

Washington State Department of Transportation

US 2 Westbound Trestle

Status Report to Washington State Legislature

June 30, 2023



Table of Contents

1.	SUMMARY	1
2.	INTRODUCTION	2
2.1	Purpose of Report.....	2
2.2	Project Background	2
2.2.1	Previous Studies.....	2
2.2.2	Planning and Environmental Linkages (PEL) Study	3
2.2.3	Legislative Direction in SSB 5975 Section 303(5) and 2023 Biennium Funding.....	4
3.	CURRENT STUDY.....	5
3.1	Key Decisions Made to Date	5
3.1.1	Determination of the Revised Study Area.....	5
3.1.2	Focused PEL Process.....	5
3.1.3	Tolling as a Funding Option.....	7
3.2	Corridor Users and Travel Patterns	7
3.2.1	Existing and Future Land Use	7
3.2.2	Existing and Future Baseline Traffic Volumes.....	9
3.2.3	Origins and Destinations of US 2 Westbound Trestle Users ...	10
3.2.4	Multimodal Facilities and Usage	12
3.2.5	Potential Solutions to Increase Multimodal Usage	13
4.	MOVING FORWARD	18
4.1	Reframing Scope	18
4.2	Next Steps	18
4.3	Key Milestones/Schedule	20
	APPENDIX A. EXISTING TRANSIT SERVICE AND ACTIVE TRANSPORTATION FACILITIES	I

Figures

- Figure 1. Recent Studies Relevant to the US 2 WB Trestle..... 3
- Figure 2. Expanded Study Area for US 2 Westbound Trestle
Transportation Analysis 6
- Figure 3. Existing and Future Households and Employment for
US 2 Trestle Primary Travel Shed 8
- Figure 4. US 2 Westbound Traffic Volumes – 2018..... 9
- Figure 5. Morning Peak Hour Traffic Volumes, Existing (2018) and
No-Build (2040) Configurations..... 10
- Figure 6. Trip Origins and Destinations by Travel District,
No-Build 2040..... 11
- Figure 7. Summary of Transit and Active Transportation Workshop..... 15
- Figure 8. Milestone Schedule for US 2 Westbound Trestle Replacement
Project PEL Study 21

1. Summary



3 previous studies to confirm need and funding



3 municipalities and 1 transit agency with direct impacts



\$17M to advance alternatives in the 2023-2025 biennium



2-level project study area to capture direct and tangential effects of potential changes



Convened 1 multimodal-focused workshop with 2 focus groups to identify opportunities



Efforts resulted in 3 key study findings to date:



Identified strategies in 3 multimodal categories: transit, vanpool/shuttle/microtransit, and active transportation

- 1 Tolling should be considered as a funding option
- 2 Transit and active transportation improvements will likely not offset the need to widen US 2 westbound trestle
- 3 Multimodal improvements paired with a tolling strategy could provide the most cost-effective trestle replacement solution



Initiated PEL to streamline NEPA and reduce future rework

2. Introduction

2.1 Purpose of Report

This report provides a status update on the US 2 Westbound Trestle project in compliance with SSB 5975, Section 303(5), which is described further in Section 2.2.3. The directive required the Washington State Department of Transportation (WSDOT) to consider options that enhance multimodal mobility options as part of the project and to report back to the Legislature with its preliminary analysis of these options by June 30, 2023.

2.2 Project Background



History of Structure

The US 2 westbound trestle encompasses the westbound segment of US 2 between Interstate 5 (I-5) on the west and the interchanges of State Route 204 (SR 204) and 20th Street SE to the east, and crosses the Snohomish River, Deadwater Slough, and Ebey Slough. US 2 is classified as an urban principal arterial and serves as the primary west-east corridor connecting the city of Everett and I-5 to the cities of Marysville, Lake Stevens, and Snohomish. The current structure was completed in 1968 with a design life expectancy of 75 years.

As the westbound trestle began to show signs of aging, WSDOT completed a bridge rehabilitation of the structure in 2011 to extend its service life. At time of completion, the rehabilitation project was expected to extend the service life of the trestle until approximately 2045.

2.2.1 Previous Studies

Several studies have been conducted in recent years that discussed the need for improvements to the US 2 westbound trestle. A timeline is shown in Figure 1. In 2009, the Washington State Legislature (Legislature), along with the City of Everett and Snohomish County, provided funding for a corridor planning study that focused on identifying short- and long-range improvements

for the US 2 westbound trestle that would address future operational needs. Completed in August 2016, the **US 2: Everett Port/Naval Station to SR 9 Corridor Planning Study** concluded the future replacement of the westbound trestle would be driven by traffic congestion and the useful life of the existing structure. The study made the preliminary assumption that the new trestle would be three lanes.

Two subsequent studies were also conducted to further advance a long-term solution for the corridor. These studies are:

- » **US 2/SR 204/20th Street SE Interchange Justification Report (IJR).** This study, completed in April 2018, identified a preliminary preferred alternative for the east end interchange that include single lane connections from SR 204 and 20th Street SE along with a two-lane connection from US 2.
- » **US 2 Westbound Trestle Funding and Finance Study.** This study was completed in January 2018 and developed a scoping-level cost estimate for the replacement of the westbound trestle (three-lane and four-lane alternatives) and east end interchange improvements identified in the IJR. The study also looked at a variety of funding sources, including tolling and public-private partnership (P3) options. It concluded that unless a gas tax in excess of 3 cents was specifically earmarked for this project, tolling would likely be required to generate sufficient funding.

Figure 1. Recent Studies Relevant to the US 2 WB Trestle



2.2.2 Planning and Environmental Linkages (PEL) Study

In 2018, the Legislature authorized funding to identify additional high-level conceptual alternatives for the US 2 westbound trestle that could eventually be carried forward into the National Environmental Policy Act (NEPA) review process. Building off the previous studies, this project developed a draft Purpose and Need and high-level concepts.

Various stakeholders were engaged throughout the project, including Federal Highway Administration (FHWA); Snohomish County; the cities of Everett, Lake Stevens, Snohomish, and Marysville; the Port of Everett; Community Transit; and Sound Transit. Additional briefings were held with elected officials, resource agencies, and tribes and interviews conducted with local community-based organizations. Findings from the study were documented in a PEL study report that was finalized in January 2021.

Draft Purpose and Need

Based on the transportation needs identified at that time and for the study area evaluated, the PEL study developed the following draft Purpose and Need Statement:

The draft purpose of the US 2 Westbound Trestle Study is to develop a long-term solution that will increase travel reliability, reduce crash potential, and improve multimodal system linkages to support regional and community growth. In addition, a solution should modify roadway geometrics and satisfy current operational standards. The draft need is a long-term solution for the US 2 westbound trestle that addresses mobility, safety, multimodal use, and sustainability.

Results of Initial Study

The initial PEL study focused on 2040 traffic operations on the US 2 westbound trestle. The analysis indicated that adding lanes to the trestle alone would not alleviate the forecasted congestion on the trestle. A larger study area that includes portions of I-5 and a better understanding of how travelers move through the network would be required to adequately assess future conditions, evaluate reasonable alternatives, and develop a long-term solution for the westbound US 2 corridor.

Next steps recommended by the study included placing the corridor in a broader context that recognizes capacity limits on the I-5 corridor and on the surface streets and intersections in downtown Everett. Additionally, the transportation analysis approach used could be expanded to include person-throughput in the corridor as a primary criterion for evaluation. Multimodal strategies could be explored to increase the use of high-occupancy vehicle (HOV) and transit, including an assessment of gaps in transit access to communities.

2.2.3 Legislative Direction in SSB 5975 Section 303(5) and 2023 Biennium Funding

During the 2022 legislative session, the Legislature passed SSB 5975, Section 303(5), which provided additional funding and directives to advance this project. The legislation states, “it is the further intent of the Legislature that this project enhance multimodal mobility options on the US 2 Trestle. The planning, design and engineering work must consider options to enhance transit and multimodal mobility, including bus rapid transit.”

The initial elements of the transportation study for the expanded area incorporate the Legislature’s request and focus on multimodal opportunities, including assessing the maximum number of persons that transit could attract and accommodate across the trestle. This is discussed further in this report.

In 2023, the Legislature allocated an additional \$17 million for this project in the 2023-2025 Biennium to continue advancing a long-term solution for the US 2 westbound trestle.

3. Current Study

The current transportation study considers an expanded study area encompassing portions of I-5 that affect US 2 westbound trestle operations. The intent of this study is to obtain a better sense of how much multimodal system improvements could feasibly address corridor needs, as well as what types of improvements could be made to I-5 to be compatible with potential westbound US 2 improvements. Preliminary discussion of potential multimodal improvements are included in this legislative update report. The findings of this study would inform a future focused PEL analysis and future NEPA process.

3.1 Key Decisions Made to Date

Key decisions have been made related to determination of study area, whether to accelerate the focused PEL process as part of this phase, and whether to consider tolling in the development and evaluation of alternatives.

3.1.1 Determination of the Revised Study Area

WSDOT began by determining the bounds of the expanded study area. The intent was to capture an area broad enough to contain most of the transportation network and services that could potentially affect the US 2 westbound trestle corridor. Key to this was incorporating enough of the I-5 corridor, as well as alternative east/west connections between SR 9 and I-5. The resulting study area is shown in Figure 2 and includes I-5 from I-405 in Lynnwood to SR 531 in Arlington. The study area is broken into two levels. The outside, or largest area, is the area that would be modeled with the Puget Sound Regional Council (PSRC) Regional Model and with a more detailed Dynamic Traffic Assignment (DTA) model. This would capture existing conditions in the overall study area that may currently be affecting US 2 operations and capture any changes to the overall system from proposed improvements to the US 2 corridor. The inner area, bounded with a dashed line, is the area where traffic changes are expected to be most prominent with any changes to US 2 and will be the area where more detailed traffic analysis will be conducted to assess those effects.

3.1.2 Focused PEL Process

The second decision made was whether to expand the current transportation study to initiate a focused PEL process, building upon the prior PEL study. WSDOT determined that expanding the current transportation study effort to initiate and follow the FHWA's PEL process would be the most efficient way to conduct pre-NEPA activities for the project, because it would allow WSDOT to adopt planning products and decisions, such as the purpose and need and range of alternatives, into the NEPA process, resulting in the least amount of rework.

Figure 2. Expanded Study Area for US 2 Westbound Trestle Transportation Analysis



The focused PEL will use and build upon the initial PEL study and will include an assessment of the expanded study area and a more in-depth analysis of multimodal solutions and evaluation criteria by which to assess the proposed options. The objective is to develop a reasonable range of alternatives, preferably a single preferred alternative, to subsequently evaluate through the NEPA process.

Another key objective of the revised scope of the transportation study is to conduct environmental work, such as field studies, that will help the project meet the federally required timelines for completing the future NEPA process.

3.1.3 Tolling as a Funding Option

A third decision entailed whether to include tolling options as part of the alternatives being evaluated in the new PEL. The 2018 funding and finance study referenced on page 3 of this report indicated that replacing the westbound trestle could not be funded without tolling, so the initial PEL study conducted from 2018-2021 assessed the feasibility of adding an express toll lane (ETL) to the structure. WSDOT found that given the short length of the trestle, the complex movements that need to be made at the interchanges at each end and the subsequent weaving required across the trestle, an ETL would not offer a travel time advantage, would not be well used, and would not generate any notable revenue.

While the ETL was deemed infeasible in the initial PEL, WSDOT is including full tolling of all trestle lanes as an option to be considered in the new PEL. Including a tolling alternative as part of the current study prevents future rework if tolling is deemed necessary later in the NEPA process. WSDOT has been coordinating internally with the Toll Division and externally with key legislators to build awareness of this study alternative.

WSDOT will study the following effects relative to tolling:

- » Potential route diversion and associated impacts
- » Equity considerations
- » Transit benefits and the potential to attract more transit riders
- » Effects of tolling on overall demand
- » Potential tolling revenue

3.2 Corridor Users and Travel Patterns

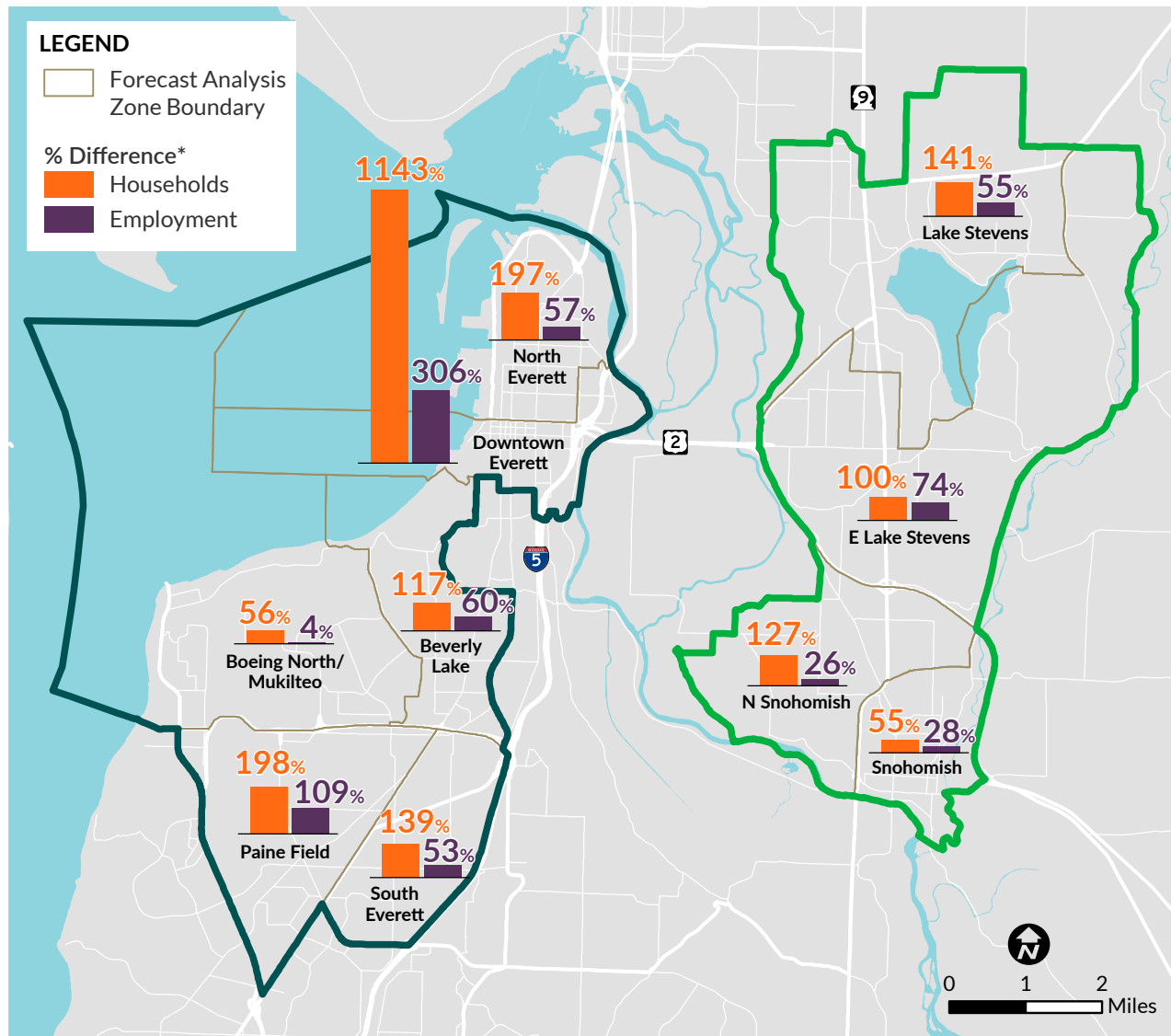
An in-depth understanding of existing and future users and travel patterns in the corridor is necessary to develop viable multimodal concepts for the US 2 westbound trestle. WSDOT reviewed existing information and facilitated a multimodal-focused stakeholder workshop before identifying transit opportunities and impacts in the corridor.

3.2.1 Existing and Future Land Use

Land use plays an important role in supporting and facilitating the use of transit. Higher density residential areas and employment centers are easier to serve with transit and generally support higher transit use. Less dense single family suburban housing or rural areas typically are less efficient to serve with transit, as are strip mall commercial developments. Currently, land use on the east side of the trestle is predominantly lower density single family housing and rural development, which is not conducive to transit use. The areas surrounding the cities of Lake Stevens and Snohomish were estimated to contain approximately 23,500 households and 14,700 jobs in 2018 (see Figure 3). On the west side of the trestle, downtown Everett with the city and county offices concentrated along with a variety of commercial and retail activities represents a fairly dense

employment center that in itself can be reasonably served by transit. The Boeing/Paine Field Manufacturing Industrial Center (MIC), while it has a large employment base (approximately 62,200 jobs in 2018), is somewhat more challenging because the job sites are spread out in such a way as to be difficult to serve by transit. Additionally, security requirements prohibit the routing of public transit within the Boeing facility.

Figure 3. Existing and Future Households and Employment for US 2 Trestle Primary Travel Shed



West Side		
	HOUSEHOLDS	EMPLOYMENT
2018	44,000	104,400
2050	150,000	194,400
% Difference*	+241%	+86%

East Side		
	HOUSEHOLDS	EMPLOYMENT
2018	23,500	14,700
2050	49,800	21,200
% Difference*	+112%	+44%

* from 2018 to 2050

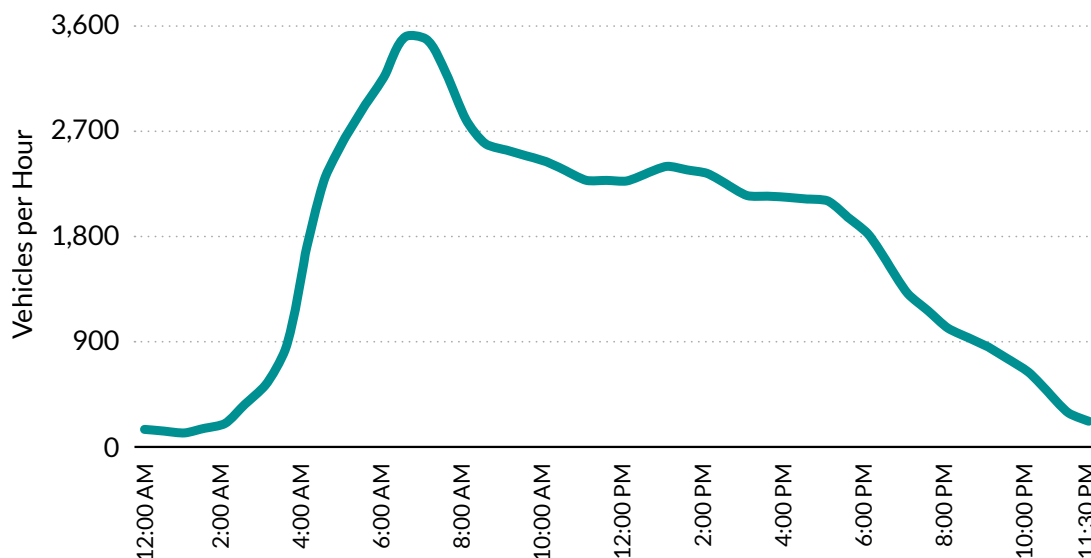
Regional land use projections, however, indicate a shift in employment activity on the west side of the trestle by year 2050. While the Boeing/Paine Field MIC is still projected to be a major employment center (87,600 jobs—a 41 percent increase over 2018), downtown Everett and North Everett combined are expected to increase from 36,500 jobs in 2018 to 97,800 jobs by 2050—a 168 percent increase. The majority of that growth is expected to occur in downtown Everett with 16,300 jobs in 2018 growing to 66,100 jobs by 2050—a 306 percent increase. This level of employment density is certainly conducive to being served by transit; and to avoid undue congestion on downtown Everett streets, it will need to be, in large part, served by modes other than the single occupant auto.

3.2.2 Existing and Future Baseline Traffic Volumes

The US 2 westbound trestle experiences its highest traffic volumes during the morning with a peak of almost 3,600 vehicles per hour between 6:30 and 7:30 a.m. as shown in Figure 4.

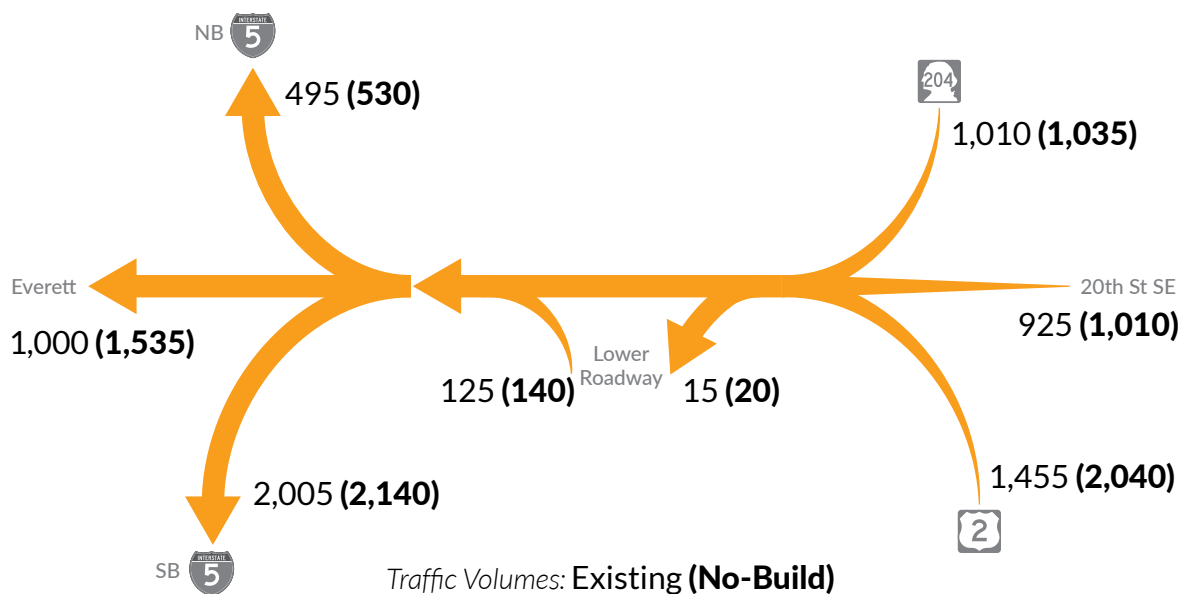
Projected future use of the trestle will be considered as we assess how improvements to the regional transit and active transportation networks can reduce the overall traffic volumes on the westbound trestle and ultimately right-size the project for future conditions. The no-build configuration serves as a baseline for comparing future solutions and contains the planned and programmed projects in the transportation analysis area that would be in place in the future without a replacement of the US 2 westbound trestle. This includes projects that have been identified in long-range plans and/or have committed funding, such as the additional westbound lane on 20th Street SE for priority use by transit and HOVs. The no-build configuration does not include an active transportation connection over the westbound trestle span. Additionally, the existing structure is not wide enough to accommodate a designated HOV lane without repurposing one of the two existing general-purpose lanes as the existing shoulder is not wide enough for peak shoulder use.

Figure 4. US 2 Westbound Traffic Volumes – 2018



Preliminary estimates show that the traffic demand for the no-build configuration in 2040 significantly increases on the westbound trestle as compared to the existing condition; however, the anticipated increase in volumes varies by origin and destination, as shown in Figure 5 and reflected by changes on each of the on-ramps and off-ramps from the westbound trestle. In both the existing and no-build configurations, most travelers on the westbound trestle are headed for southbound I-5, although in 2040, the volume of traffic to downtown Everett experiences the most growth which is consistent with the high rate of development projected for downtown. Most travelers enter the westbound trestle from US 2, and in 2040, this volume increases substantially more than the other on-ramp volumes. This information was used to develop concepts in the initial PEL for the westbound trestle to accommodate the various traffic flows.

Figure 5. Morning Peak Hour Traffic Volumes, Existing (2018) and No-Build (2040) Configurations

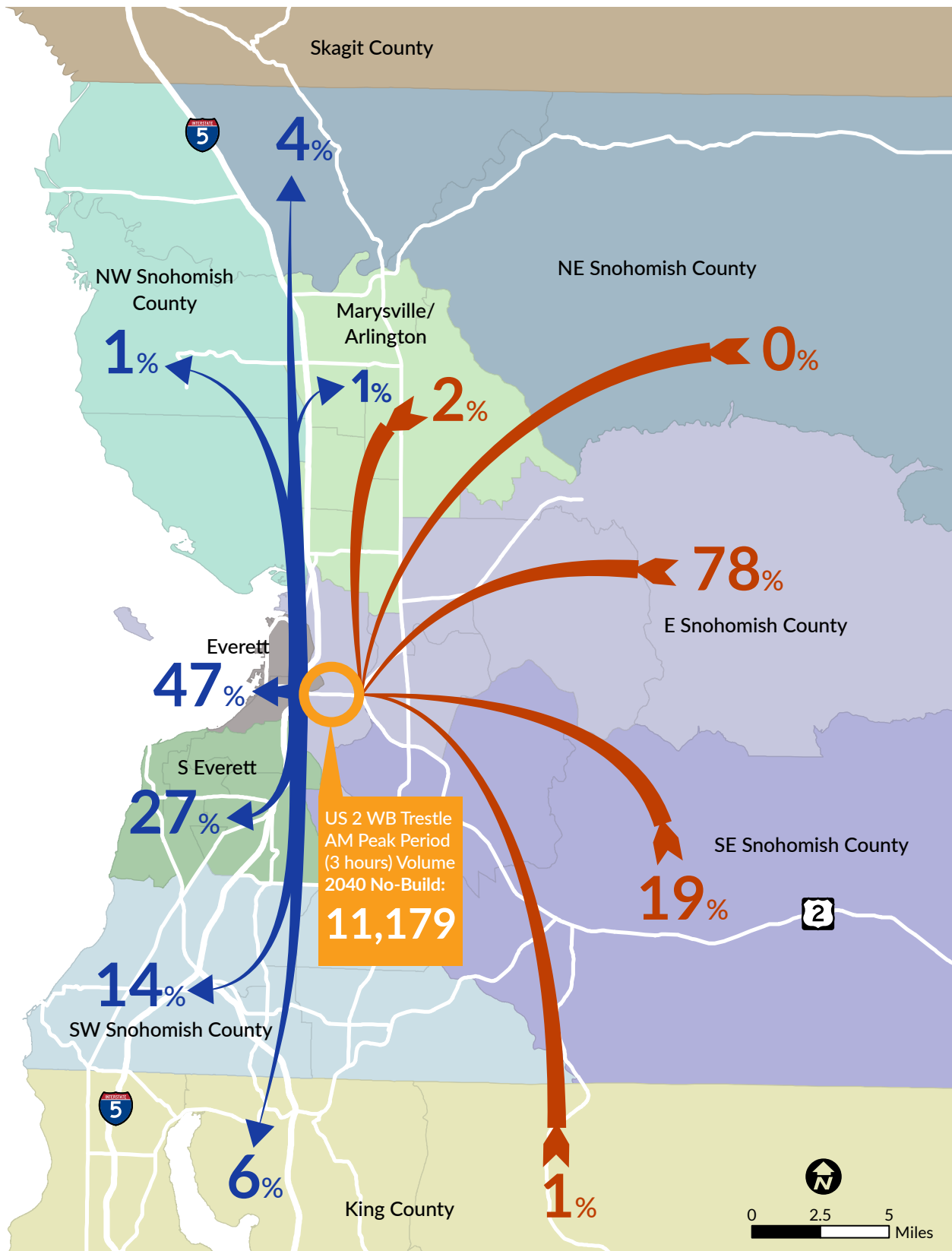


3.2.3 Origins and Destinations of US 2 Westbound Trestle Users

To develop an understanding of regional movements that rely on the westbound trestle, data collected from the PSRC and StreetLight¹ were analyzed to indicate by travel district where the trips across the westbound trestle begin and end. Figure 6 illustrates results of this data analysis for the morning peak period under the 2040 no-build configuration. The highest percent of trips begin in east Snohomish County, and the highest percent of trips end in Everett. Only 6 percent of travelers across the westbound trestle are headed for King County and Seattle. These data will be useful for developing a multimodal strategy for the corridor that considers all trip types and purposes.

¹ StreetLight is a proprietary data analytics platform, which uses personal cellular-device location data and navigation GPS data to determine estimates of trip origins, destinations, travel times, and routing information.

Figure 6. Trip Origins and Destinations by Travel District, No-Build 2040



3.2.4 Multimodal Facilities and Usage

Before improvements to the multimodal network can be determined, it is necessary to identify current and future programmed transit and active transportation facilities and usage.

Transit

Current Service and Ridership

Community Transit presently provides bus transit service via the US 2 westbound trestle on four routes, as well as commuter routes to downtown Seattle and Bellevue. These include a mix of peak and daily service routes. Existing ridership for these routes combined across the westbound trestle averages approximately 140 riders in the AM peak period (6 to 9 a.m.), and 380 riders daily. This represents about 1.3 percent of morning peak period trips and roughly a 0.8 percent transit share of user trips on a daily basis. Appendix A contains maps showing existing transit routes within the greater project area.

Future No-Build Service and Ridership Projections

Preliminary results from the PSRC SoundCast Model show transit ridership across the westbound trestle increasing to 650 riders in the AM peak period, and 1,400 for daily by the year 2050. This reflects nearly a seven-fold increase in the AM peak period, and more than a four-fold daily increase. However, despite this projected increase, transit riders as a percent of total westbound users are still only projected to be 4.1 percent in the AM peak period, and 2.2 percent for daily.

Future changes to the transit network include the restructuring of Community Transit's route network to integrate with the Sound Transit Link extension to Lynnwood in 2024, and subsequently to Everett Station in 2037. This restructuring will eliminate most of the current express bus routes that now serve the Northgate Link Station, downtown Seattle, or the University of Washington and refocus them on the Snohomish County Link stations. The bus service hours for the commuter express routes can then be reallocated to local service, including *Swift* bus rapid transit (BRT).

Active Transportation

A review of the existing active transportation facilities in the study area identified some gaps, particularly surrounding park-and-rides and for regional connections with Everett Station. Appendix A contains maps showing existing active transportation facilities in the Lake Stevens/Snohomish area on the east side of the US 2 westbound trestle and in downtown Everett on the west side of the trestle.

Many of these gaps have been acknowledged by the local jurisdictions, who have planned or are planning projects to address these needs. The City of Everett has several planned active transportation facility improvement projects identified in their Transportation Improvement Plan and the City of Everett Bicycle Master Plan. Additionally, the City of Everett's US 2/I-5 Interchange Planning Study is considering supplementing interchange concepts with additional active transportation connections, particularly between regional centers and transit facilities. The

City of Lake Stevens has also recently approved transportation funding that will assist in providing additional and improved sidewalks within the city.

Active transportation facilities are particularly necessary around transit facilities (stops, stations, transit centers, park-and-rides, etc.) to support the level of transit service forecasted as part of this effort. It is not expected that these types of improvements will be a significant driver for increasing transit ridership, but they are essential for providing safe access, and to be able to provide a more extensive and efficient transit system that can help relieve some of the pressure on the trestle and transportation system overall. It is assumed that any new transit facility proposed will also include a full active transportation analysis within the walk and bike sheds for those locations, including recommendations for improving and providing adequate accessibility to those facilities.

3.2.5 Potential Solutions to Increase Multimodal Usage

Stakeholder Workshop to Address Potential Transit Improvements

On April 17, 2023, WSDOT conducted a workshop focused on identifying transit service and multimodal strategies to maximize the ability of transit to serve westbound trestle users. In addition to project team members, representatives from Snohomish County, City of Everett, City of Lake Stevens, and Community Transit participated in the workshop. Attendees included:

- » Steve Dickson, Snohomish County – Transportation and Environmental Services Director
- » Mohammad Uddin, Snohomish County – County Traffic Engineer
- » Sophie Luthin, Community Transit – Long-Range Planning Project Manager
- » Shawn Nakano, Community Transit – Transportation Supervisor
- » Rashid Dolor, Community Transit – Service Development Planner
- » Corey Hert, City of Everett – City Traffic Engineer
- » Tom Hood, City of Everett – City Engineer
- » Yorik Stevens-Wadja, City of Everett – Planning Director
- » Kim Klinkers, City of Lake Stevens – City Engineer

The primary goal of the workshop was to explore a larger area for transit service and accessibility and identify on- and off-corridor solutions that could reduce vehicular demand on the US 2 westbound trestle.

The study team provided background on the US 2 westbound trestle’s initial PEL and the 2022 legislative direction to examine opportunities to increase transit and other mode use across the trestle in an expanded study area. WSDOT also provided a summary of existing and projected transit ridership.

Attendees were divided into two focus groups: one representing the east side areas of the trestle and one representing the west side. They were asked to address two areas: (1) Identify gaps in the existing and future transit network that could affect ridership, and (2) Identify gaps in the transit access network that could affect ridership and suggest solutions.

Key Suggestions from Breakout Groups

For the east side group, park-and-ride lot capacity increases were important to help shift more trips onto transit before accessing the westbound trestle. The following locations for new park-and-ride lots were identified:

- » Along 20th Street SE between US 2 and 91st Avenue SE to capture ridership in a central area between Lake Stevens and northwest Snohomish. This location would leverage the recently implemented bus-only lane on 20th Street SE between 91st Avenue SE and US 2
- » Along Sunnyside Boulevard SE closer to Marysville
- » In north Snohomish near the US 2/SR 9 interchange

Another strategy included modifying the service to travel on SR 204 instead of 91st Avenue SE. This would keep fixed route ridership high and allow use of microtransit services (see above) from the outer neighborhoods to transfer to buses at park-and-ride lots before accessing the westbound trestle. The east side group also acknowledged the importance of addressing active transportation connections, particularly how to get bicycle access and storage infrastructure at park-and-ride lots and transit centers.

A key theme for the west side group was providing more direct service to employment centers. The project team provided working maps showing large increases in employment in downtown Everett in the forecast year based on PSRC forecasts (see Figure 3). This group emphasized the importance of transit priority across US 2 and through the interchanges at either end of the trestle. Community Transit staff indicated the corridor would qualify in the future for higher frequency service of approximately 15-minute headways. Service enhancements will depend on the actual development of west side employment centers.

Workshop attendees also identified strategies to serve major population centers outside of downtown Everett, such as the Boeing and Paine Field areas, including first/last mile access strategies. These include:

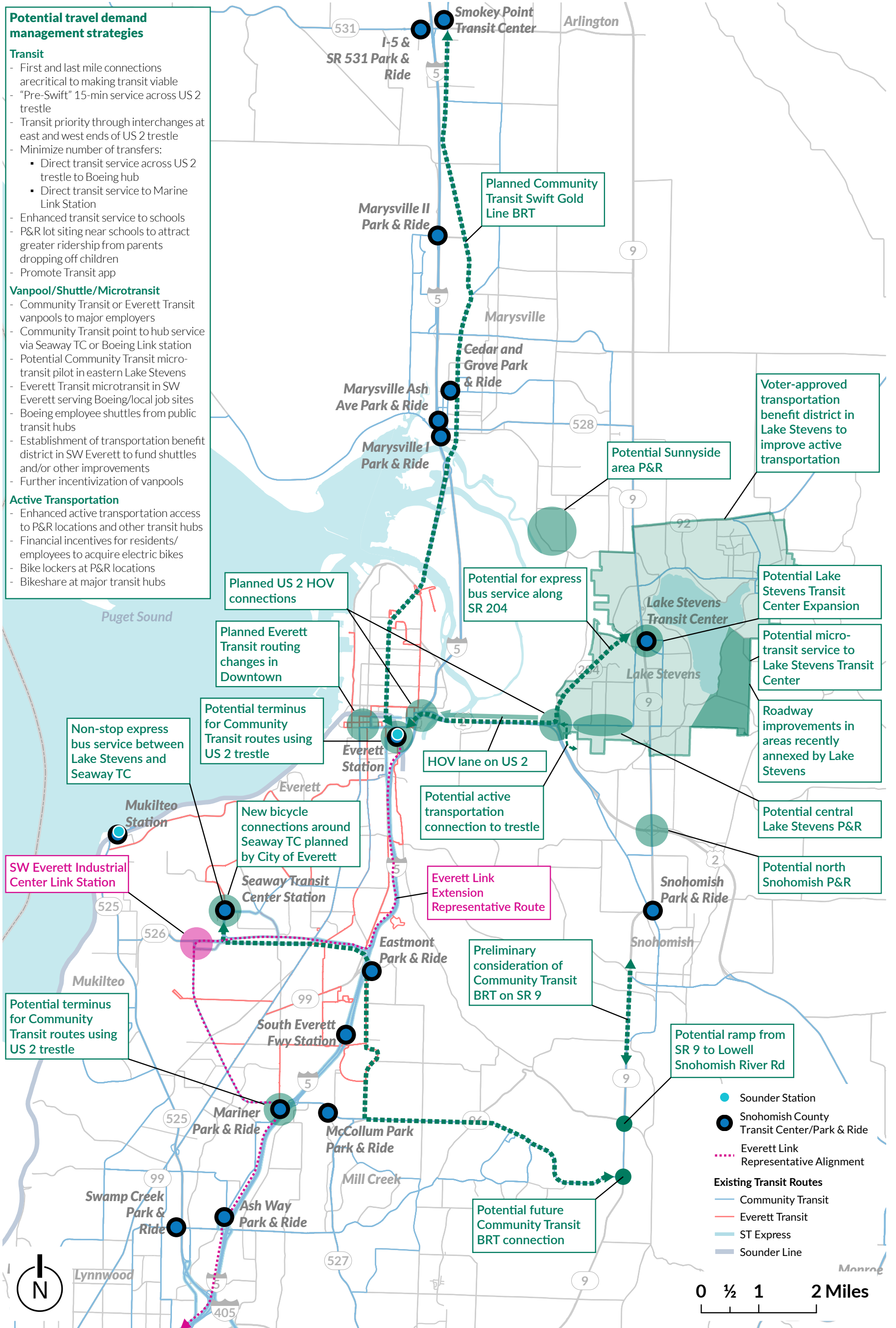
- » Use Boeing Link Station as a microtransit hub to facilitate first/last mile connections between work sites and transit
- » Expand bike share service at transit hubs and provide bicycle facility infrastructure between transit hub(s) and work sites
- » Add services as direct/express routes to the Boeing Link Station transit hub and/or the Seaway Transit Center
- » Provide a direct express bus route from US 2 to Mariner Link Station, bypassing Everett Station to save travel time

Figure 7 provides an area map showing potential travel demand strategies to serve transit, HOV, microtransit, and active transportation, all derived from the April 17 workshop discussions.

What is Microtransit?

Microtransit is typically an on-demand service available to the general public that uses app-enabled trip request and fare payment functions. Microtransit is generally used as a complement to fixed route service, providing transportation during time periods or in geographic regions poorly served by regular fixed route service.

Figure 7. Summary of Transit and Active Transportation Workshop



Transit and Active Transportation Improvement Impacts on Corridor Demand

Based on suggestions from the workshop, WSDOT assessed the potential for how these improvements could increase transit ridership and decrease traffic volumes on the US 2 westbound trestle.

Decreasing traffic volumes would have multiple effects on the transportation system, including:

- » reducing overall travel delay for people using the system,
- » decreasing pollution and improving air quality, and
- » possibly reducing the need for additional travel lanes, which could decrease environmental impacts and lower the cost of the trestle replacement while still meeting the region's mobility needs.

The effectiveness of the transit and active transportation recommendations in reducing the need for lanes on the trestle was addressed by comparing the future traffic volume forecast with a reasonable level of use of the proposed transit-related facilities and services. This preliminary estimate is intended to be further checked as the project team continues to work with the transit agencies as they update their long-range plans and make additional decisions about future transit services.

Early Key Findings Based on the Transit Workshop

- Adding transit service alone to the existing transportation system would not be effective because buses would be stuck in traffic congestion just like general traffic
- System level transit improvements are needed for transit to be effective. This could include:
 - An HOV lane on the US 2 westbound trestle paired with either direct HOV connections or congestion bypass options for transit on both ends of the trestle
 - Strategically located, easily accessible park-and-ride lots
 - Microtransit programs to provide transit access options to bus routes, park-and-ride facilities, and transit hubs
 - Active transportation access improvements
 - Increased frequency of transit service
- Financial incentives for transit could include:
 - Higher gas prices
 - Higher parking prices
 - Tolls
 - Free or subsidized transit passes
- Transit and active transportation improvements alone will not reduce the need for at least one new lane on the westbound trestle
- Transit and active transportation improvements paired with tolling would allow for the most cost-effective westbound trestle replacement option
- Further collaboration with the transit agencies is needed to confirm park-and-ride and transit service assumptions for the year 2050

Preliminary forecasts for the US 2 westbound trestle without tolling show approximately 1,600 more vehicles per hour westbound in the AM peak hour by the year 2050. Travel times for trips leading up to and crossing the trestle could exceed 90 minutes due to severe congestion at the interchanges on each end of the trestle. A key finding from the initial study of the US 2 westbound trestle was that transit service would be delayed reaching the US 2 westbound trestle and further delayed getting to downtown Everett or onto I-5 without a system level bypass. If the buses only get a travel time benefit crossing the trestle structure, they may only see between 2 to 3 minutes of savings. If a system level connection was provided (i.e., bypassing the congestion at both ends of the trestle), travel times would see a much larger decrease making transit more appealing.

The regional travel demand model has also estimated that transit ridership could increase by over 600 riders during the morning peak period. That is a 585 percent increase over today's ridership. If the corridor is still congested with 90 minutes or more of delay, the transit ridership would be less likely to materialize because there would be little perceived benefit to the travelers. If we were to increase the bus frequency, improve accessibility for active transportation, add park-and-ride lots, we would still see a considerable amount of congestion on the corridor. For example, if there were three 250-stall park-and-ride lots constructed with high-frequency transit service and the lots were 85 percent used, this could increase transit ridership and decrease the number of people driving their cars by about 640 vehicles. This would reduce the congestion on the US 2 westbound trestle and improve air quality, but it would not reduce the need for an HOV/transit lane and associated system connectivity. The HOV/transit lane and associated system connectivity would be necessary to incentivize people to ride buses and realize a travel time savings that could offset the additional time it takes to park a car and wait for a bus. While this preliminary study illustrates the need to pursue transit improvements in frequency, infrastructure, and accessibility to reduce vehicle demand on the US 2 westbound trestle, it also highlights the need for system level infrastructure improvements that will provide transit riders with a travel time benefit.

As the project team continues to refine the travel demand model and work with local jurisdictions, the ridership numbers may change somewhat, but the changes would likely not be enough to change the overall findings outlined in this report.

Tolling the US 2 corridor would reduce total demand because travelers would choose a different route, change their time-of-day travel, work remotely when possible, use carpool/vanpool, or ride transit. Tolling would not reduce the need for an HOV lane on the US 2 westbound trestle because there would still be demand for a reliable transit option. The HOV lane could also be managed to maximize its efficiency throughout the day.

4. Moving Forward

4.1 Reframing Scope

As noted in Section 3.1.2, WSDOT decided to expand, or reframe, the scope of the transportation study into a focused PEL process to adopt planning products and decisions, such as the purpose and need and the range of alternatives, and streamline the NEPA process. The primary changes and additions to the scope of work include:

- » Regular coordination with FHWA and signatures at the four concurrence points
- » Expansion of public, agency, and Tribal outreach program
- » Revisiting or confirming the previously developed draft Purpose and Need statement
- » More structured alternatives analysis framework tied to the purpose and need
- » More robust transportation analysis
- » More details on the design of potential project improvements
- » Deeper dive into environmental conditions and potential “red-flag” impacts

4.2 Next Steps

The study of a replacement of the US 2 westbound trestle is a priority for the Legislature, which allocated \$3 million in funding for the 2021-2023 biennium and \$17 million for the 2023-2025 biennium and intends to ultimately provide a total of \$210 million for the planning, design, right-of-way acquisition, interim improvements, and initial construction of a replacement facility. WSDOT is currently developing a work plan or “road map” identifying major milestones toward reaching this ultimate goal, and the timeframes associated with each step.

To date, the evaluation of existing transportation conditions has been completed. The evaluation of future transportation conditions without the project (a future No-Build Alternative) is underway. The results of the future No-Build Alternative will help identify places and conditions in the transportation network that are contributing to congestion on the US 2 westbound trestle, including conditions on I-5 that affect US 2 operations. Once the transportation analysis for the future No-Build Alternative is complete, WSDOT will:

- » Revise the draft Purpose and Need statement, if needed
- » Develop an evaluation framework, including screening criteria and methodology, for measuring effectiveness
- » Identify and screen multimodal improvement design concepts for US 2, its interchanges with SR 204/20th Street SE and I-5, as well as relevant portions of I-5

- » For environmental disciplines, prepare memoranda to document the assessment methodology and existing conditions within the environmental study area
- » Package design concepts into system alternatives
- » Evaluate system alternatives
- » Identify a preferred long-term system solution for the US 2 westbound trestle
- » Prepare and release the focused PEL study report

Throughout these next steps, the project team will provide opportunities for meaningful input from local agencies, resource agencies, Tribes, community-based or special-interest organizations, and the general public. In addition, to streamline a future NEPA process, throughout these next steps, the project will comply with FHWA's PEL requirement (23 United States Code 168(d)(4)) and will provide public notice that the planning products prepared during this planning process may be adopted during a subsequent environmental review process.

A key element of this effort will be to maintain coordination with relevant ongoing studies and planning efforts, including the following:

- » **WSDOT I-5 Master Plan:** In spring 2022, the Legislature initiated the Move Ahead Washington funding package that included funding for WSDOT to conduct statewide (border-to-border) planning for I-5. This work will ultimately create a master plan that addresses seismic vulnerability and resiliency; manages lanes; and develops a framework, coordination of corridor needs, core evaluation criteria, and a prioritization process, as well as the identification of early action priority projects that address safety and resiliency along the corridor. The US 2 Westbound Trestle PEL Study will need to coordinate closely with the relevant planning of the I-5 study for consistency and efficiency, including consideration of early potential I-5 improvements, and coordination with stakeholder participation for the project.
- » **City of Everett I-5/US 2 Interchange Planning Study:** When WSDOT began studying options for replacing the US 2 westbound trestle, the I-5 and US 2 interchange was identified as needing similar improvements to achieve the full benefit of the westbound trestle. In 2020, the City of Everett and Snohomish County received a grant from the PSRC to continue the preliminary work identified in WSDOT's study. In 2022, the City launched the I-5/US 2 Interchange Planning Study to identify improvements to the interchange and city streets that connect to it. The US 2 Westbound Trestle PEL Study is coordinating closely with the interchange planning study, including sharing data collected for each project, and will be incorporating improvement options identified in the study into the development of an overall system solution for the US 2 westbound trestle replacement.
- » **WSDOT Ultra-High-Speed Ground Transportation:** WSDOT is studying how ultra-high-speed ground transportation (UHS GT) might serve as a catalyst to transform the Pacific Northwest. In 2022, the Legislature allocated \$4 million for additional analysis and development of an expanded framework for future work, and \$150 million to be used as matching funds to leverage federal funding opportunities over the next six years. WSDOT is determining the next phase of work and how it will be undertaken. The US 2 Westbound Trestle PEL Study will coordinate with the UHS GT study as it progresses to incorporate potential effects it may have on the transportation system served by US 2.

4.3 Key Milestones/Schedule

A high-level schedule for completing the focused PEL process is shown in Figure 8 on the next page. Key milestones include:

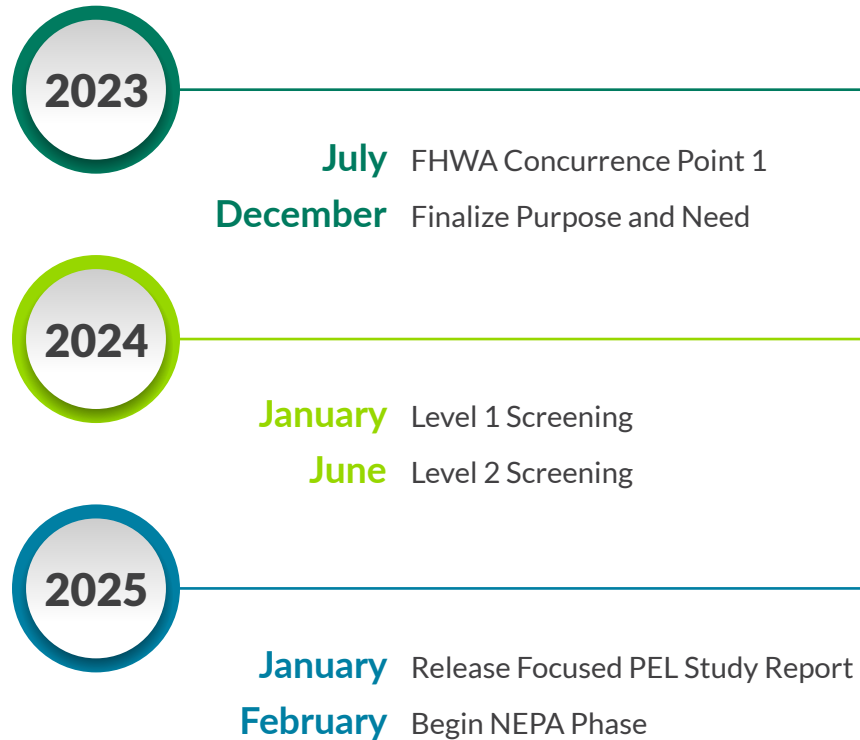
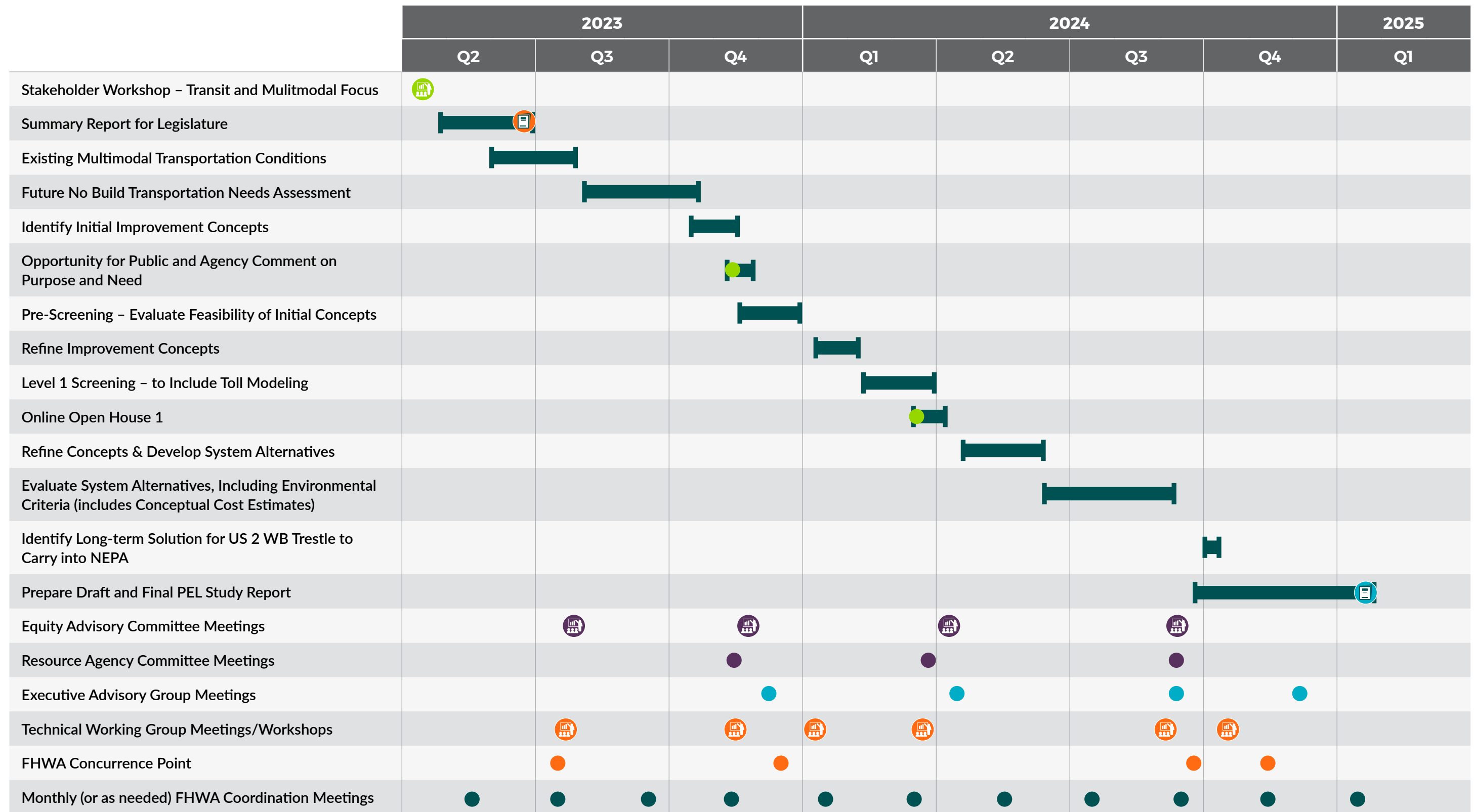


Figure 8. Milestone Schedule for US 2 Westbound Trestle Replacement Project PEL Study



Key Milestones =Legislature Report =PEL Study Report =Public Outreach



Ebey Island
Homeacres Rd
NEXT LEFT

Ebey Island
Homeacres Rd
LOCAL ACCESS ONLY

TRAFFIC ADVISORY
TUNE 530 AM
WHEN FLASHING

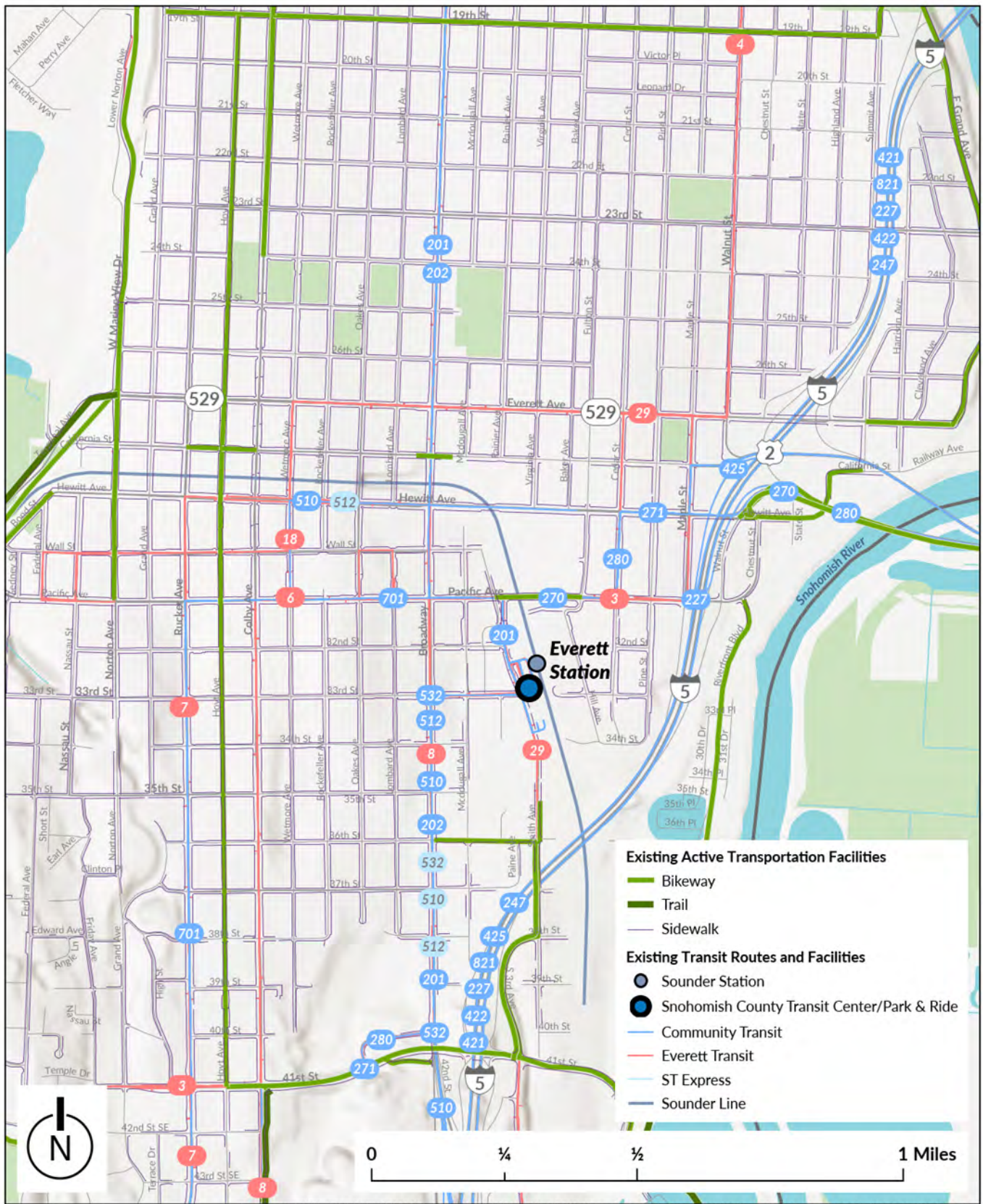
EXIT
25

SPEED
LIMIT
55

WRONG
WAY

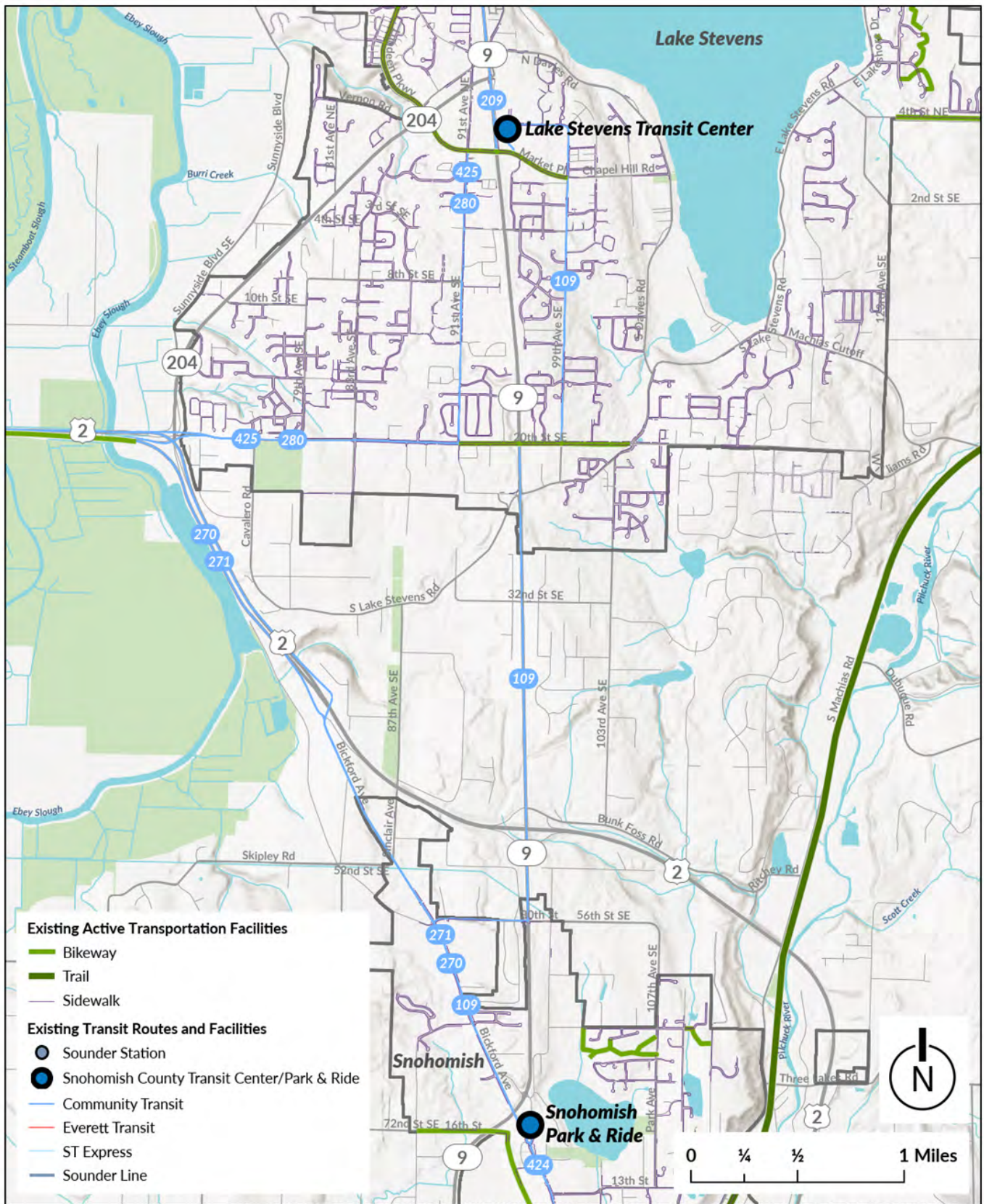
WRONG
WAY

Appendix A. Existing Transit Service and Active Transportation Facilities



Source: FEMA, USFWS, WSDOT, WA DNR, WA ECY, PSRC, Sound Transit, Community Transit, Everett Transit, Snohomish County, City of Everett, City of Lake Stevens, City of Lynnwood, City of Marysville, City of Snohomish, Esri, Mapbox, OpenStreetMap

Active Transportation Facilities - Downtown Everett **US 2 Westbound Trestle**



Source: FEMA, USFWS, WSDOT, WA DNR, WA ECY, PSRC, Sound Transit, Community Transit, Everett Transit, Snohomish County, City of Everett, City of Lake Stevens, City of Lynnwood, City of Marysville, City of Snohomish, Esri, Mapbox, OpenStreetMap

Active Transportation Facilities - Lake Stevens/Snohomish **US 2 Westbound Trestle**



**US 2 Westbound Trestle
Status Report to Washington State Legislature**

June 30, 2023