capital planning, and policy recommendations from the TDP as part of the transportation element of their comprehensive plans.<sup>14</sup> These sections of the TDP are directly relevant to future land use actions; their adoption will provide clear direction to jurisdiction staff and development applicants. Alternatively, jurisdictions could adopt the entire TDP by reference, as a supplement to the locally adopted comprehensive plan. The adoption process can be accomplished as an amendment to the adopted comprehensive plan; this could be done either as a standalone amendment containing policy language (whole cloth or modified) from this document, or during an update of the local transportation system plan (TSP), which is the transportation element of the local comprehensive plan.

### Development Requirements (Zoning or Development Ordinances)

Transit-supportive development requirements can help further regional and local transit policy objectives and implement TDP recommendations. Recommendations to assist local partners in implementing the TDP are summarized in the Policy and Development Requirement Amendments section of this plan. Adoption-ready development requirement language for Wasco County is provided in Appendix B. Model development requirement language for other jurisdictions in the county that have adopted zoning or development ordinances – i.e., The Dalles, Mosier, Maupin, and Dufur – is provided in Appendix D; this language can be refined as appropriate for each jurisdiction.

In cases where development regulations may not appear to be needed or appropriate for a jurisdiction now (which may be the case for less-populated jurisdictions), the model language is available for

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<sup>14</sup> To the extent they are appropriate, technology and financial plan recommendations from the TDP can be adopted into the transportation element of local comprehensive plans as well.

discussions within the community and with local decision-makers to gauge interest and support for these regulations as potential enhancements to development requirements in the future.

A local jurisdiction could adopt zoning or development ordinance amendments in a few different ways: as part of a targeted TSP amendment, along with the policy amendments discussed above; bundled with other zoning or development ordinance amendments that the jurisdiction is considering or has planned; or as a standalone set of zoning or development ordinance amendments.

### **Policy and Development Requirement Amendments**

This section is intended to provide guidance to jurisdictions in the transit service area – Wasco County, The Dalles, Mosier, Maupin, and Dufur – to help implement the recommendations of the TDP. It includes the following elements to assist local implementation:

- An overview of transit-supportive policy statements,
- A general recommendation regarding policy amendments,
- An overview of transit-supportive development requirement concepts,
- A reference to the assessment of adopted local development requirements from Memo #6, and
- A general recommendation regarding zoning or development ordinance amendments.

The policy and development requirement language recommended in this section is intended to ensure that access to transit is enhanced through future local land use and development decisions. Guidance on actions for local jurisdictions to adopt these policy and development requirement recommendations is provided in the Local TDP Adoption section.

### **Policies**

Recommended transit-supportive policy statements should be reflected in local comprehensive plans and/or TSPs. Policy statements recommended for local jurisdictions in this TDP carry forward the goals and model policies developed for jurisdictions early in the planning process. The statements were updated following Advisory Committee Meeting #4 and a review of proposed TDP goals and policies. The proposed goals and policies were designed to guide The LINK and not necessarily the local jurisdictions; however, the two sets of goals and policies should be consistent with one another. The recommended policy statements also include updates made following the review of the Draft TDP and discussions from the local planning workshop in April 2022.

As noted above, adoption-ready policy language has been developed for Wasco County and is included in this plan in Appendix B.

To the extent that recommended policy language is not already represented in adopted policies, cities in Wasco County should consider adopting a version of the recommended language in Appendix C, using adoption actions discussed in the Local TDP Adoption section. In the case of small cities (i.e., cities other than The Dalles), the most basic transit-supportive policy statements (indicated in bold in Appendix D) should be appropriate and considered for local adoption.

### **Zoning or Development Ordinances**

Local development regulations are vital to implementing the TDP through land use permitting, realizing transit-supportive development and improvements over time throughout the county. Local jurisdictions should consider updating development-related requirements to ensure future development will support transit — particularly through coordination with The LINK and improvements that enhance access to transit. Transit-supportive development requirement concepts and model language have evolved

through transit planning processes throughout the state, drawing on sources such as the Oregon Public Transportation Plan, Oregon Transportation Planning Rule (TPR), and State of Oregon Transportation and Growth Management Model Development Code for Small Cities, 3rd Edition.

Transit-supportive development requirement concepts that can be locally codified are as follows:

- Coordination – Coordination between jurisdictions and the transit service provider regarding proposed development is critical to ensuring transit-supportive development occurs. The periods during which an applicant is preparing a development application and when that application is under review by the jurisdiction present key opportunities for this coordination.
- Access to Transit and Supportive Improvements – Providing safe and convenient access to transit and furnishing stops with supportive improvements (e.g., lighting and seating) will make transit easier and more attractive for the rider. In addition to requiring “site access” – access directly from buildings on a site to an existing or planned transit stop – transit-supportive access also consists of “area access” ensuring that transportation network connectivity is high enough to easily reach transit stops by walking and rolling (e.g., biking, skating, scooting, and mobility devices). Development regulations can promote this connectivity through maximum block length standards and required non-motorized access through long blocks.
- Parking – Parking affects the transit orientation of development in several ways. Capping the amount of vehicle parking permitted can help make alternatives to driving more attractive and create smaller parking areas for more pedestrian-oriented and transit-supportive development. The location and design of vehicle parking – e.g., restricting parking between buildings and the street and requiring landscaping and walkways – play a significant role in making pedestrian access to transit attractive and convenient. Parking areas also provide potential locations for transit stops, park-and-rides, and ridesharing. Providing sufficient and well-designed bicycle parking supports connections from transit to destinations by bike.
- Urban form – Urban form created by development standards can be used to establish a pedestrian-friendly environment and support transit. Transit-supportive development standards include those that: minimize the distance between buildings and the transit street; allow buildings to be set back from the street if pedestrian amenities are provided; and do not allow parking between the building and street.
- Definitions – Zoning and development ordinances should include transit-related definitions in order to clarify and support transit-supportive ordinance provisions.

Model zoning and development ordinance language for all the concepts described above is provided in full in Appendix D. Adoption-ready development ordinance language for Wasco County is provided in Appendix B.

Some of the model development requirements may not necessarily be appropriate or applicable for jurisdictions in Wasco County. Factors in determining the appropriateness and applicability of transit-supportive development regulations consist primarily of the type of transit service recommended in each community, community size, and level of urban development. Local requirements that are most universally needed and impactful are those regarding **coordination between the jurisdiction and transit service providers, site access to transit, transit stop improvements, and allowing for transit uses in parking areas**. For unincorporated Wasco County and the Cities of Mosier, Dufur, and Maupin, where populations are relatively small (roughly 500 people in each of the cities), transit-supportive development regulations related to parking and urban form may not be appropriate or applicable.

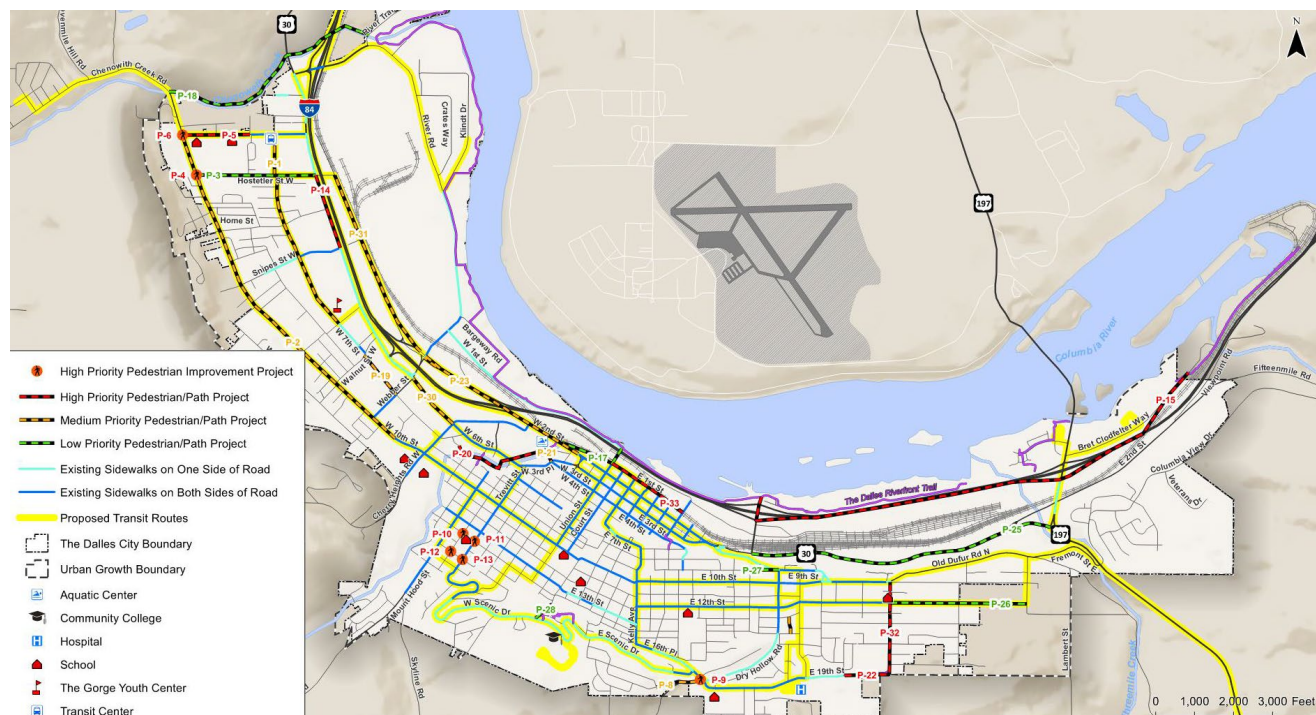


Memo #6 assessed each jurisdiction's current local zoning or development ordinance language and compared it to transit-supportive development requirements deemed appropriate and applicable for each community. Where the assessment found that current language is either partially consistent or not consistent with transit-supportive development requirements, the cities should modify the model language in Appendix D and update their local ordinances in order to effectively implement the TDP and improve transit service in Wasco County. This process would be accomplished using adoption actions discussed earlier in the Local TDP Adoption section.

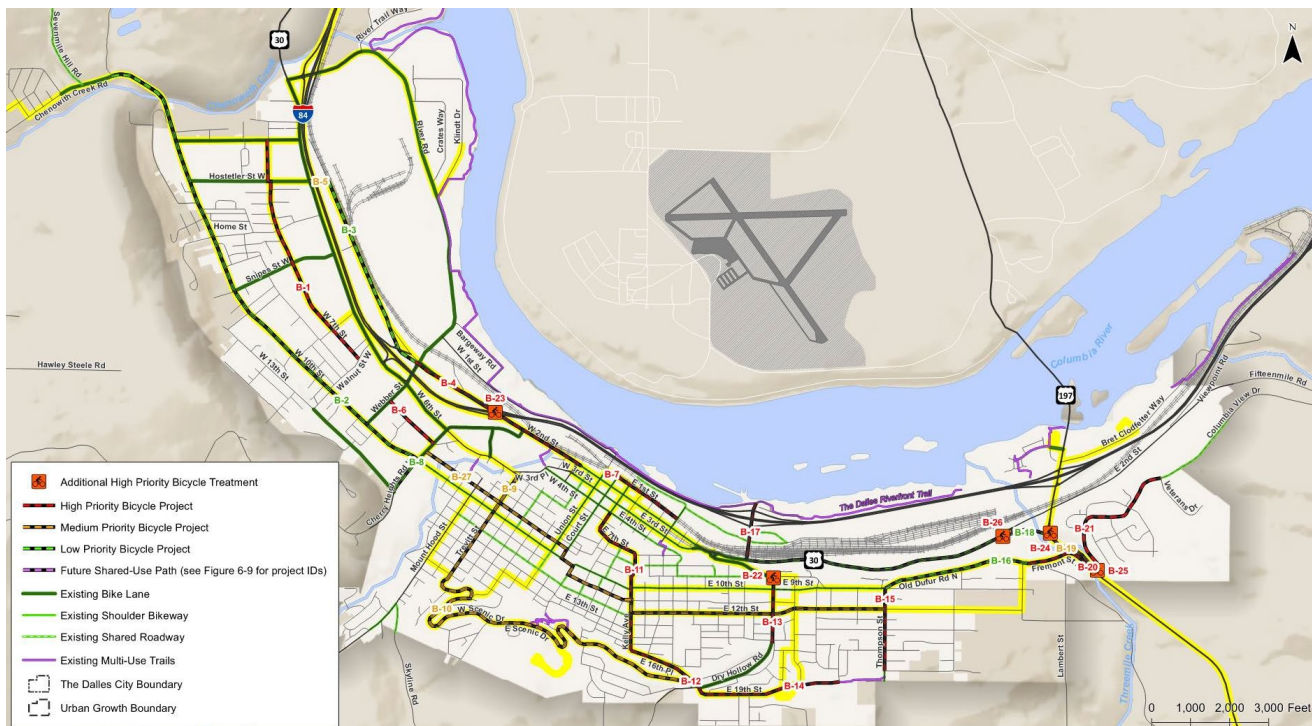
### Supporting Infrastructure

Figure 13 and Figure 14 illustrate the proposed transit routes overlayed on The Dalles TSP pedestrian and bicycle plans, respectively. As shown, a majority of the routes overlap with existing or planned pedestrian and bicycle facilities. The proposed Red Route's extensions to Chenoweth and the Port are located along areas without existing or planned pedestrian facilities. The TSP identifies existing bike lanes along River Road near the Port, and a low-priority bicycle project serving Chenoweth. This lack of pedestrian and bicycle facilities emphasize the near-term need to provide direct transit access to these locations, as it would be difficult for people to travel to the Transit Center to ride the bus. Coordinating bus stop improvements with bicycle and pedestrian infrastructure can be a cost savings to both the City and The LINK, and serve as local match for federal funding. Additionally, the coordination of these improvements should consider conflicts between the different modes, and consider the need for bus pullouts v. in-lane stops, bus stop islands in-between the vehicle lane and bicycle lanes, and other treatments to reduce conflict points and enhance the comfort of vulnerable users.

**Figure 13: Proposed Transit Routes Overlayed on The Dalles TSP Pedestrian Plan**



Source: The Dalles TSP

**Figure 14: Proposed Transit Routes Overlayed on The Dalles TSP Bicycle Plan**

Source: The Dalles TSP

Additionally, North Wasco School District's Safe Routes to School (SRTS) plan identifies improvement recommendations to facilitate safe walking and rolling to school safer and more comfortable. Figure 15 and Figure 16 show the plan's recommended projects within the next five years. These projects include several crossing improvements, sidewalk improvements, traffic calming projects, and a separated trail or path serving Chenoweth. It would be advantageous to place transit stops near improved crossing facilities to facilitate safe and comfortable travel via these new facilities.

**Figure 15: SRTS Improvement Recommendations for Access to Chenoweth Elementary School**

Source: North Wasco School District SRTS Plan



**Figure 16: SRTS Improvement Recommendations for Access to St. Mary's Academy and The Dalles High School**

## IMPROVEMENT RECOMMENDATIONS



- Street Improvement
- Crossing Improvement
- Off-Street Improvement (Trail/Path)
- ☆ Colonel Wright Elementary School
- Railroad
- School Property
- Parks
- Water
- City Boundary

Source: North Wasco School District SRTS Plan

## CONCLUSION

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Transit plays an important role in Wasco County, connecting its residents and visitors to the places they need and want to go. The recommendations shown here include conceptual guidance to be refined by The LINK and its partners moving forward. With this plan, Wasco County seeks to enhance transit service to meet the needs of the community, improve the transit experience, and prepare for future regional growth and tourism.

## APPENDICES

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- A. Technical Memoranda
- B. Adoption-Ready Policy and Development Ordinance Amendments for Wasco County
- C. Policy Amendment Recommendations for Cities
- D. Zoning and Development Ordinance Amendment Recommendations for Cities