City of Kenmore

City of Kenmore - 18120 68th Avenue NE - Kenmore, WA 98028
Phone: 425-398-8900 - E-mail: cityhall@kenmorewa.gov

Planning Commission Meeting
ON-SITE
Tuesday, April 4, 2023 - 7PM
In addition, we try to provide access to the meeting virtually:
ZOOM LINK: https://kenmorewa-gov.zoom.us/j/83040220618

Or Telephone: Dial US: +1 253 205 0468
Callers please dial *9 to Raise/Lower Hand
Webinar ID: 830 4022 0618

Technical Difficulties - If the virtual component of the meeting disconnects, and we cannot resolve technical difficulties to reconnect the virtual component, the in-person meeting will continue at City Hall if there is a quorum of the body to conduct business.

1. CALL TO ORDER

2. PUBLIC COMMENTS

This is an opportunity to express your views on issues that are important to you and to the community. Please email comments to Shannon Tipple-Leen at stippleleen@kenmorewa.gov by 5:00 p.m. on Tuesday, April 4, 2023. All comments received will be forwarded to the Planning Commission for consideration. In a hybrid meeting, we will hear from our onsite guests first, followed by our virtual guests. You also may use the "raise hand" feature in Zoom during the Public Comment portion of the meeting or call in at the number listed above. A 3-minute comment limit applies.

3. APPROVAL OF MINUTES

March 21, 2023 Planning Commission Meeting Minutes

4. AGENDA ITEMS

Comprehensive Plan Update: Transportation Element (continued)
04.04.23 Staff Memo - Transportation Element
Attachment 1 Draft Transportation Element, clean version
Attachment 2 Draft Transportation Element, track changes version
Attachment 3 Draft Capital Facilities Plan, Table CF-C, Transportation Capital Improvements
Attachment 4 Appendix D-1, Traffic Modeling Assumptions and Level of Service Reports
Attachment 5 Appendix D-2, Land Use Maps
Attachment 6 Appendix D-3, Roadway Fact Sheets
Attachment 7 Appendix D-4, Transportation Cost Estimates
Attachment 8 Appendix D-5, Transportation Project Funding Sources
Attachment 9 Responses to public comments

Attachment 10 March 7, 2023 Planning Commission Public Hearing Presentation
Power Point Presentation 04.04.23

Comprehensive Plan Update: Utilities Element (continued)
04.04.23 Staff Memo - Utilities Element
Attachment 1 – Fish Enhancement Information from PSE

5. ADJOURNMENT

6. UPCOMING MEETINGS:

April 18, 2023, 7:00 p.m. - Climate Action Element

City of Kenmore
Planning Commission Meeting Minutes
March 21, 2023, @ 7:00 p.m.

Planning Commission Members – In Attendance (the meeting was held onsite and virtually using the Zoom online platform)

Dwight Thompson, Chair
Mike Vanderlinde, Vice Chair (Joined over Zoom)
Nathan Loutsis
Saad Qadri
Derek Wyckoff

Staff

Debbie Bent, Community Development Director
Lauri Anderson, Principal Planner
Richard Sawyer, Environmental Services Director in Public Works
Sammie Roeun, Administrative Specialist – Environmental Services Division
Gretchen Muller, Cascadia Consulting Group (Joined over Zoom)
Nicole Gutierrez, Cascadia Consulting Group (Joined over Zoom)
Hailey Weinberg, Cascadia Consulting Group (Joined over Zoom)
Shannon Tipple-Leen, Planning Commission Clerk
Brian Randall, Co Clerk

1. CALL TO ORDER

The meeting was called to order by Chair Thompson at 7:00 p.m.

2. PUBLIC COMMENTS

No public comments

3. APPROVAL OF MINUTES

March 7, 2023, Meeting minutes were approved by unanimous consent.

4. AGENDA ITEMS

Introduction to the Climate Action Plan (CAP)

Richard Sawyer, Environmental Services Director, introduced Gretchen Muller of Cascadia Consulting Group. Ms. Muller gave a power point presentation on Climate Action Plan with assistance from Nicole Gutierrez and Hailey Weinberg.

-Questions and changes for presentation

Is there sufficient staff on site to implement this plan?

Please give a background on Cascadia Consulting Group.

What is the Climate Action Element going to look like and how does it differ from the Climate Action Plan?

Is there a way to get more people in the community involved?

Is there engagement with youth happening in conjunction with the plan?

What is the City doing with the Climate Action Plan? Are there structures to address some of the impacts of climate change proactively and determine climate resilience?

Are the greenhouse gas numbers from 2019 still relevant for today?

Do you feel that the City is prepared resource wise to integrate this plan into every department?

It was asked to Cascadia how CAP plans have worked in other cities. Are they meeting the goals they set?

Staff responded to these questions.

A public hearing was discussed for June.

8. ADJOURNMENT

Chair Thompson adjourned the meeting at 8:07 PM

_____

Planning Commission
Approved by Planning Commission on: _____

City Of Kenmore, Washington

Memorandum

Date: April 4, 2023

To: Planning Commission

From: John Vicente, P.E., P.M.P., City Engineer

Regarding: Transportation Element

At your April 4 meeting, the Planning Commission will continue discussion of the draft Transportation Element (see Attachment 1). This meeting will include review of the responses to questions and edits discussed at the March 7 meeting as well as presentation of modifications in response to comments provided by the Puget Sound Regional Council.

Attachment 1 provides a complete, clean version of the draft Transportation Element update and Attachment 2 shows all changes to the existing version of the element in the ~~strikeout~~/underline/highlight format. Changes since the March 7 meeting are shown in the ~~strikeout~~/underline/highlight format with blue highlighting. Attachments 2, 5, and 7 incorporate changes from the March 7 meeting.

In addition to the draft Transportation Element, the Transportation section of the Comprehensive Plan Capital Facilities Element (Table CF-C, Transportation Capital Improvements) (see Attachment 3) must be updated as well to provide consistency within the Comprehensive Plan. The draft Capital Facilities Plan Table CF-C includes the estimated costs for all 6- and 20-year projects identified in the draft Transportation Element. The draft Capital Facilities Plan Table CF-C has been updated to reflect revised cost estimates for one project.

Several appendices accompany the draft Transportation Element update:

- Appendix D-1 (Attachment 4) describes the methodology used to perform the traffic modeling, including detailed modeling outputs showing forecast performance at select intersections.
- Appendix D-2 (Attachment 5) summarizes the process to distribute planned household and employment growth throughout the City, which was used as part of the travel demand modeling effort.
- Appendix D-3 (Attachment 6) provides additional details about the City's street typologies explained in the element.
- Appendix D-4 (Attachment 7) provides conceptual engineering drawings, cost estimates, and the cost estimating methodology for the projects included in the Transportation Element and draft Capital Facilities Plan Table CF-C.
- Appendix D-5 (Attachment 8) summarizes available grant funding sources that could be sought by the City to help provide funding for the capital projects.

The Planning Commission has reviewed and discussed the Draft Transportation Element at four previous meetings. The draft Transportation Element remains substantially unchanged

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since your most recent review on March 7. Specific changes to the draft Transportation Element include:

- Additional text clarifying why NE 175th Street is not included on Figure T-8. The title for Figure T-8 was also updated to specify it identifies WSDOT FGTS classified routes only (Page 6-16 through 6-17)
- In response to a comment from the Puget Sound Regional Council (PSRC), a new figure (Figure T-9) was added showing the Kenmore Air Harbor. Supplemental text was included to direct readers to the Land Use element for additional details regarding operations (Pages 6-16 and 6-18)
- A definition was provided for PM Peak period (Page 6-19)
- The titles of Figures T-18 and T-19 (renumbered to accommodate the new Figure T-9) were updated to denote that they represent the future vision for the pedestrian and bicycle networks, respectively (Pages 6-52 and 6-54)
- Figure T-23 (renumbered to accommodate the new Figure T-9) was updated to include the full length of the 61st Avenue sidewalk, as presented at the March 7 Planning Commission meeting (Page 6-65)
- In response to a comment from the PSRC, Table 11 was amended and Table 12 added to provide additional detail regarding future project funding (Pages 6-69 and 6-70)
- In response to a comment from the PSRC, a typographic error was corrected in Appendix D-2 to accurately reflect the number of jobs in Kenmore in 2018.

A response to public comments received at the March 7 public hearing, as well as the corrected staff presentation, was provided with the meeting minutes. Upon the close of the public hearing, one additional comment was received. A response to this comment, as well as those previously received, is provided in Attachment 9. At the public hearing, it was noted the presentation included a slide with incorrect information pertaining to the survey results. This presentation, including the corrected slide, is provided in Attachment 10.

Staff recommends the Planning Commission continue discussion of the draft Transportation Element and draft Capital Facilities Plan Table CF-C. If no additional changes are requested, the Planning Commission can take action at the April 4 meeting to formulate a recommendation on the draft Transportation Element and draft Capital Facilities Plan Table CF-C to the City Council.

<u>Attachments</u>
Attachment 1: Draft Transportation Element, clean version
Attachment 2: Draft Transportation Element, track changes version
Attachment 3: Draft Capital Facilities Plan, Table CF-C, Transportation Capital Improvements
Attachment 4: Appendix D-1, Traffic Modeling Assumptions and Level of Service Reports
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Attachment 6: Appendix D-3, Roadway Fact Sheets
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Attachment 10: March 7, 2023 Planning Commission Public Hearing Presentation

TRANSPORTATION ELEMENT

ATTACHMENT 1

INTRODUCTION

Since its incorporation in 1998, the City of Kenmore has continuously made investments that enhance its position as a vibrant community in which to live, work, and play. New civic facilities in downtown and multimodal transportation facilities throughout the City have been key contributors to the City's vitality. Building on previous improvements, this Transportation Element aims to support the vision of Kenmore as a high-capacity transit community with an activated, thriving downtown, as described in the Land Use Element. It also describes a network that supports travel by walking, biking, and riding transit throughout Kenmore, in addition to supporting adequate mobility when traveling by car in Kenmore through 2044. The Element supports the City's Diversity, Equity, and Inclusion Policy, adopted in 2020, to allocate resources in areas with historically disadvantaged communities. Recognizing that vehicle emissions are Washington State's largest contributor to greenhouse gases, the Element reflects the goals and policies described in Kenmore's Climate Action Plan (CAP), emphasizing a shift to transportation modes and technologies that reduced vehicle emissions.

Purpose

The purpose of the Transportation Element is to describe the City's vision for a safe, balanced, and efficient multi-modal transportation system that supports the Land Use element. The Transportation Element includes goals, policies, and objectives for maintenance and development of Kenmore's transportation system. It also identifies future transportation investments needed to realize the city's vision for multi-modal mobility within Kenmore. The Transportation Element informs the development of the Capital Improvement Program (CIP) by identifying the types of projects the City should undertake to support future transportation needs in the 6- and 20-year horizons. The plan also evaluates how these projects coincide with the City's financial resources.

This Transportation Element includes the following sections:

- ***Existing Conditions***: Describes conditions for all travel modes in the existing transportation system. This section also identifies current challenges and trends that will affect Kenmore's transportation network in the future.
- ***Goals, Objectives, and Policies***: Explains Kenmore's vision for transportation and the goals that serve as the basis for the Transportation Element.
- ***Future Transportation System***: Describes the City's layered transportation network concept to create a complete, multimodal transportation network in Kenmore. This section also establishes the City's level of service (LOS) standards.
- ***Near Term and Long Term Capital Projects:*** Provides near-term and long-range project lists based on the community values expressed in the transportation goals and layered network.
- ***Implementation Strategies***: Evaluates Kenmore's financial conditions over the next 20 years and provides guidance on plan implementation.

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Regional Context

The Transportation Element sets a framework for understanding, prioritizing, measuring, and creating a transportation network to help Kenmore achieve its land use vision. Kenmore's regional setting, shown in **Figure T-1**, is important. Nestled on the north shore of Lake Washington, the City forms the northern edge of King County and is bisected by State Route 522 (SR 522), a Highway of Statewide Significance. Given this strategic location, transportation conditions in the City are strongly influenced by pass-through traffic travelling between Seattle and east side cities, as well as growth in Snohomish County. The Kenmore Air Harbor provides connections to additional regional destinations, such as the Olympic Peninsula, the San Juan Islands, and British Columbia. The City must coordinate its transportation planning with a variety of jurisdictions, including neighboring cities, King County (including King County Metro), Sound Transit, the Puget Sound Regional Council (PSRC), and the Washington State Department of Transportation (WSDOT).

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Figure T-1: City of Kenmore and Surrounding Area

Growth Management Act (GMA)

The State's Growth Management Act (GMA) of 1990 requires communities to prepare a transportation plan consistent with the City's Land Use Element. Specific GMA requirements for the Transportation Element include addressing:

- Land use assumptions used in estimating travel
- Estimated traffic impacts to state-owned transportation facilities resulting from growth
- Future transportation facilities and services needs, including those for air, water, and ground transportation
- LOS standards for arterials, state highways, and transit routes
- Specific actions and requirements for bringing locally owned transportation facilities and services into compliance with established LOS standards
- Forecasts of future traffic based on the adopted land use plan
- State and local system needs to meet current and future demands
- Financing capability to judge needs against probable resources
- A multiyear financing plan based on needs, which will serve as the basis for the City's six-year transportation program
- Strategies to address issues if probable funding falls short of meeting identified needs
- Intergovernmental coordination efforts
- Demand-management strategies
- Bicycle and pedestrian improvements

This Transportation Element addresses the required transportation components of the GMA.

VISION 2050

PSRC is the region's metropolitan planning organization. Comprising cities, towns, counties, ports, tribes, transit agencies, and major employers, PSRC sets regional growth policies for King, Pierce, Snohomish, and Kitsap Counties. Adopted in 2020, VISION 2050, establishes the long term goals for growth management, economic, and transportation issues. This Transportation Element is consistent with the VISION 2050 priorities.

VISION 2050 identifies several key goals for transportation in the region:

- **Maintenance, Management, and Safety** – Maintain, preserve, and operate the existing transportation system in a safe and usable state.
- **Support the Growth Strategy** – Support the regional growth strategy by focusing on connecting centers with a highly efficient multimodal transportation network.
- **Greater Options, Mobility, and Access** – Invest in transportation systems that offer greater options, mobility, and access in support of the regional growth strategy.

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Countywide Planning Policies (CPPs)

The Regional Growth Strategy identifies a network of walkable, compact, and transit-oriented communities, including the City of Kenmore, that are the focus of urban development. The Regional Growth Strategy envisions an efficient, multimodal transportation system that provides various options for moving people and goods into and among centers.

The overarching transportation goal in the Countywide Planning Policies (CPPs) is that "the region is well served by an integrated, multimodal transportation system that supports the regional vision for growth, efficiently moves people and goods, and is environmentally and functionally sustainable over the long term". The CPPs support the transportation vision in the Regional Growth Strategy with policies focused on:

- Supporting Growth – focusing on serving the region with a transportation system that furthers the Regional Growth Strategy;
- Mobility – addressing the full range of travel modes necessary to move people and goods efficiently within the region and beyond; and
- System Operations – encompassing the design, maintenance, and operation of the transportation system to provide for safety, efficiency, and sustainability.

Other Plans

WSDOT controls SR 522, which runs east-west through Kenmore. As such, the City coordinates with WSDOT and neighboring communities regarding impacts to and needed investments on SR 522.

Sound Transit provides regional, high capacity transit service throughout the Puget Sound via Link light rail, Sounder commuter rail, and ST Express bus service. Sound Transit is currently advancing the capital and service investments included in the ST2 and ST3 ballot measures approved in 2008 and 2016, respectively. The ST2 ballot measure included funding for the Lynnwood Link light rail extension, planned for completion in 2024. The Shoreline South/148th Street and Shoreline North/185th Street stations will be the closest light rail stations to Kenmore, providing nearby access for Kenmore residents wishing to ride transit to destinations throughout the Puget Sound region. Sound Transit's Stride bus rapid transit (BRT) service on SR 522 was funded by the ST3 ballot measure. Planned for implementation in 2026, Stride will provide high-capacity transit service directly in Kenmore, providing residents with a direct connection to light rail in Shoreline and Stride service on I-405.

Metro Connects is King County Metro's (Metro's) 30-year vision for mobility. It is a long-range service and capital vision that describes planned future service networks and the capital investments needed to support those networks. The plan envisions multimodal connections to the places people want to go with safe and secure operations and facilities for passengers, employees, and communities. Metro Connects emphasizes Metro's core values of safety, equity, and sustainability, incorporates the recommendations of the King County Metro Mobility Framework, and aligns with Metro's Strategic Plan for Public Transportation and its Service

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Guidelines. The service networks envision changes to Kenmore's transit services, particularly in relation to the implementation of Sound Transit's investments in the regional HCT system.

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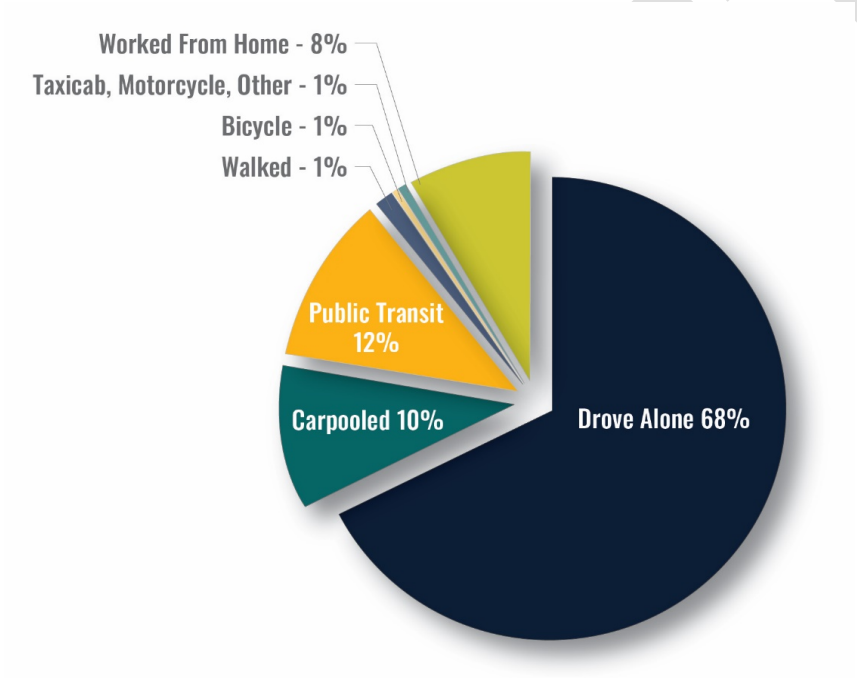
EXISTING CONDITIONS

Transportation Network Overview

Kenmore's transportation network accommodates many modes of travel, including walking, bicycling, public transit, driving, and flying. Vehicular travel for commuting to work, which generally occurs during the morning (AM) and evening (PM) peak when traffic volumes are highest, is the primary choice for many travelers in and around Kenmore, as shown in the Census journey-to-work data (see **Figure T-2**). The peak volumes for vehicles, pedestrians, bicyclists, and transit can occur during different times by location. For example, areas near schools are influenced by the start and end of classes, resulting in increased pedestrians and vehicles volumes during these times.

Figure T-2: Commute Mode to Work



Source: American Community Survey 2019 5-Year Journey to Work Data

City streets form the backbone of the transportation framework with roadways shaping how residents and visitors experience Kenmore. The City of Kenmore currently classifies its roadways into major arterials, minor arterials, collectors, and local streets, as shown in **Table T-1** and displayed in **Figure T-3**. Examples of each roadway type and the intended uses served are described in **Table T-1**.

Table T-1. Functional Classification of Roadways

Roadway Type	Description / Purpose	Example
Major Arterial	A roadway that serves through trips and connects Kenmore with the rest of the area.	• Simonds Road NE • 68th Avenue NE (SR 522 to NE 170th Street)
Minor Arterial	Minor arterial streets provide inter-neighborhood connections and serve both local and through trips.	• 61st Avenue NE • NE 181st Street (65th Avenue NE to 73rd Avenue NE) • Juanita Drive NE
Collectors	Collectors distribute trips between local streets and arterials and serve as transition roadways to or from residential areas.	• 68th Avenue NE (north of SR 522) • 73rd Avenue NE • NE 153rd Place
Local	Local streets provide circulation and access within residential neighborhoods.	• 62nd Avenue NE • NE 150th Street

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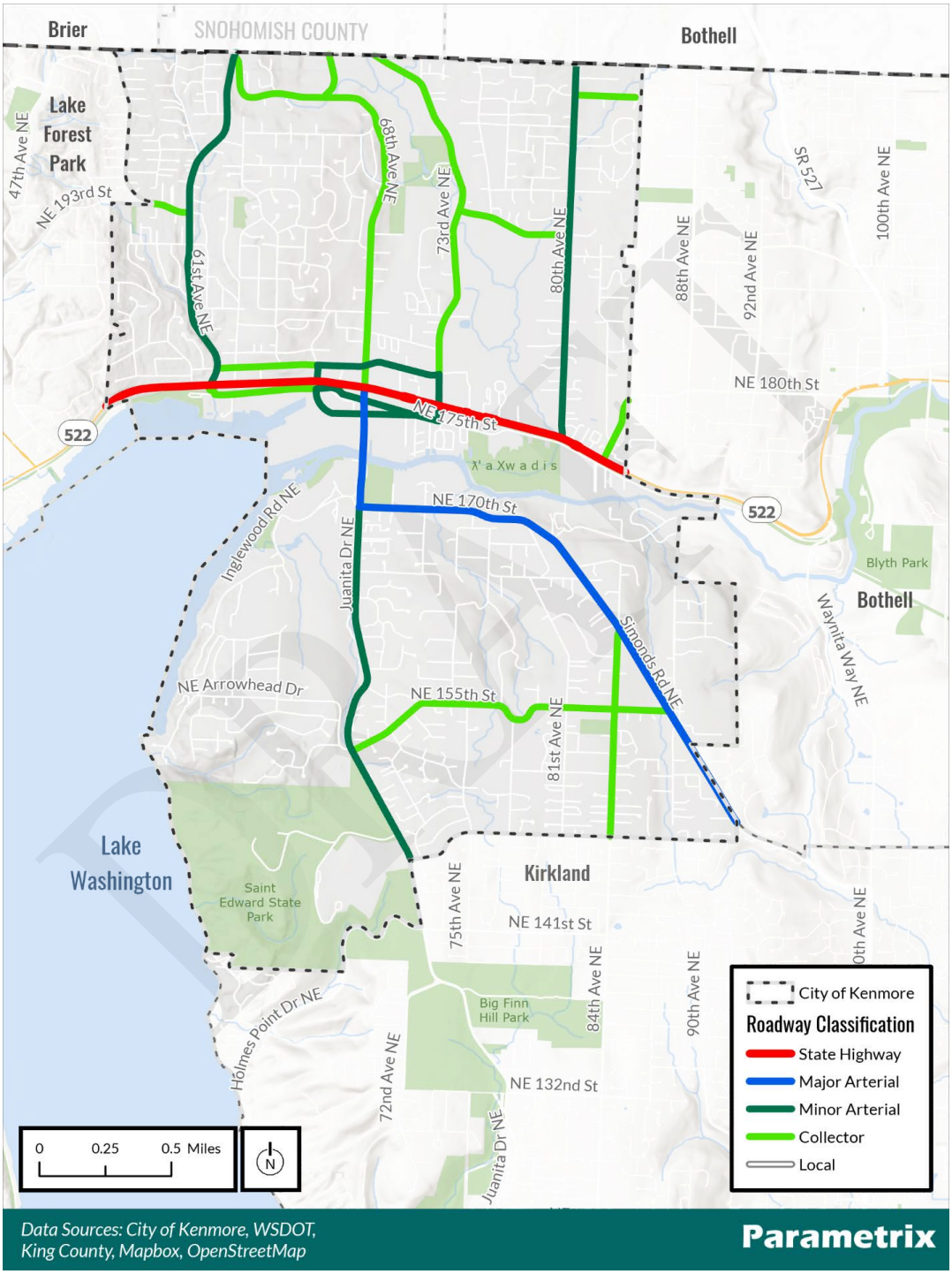
Figure T-3: Roadway Functional Classification



4. Comprehensive Plan Update: Transportation Element (continued)

There are approximately 45 linear miles of concrete sidewalks and 120 marked crosswalks in the City, but sidewalks are still absent from many streets. On quiet residential streets, sidewalks may not be necessary; however, Kenmore has a number of arterials connecting residents from their homes to commercial areas, employment centers, schools, and transit stops that lack adequate pedestrian facilities.

Figure T-4 displays different types of existing pedestrian infrastructure in Kenmore. **Figure T-5** shows where existing sidewalks and trails are located, as well as average pedestrian volumes (2022) at key intersections during the 2-hour evening peak for vehicular traffic.

Figure T-4: Existing Sidewalks and Trails

Source: Google Maps, City of Kenmore

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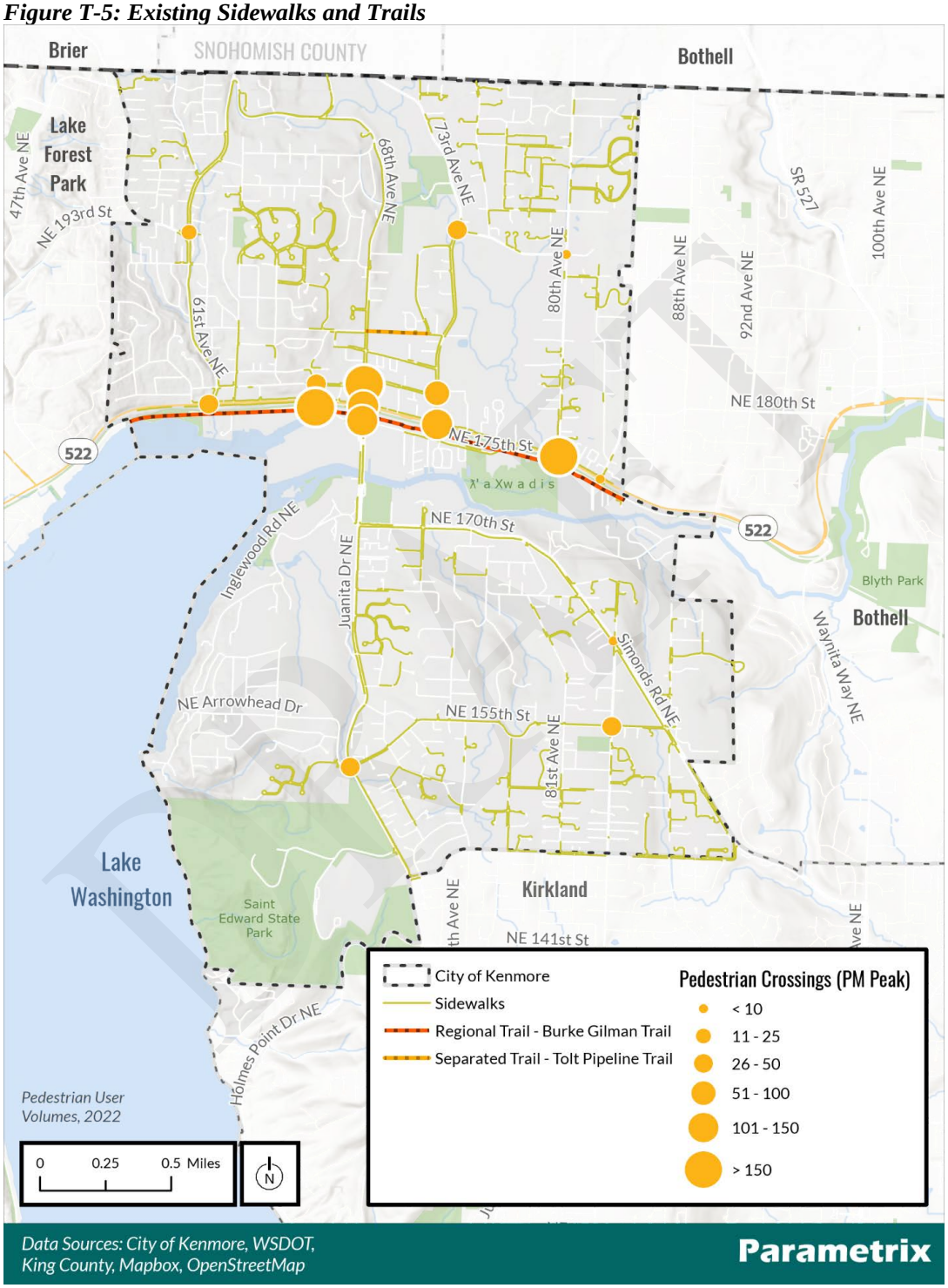
Figure T-5: Existing Sidewalks and Trails



4. Comprehensive Plan Update: Transportation Element (continued)

Kenmore hosts a section of the Burke-Gilman Trail, a regional multi-use trail that connects residents to Seattle and other area cities. However, for many Kenmore residents, connecting from home to the Burke-Gilman Trail or other non-motorized facilities can be challenging due to the topography and curvilinear streets in parts of the city. SR 522 and 68th Avenue NE / Juanita Drive NE create additional barriers to bicycling in Kenmore due to their high traffic volumes and difficult crossings. **Figure T-6** presents Kenmore's existing bicycle facilities, well as average bicyclist volumes (2022) at key intersections during the 2-hour evening peak for vehicular traffic.

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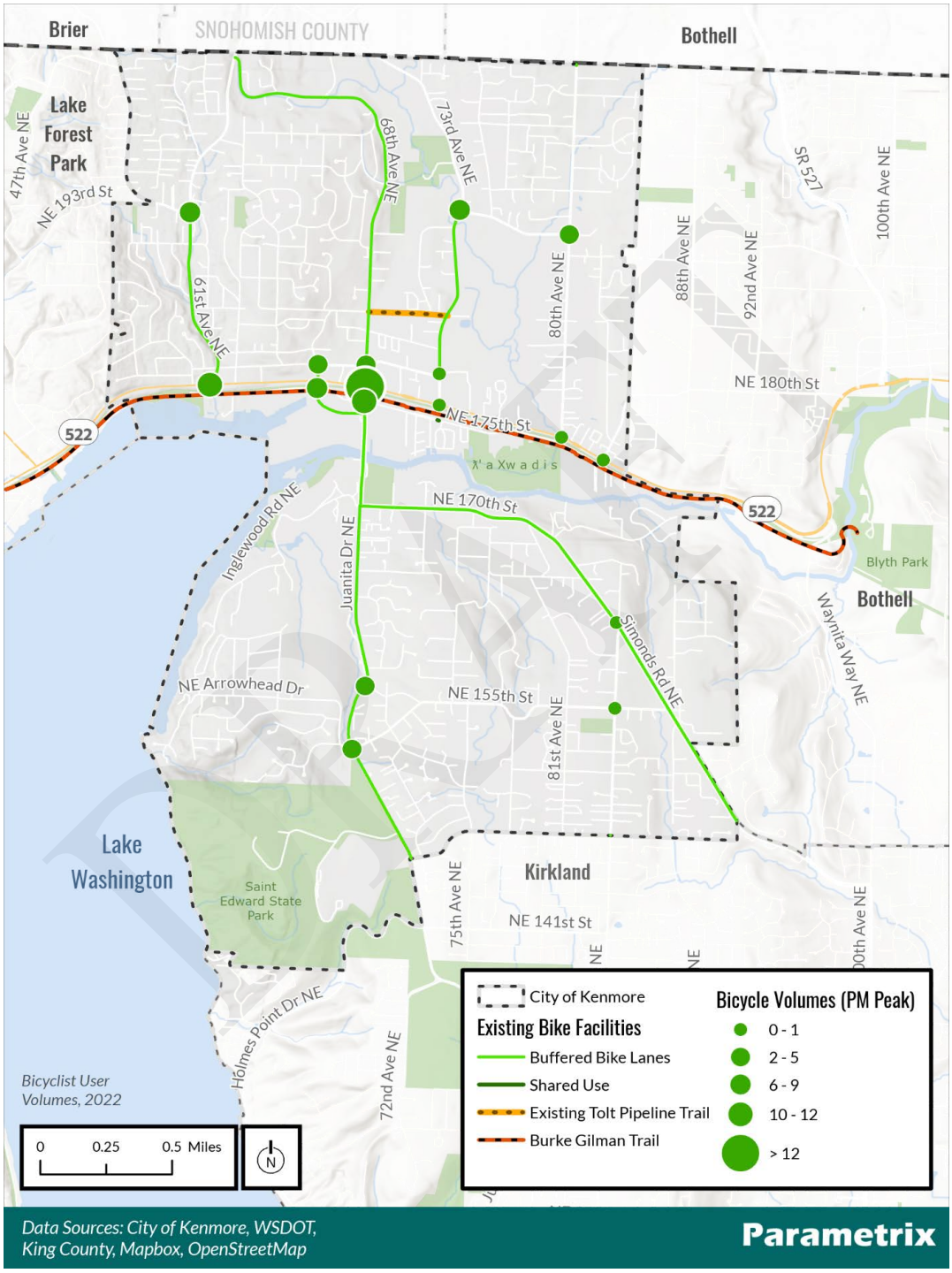
Figure T-6: Existing Bicycle Facilities and Volumes



4. Comprehensive Plan Update: Transportation Element (continued)

Many Kenmore residents and employees use public transit for trips around and outside of the City. Public transit in Kenmore consists of fixed-route and dial-a-ride bus service provided by Metro and Sound Transit. Metro also provides on-demand, point-to-point transportation between south Kenmore, North Kirkland, and downtown Bothell. The Northshore Senior Center also provides door-to-door shuttle service to many of its patrons.

Figure T-7 and **Table T-2** display the Spring 2019 transit routes serving Kenmore, average daily boardings at each stop, and park and ride utilization. These volumes reflect a high level of bus ridership in the City, particularly on routes that serve SR 522. SR 522 and the corridor south of SR 522 currently served by Route 225 (previously served by Routes 234 and 244) have been designated as high capacity transit lines by PSRC. The Kenmore Park and Ride and the park and ride at the Vine Church, both located on SR 522, were 100 and 96 percent full, respectively, on an average weekday. As shown, there was no service in the City north of SR 522/NE 181st Street.

Transit ridership declined dramatically throughout the Puget Sound region during the COVID-19 pandemic. Metro and Sound Transit reduced service levels across their networks, including the elimination of several routes in Kenmore. Additionally, both transit agencies restructured several routes that serve the city in conjunction with the opening of the North Link light rail extension in October 2021. Sound Transit Route 522, which previously provided service between Woodinville and downtown Seattle, was revised to serve the Roosevelt Link station. This change required riders to transfer to light rail to continue to downtown Seattle. A new peak only route, Route 320, was created, providing service connecting Kenmore to the Northgate Link station, South Lake Union, and downtown Seattle. Additionally, a new leased park and ride was opened at the Kenmore Community Club. Fall 2021 ridership in Kenmore is summarized in **Table T-2.**

Table T-2. Bus Service in Kenmore

Route	Service Type	2019 Average Daily Weekday Spring Boardings	2021 Average Daily Weekday Fall Boardings
225	All Day	N/A	100
234	All Day	249	N/A
243	Peak Only	1	N/A
244	Peak Only	28	N/A
309	Peak Only	110	N/A
312	Peak Only	440	N/A
320	Peak Only	N/A	21
331	All Day	98	72
342	Peak Only	36	8
372	All Day	527	204
522	All Day	680	154
981	DART	1	2

Source: King County Metro

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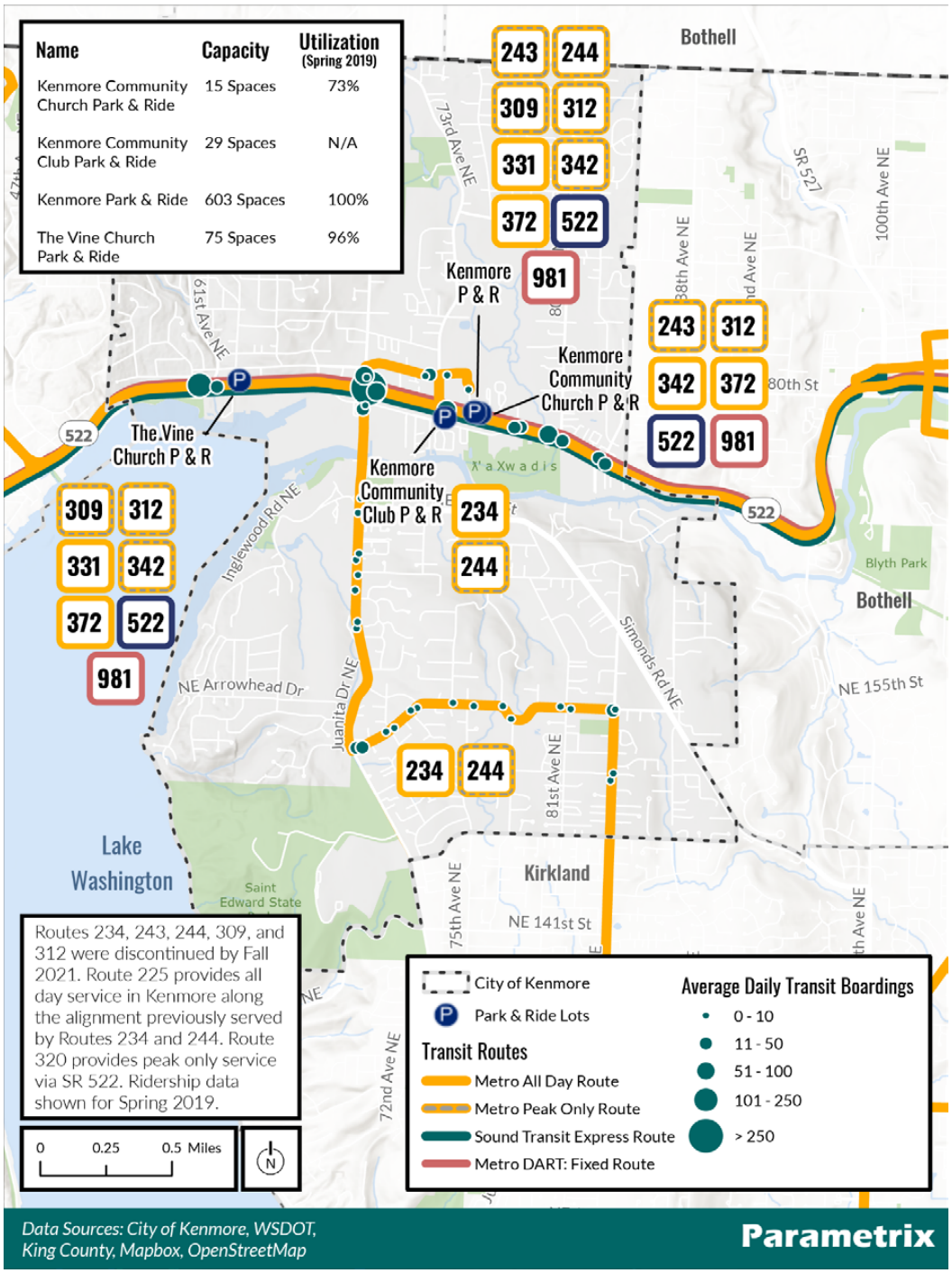
Figure T-7: Existing Transit Routes, Facilities, and Boardings (2019)



Washington State's Freight and Goods Transportation System (FGTS) classifies the state's freight corridors by modes based on annual freight tonnage moved through truck, rail and waterway freight corridors. Goods movement in Kenmore runs predominantly along the City's major arterials of 68th Avenue, NE 170th Street, Simonds Road NE, and SR 522. Because 68th Avenue provides the only Sammamish River crossing option in Kenmore, this roadway plays a particularly important role in facilitating commerce. FGTS classified routes in the City of Kenmore are shown in **Figure T-8**.

Beyond these primary routes, delivery vehicles use many other streets to reach their final destination. For example, although it is not an FGTS classified route (and thus not displayed on **Figure T-8**), NE 175th Street sees a fair amount of freight traffic due to the nature of the surrounding land uses it serves. Additionally, a wide array of freight companies provide deliveries to residents and businesses using all types of roadways, including local streets.

The Kenmore Air Harbor is also a facility of the City's transportation network. The location of the Kenmore Air Harbor is displayed on **Figure T-9** and a description of its area, fleet size, operations, and travel take-off and landing areas on Lake Washington and general aircraft flight paths used on take-off and landing can be found in the Land Use element.

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Figure T-8: WSDOT FGTS Classified Truck Routes

4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-9: Kenmore Air Harbor

4. Comprehensive Plan Update: Transportation Element (continued)

Most Kenmore residents (about 68 percent) choose motor vehicles as their primary mode of transportation to work. Moreover, many more non-resident travelers pass through the City on SR 522 / 68th Avenue / Juanita Drive / Simonds Road. Severe congestion during peak hours illustrates this issue with many intersections experiencing long delays (see **Figure T-10**).

Analysis of Kenmore's congestion for motorists is based on the traffic counts collected in January 2022. Since March 2020, traffic volumes have decreased in response to COVID-19 related initiatives. As future traffic volumes are built from forecasting from baseline conditions, the goal is to model an existing 2022 baseline condition that best reflects overall trends from the past several years. Overestimating volumes can lead to future forecasts that may be too high, potentially leading to infrastructure that is overbuilt for future conditions. Conversely, underestimating baseline conditions could lead to future forecasts that may be too low, leading to infrastructure that would be potentially underbuilt for future conditions.

To monitor changes in travel volumes related to the COVID pandemic, the City of Kenmore collected weekly travel data between May 2020 and August 2021. The data shows as of August 2021, the annual average daily traffic volumes in 2021 were 7 percent lower than 2019 volumes. Therefore, to be conservative, traffic counts collected in January 2022 for this analysis were adjusted upward by 7 percent.

To understand the level of congestion experienced during the evening commute, 19 intersections were evaluated based on their ability to accommodate PM peak hour demand in their existing configuration (number of lanes, traffic control, etc.). As noted previously, the peak volumes for vehicles, pedestrians, bicyclists, and transit can occur during different times by location. The PM peak period in Kenmore generally ranges between 3:00 PM and 6:00 PM. The PM peak period for each analyzed intersection is summarized in **Appendix D-1**. Based on this analysis, intersections were scored into one of six LOS categories that describe their operations in terms of vehicle delay. **Table T-3** describes the LOS definitions laid out in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016), which is the methodology currently applied to Kenmore's transportation network.

Table T-3. Level of Service Definitions

Level of Service	Description	Average Control Delay at (seconds per vehicle)	
		Signalized/Roundabout Intersections	Unsignalized Intersections
A	Free-flowing conditions.	< 10	< 10
B	Stable operating conditions.	> 10 and < 20	> 10 and < 15
C	Stable operating conditions, but individual motorists are affected by the interaction with other motorists.	> 20 and < 35	> 15 and < 25
D	High density of motorists, but stable flow.	> 35 and < 55	> 25 and < 35

Level of Service	Description	Average Control Delay at (seconds per vehicle)	
E	Near-capacity operations, with speeds reduced to a low but uniform speed.	> 55 and < 80	> 35 and < 50
F	Over capacity, with delays.	> 80	> 50

The City's LOS policy sets the following standards for its roadways:

- Major Arterials – LOS E or better
- Minor Arterials and collectors – LOS D or better
- Local roads – LOS C or better
- Roadways in Kenmore Countywide Growth Center
    - Signalized intersections shall operate at LOS F or better and not exceed 100 seconds of average total vehicle delay of all movements
    - Unsignalized intersections shall operate at LOS F or better on the minor street approach until a signal warrant is met using the current version of the Manual for Uniform Traffic Control Devices

It should be noted that as a highway of statewide significance, SR 522 is exempted from the City's LOS standards.

Figure T-10 shows weekday traffic volumes and **Figure T-11** shows the calculated LOS at each of the 19 intersections. As the figures show, Kenmore's major arterials see high traffic volumes and lower levels of service. Detailed reports of LOS are available in **Appendix D-1**.

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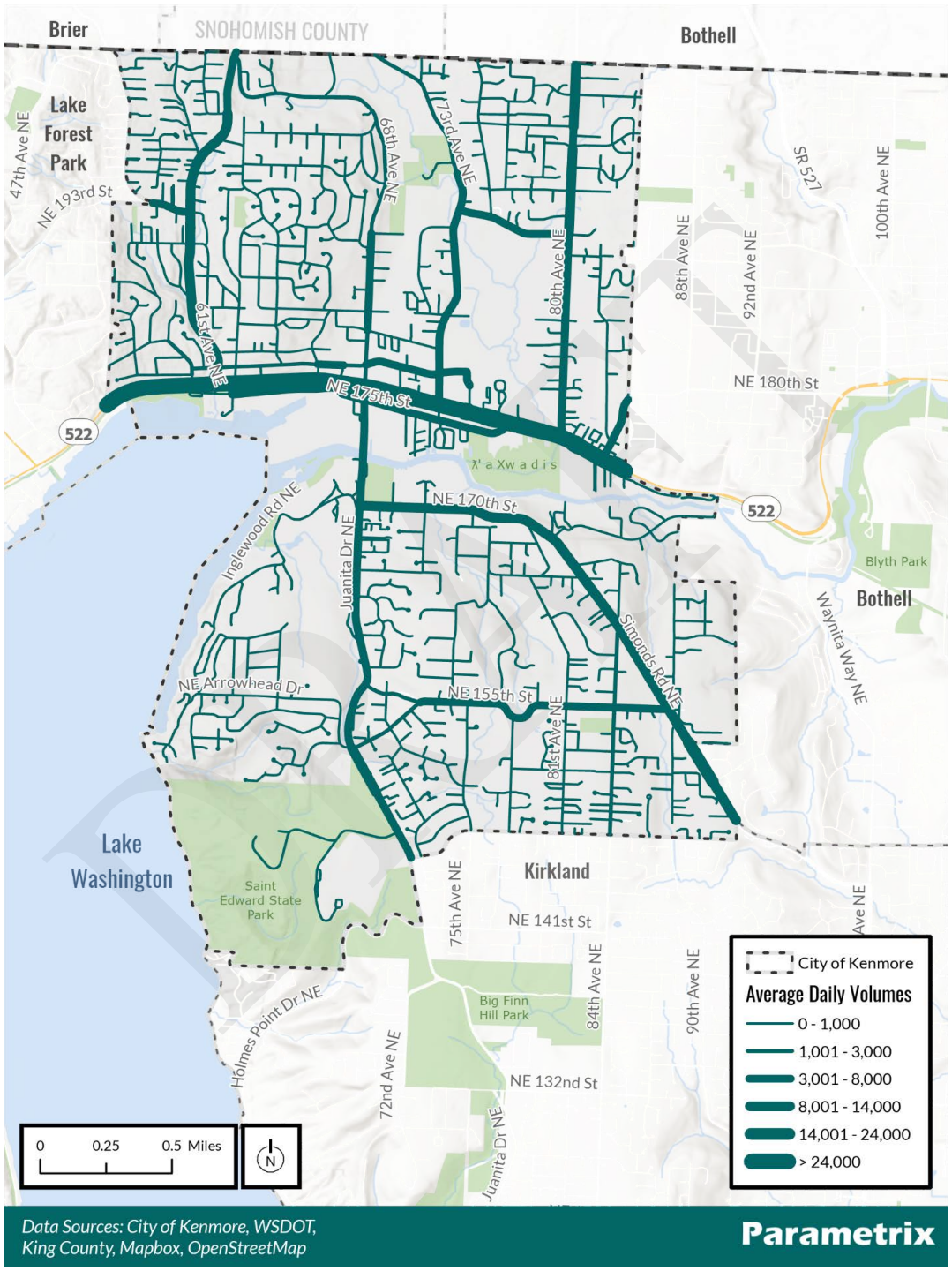
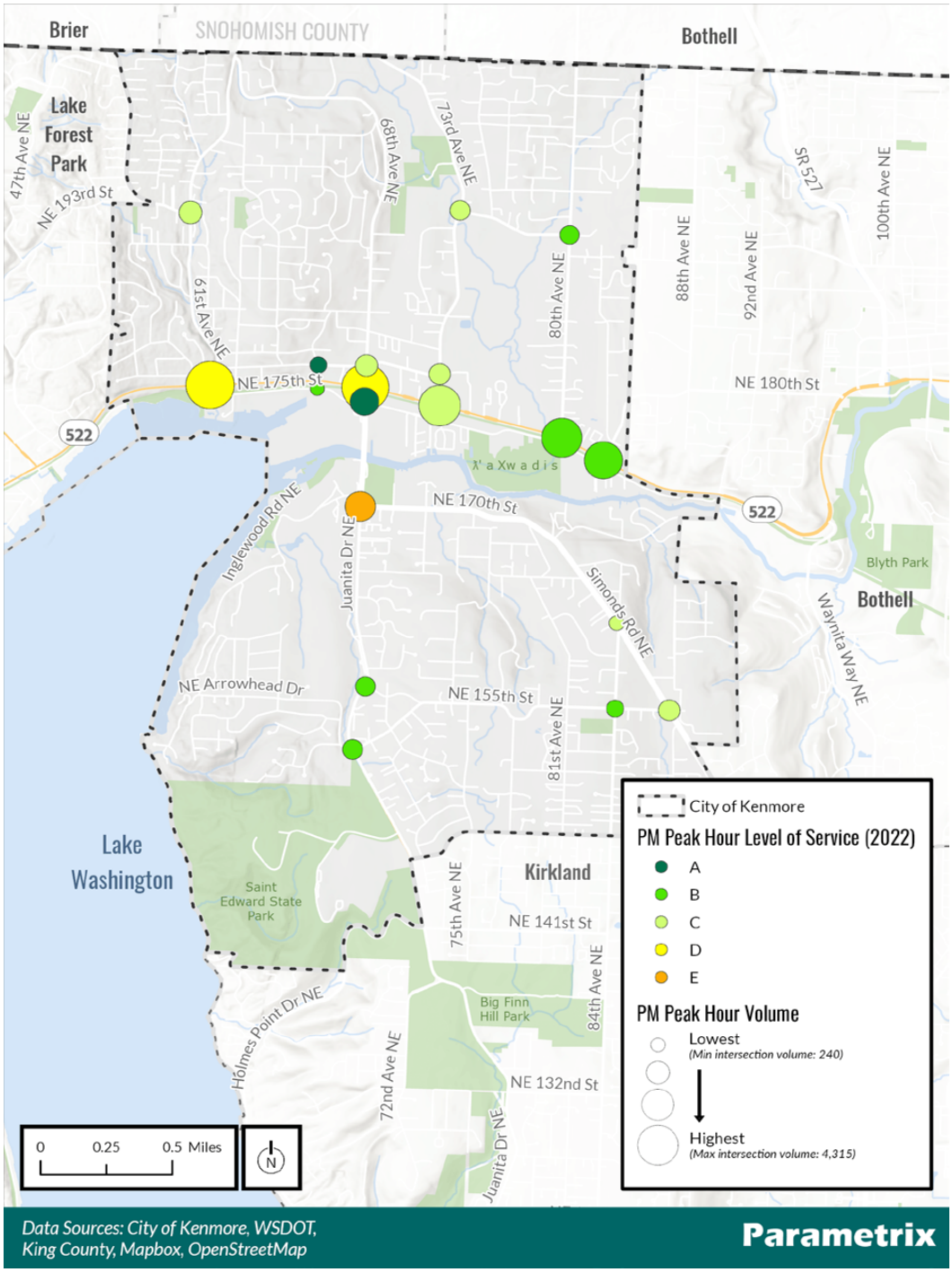
Figure T-10: Auto Average Daily Volumes



4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-91: Auto Level of Service and Volumes



Current Challenges and Observations

The City of Kenmore has several important challenges to face as it prepares for future growth and the development of its downtown core. Although Kenmore continues to invest in its multimodal transportation system, motor vehicle travel dominates the City's transportation framework currently and many travelers view Kenmore as a "pass-through town." Kenmore is planning to be a walkable, bikeable, high-capacity transit community with a vibrant downtown and addressing the following transportation challenges will be a key to the City's success:

- Safety and comfort, especially for pedestrians and bicyclists
- Transit availability and access to high capacity transit
- Limited connectivity for all users

Bicycle and Pedestrian Safety

Since 2017, Kenmore has experienced nearly 175 traffic collisions per year. Of the 871 collisions in Kenmore from January 2017 to August 2021, 325 occurred on SR 522 and 207 occurred on the 68th Avenue / Juanita Drive corridor – 61 percent of the total city-wide.

Highlighting this issue, the period from Winter 2017 through Summer 2021 saw 41 crashes that involved vehicles hitting pedestrians and bicyclists, including one pedestrian fatality. **Figure T-12** displays traffic crashes for all modes within the City, **Figure T-13** shows injury severity and **Figure T-14** shows crashes involving bicycles and pedestrians over a five-year period spanning 2017-2021.

Crash severity is categorized by WSDOT into the following five categories:

- Fatal Injury: Any injury that results in death within 30 days after the motor vehicle crash in which the injury occurred.
- Suspected Serious Injury: Any injury other than fatal which results in one or more of the following: Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood; broken or distorted extremity (arm or leg); crush injuries; suspected skull, chest or abdominal injury other than bruises or minor lacerations; significant burns (second and third degree burns over 10 percent or more of the body); or unconsciousness when taken from the crash scene.
- Suspected Minor Injury: Any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).
- Possible Injury: Any injury reported or claimed which is not a fatal injury, suspected by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.
- No Apparent Injury: Situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function.

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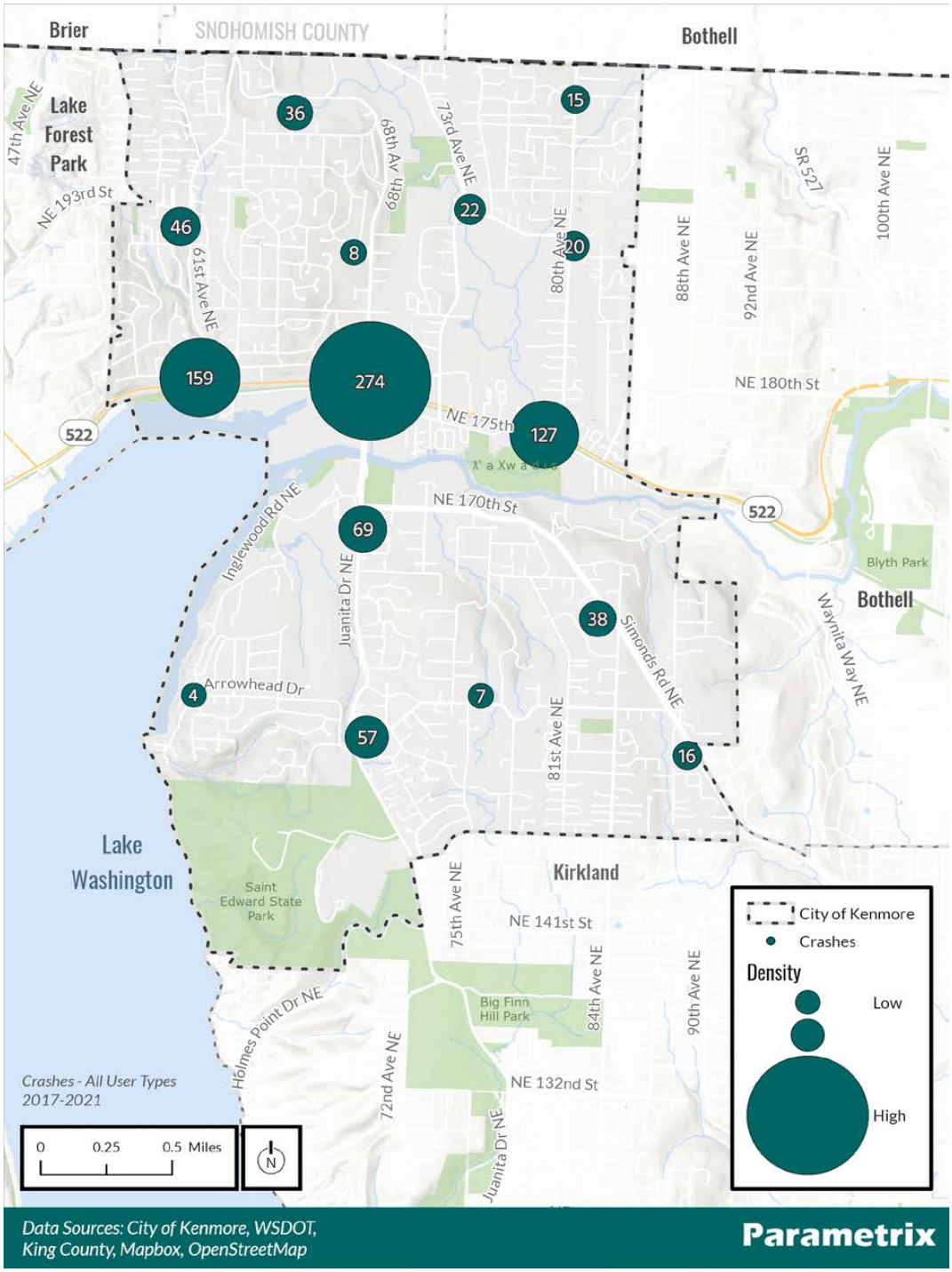
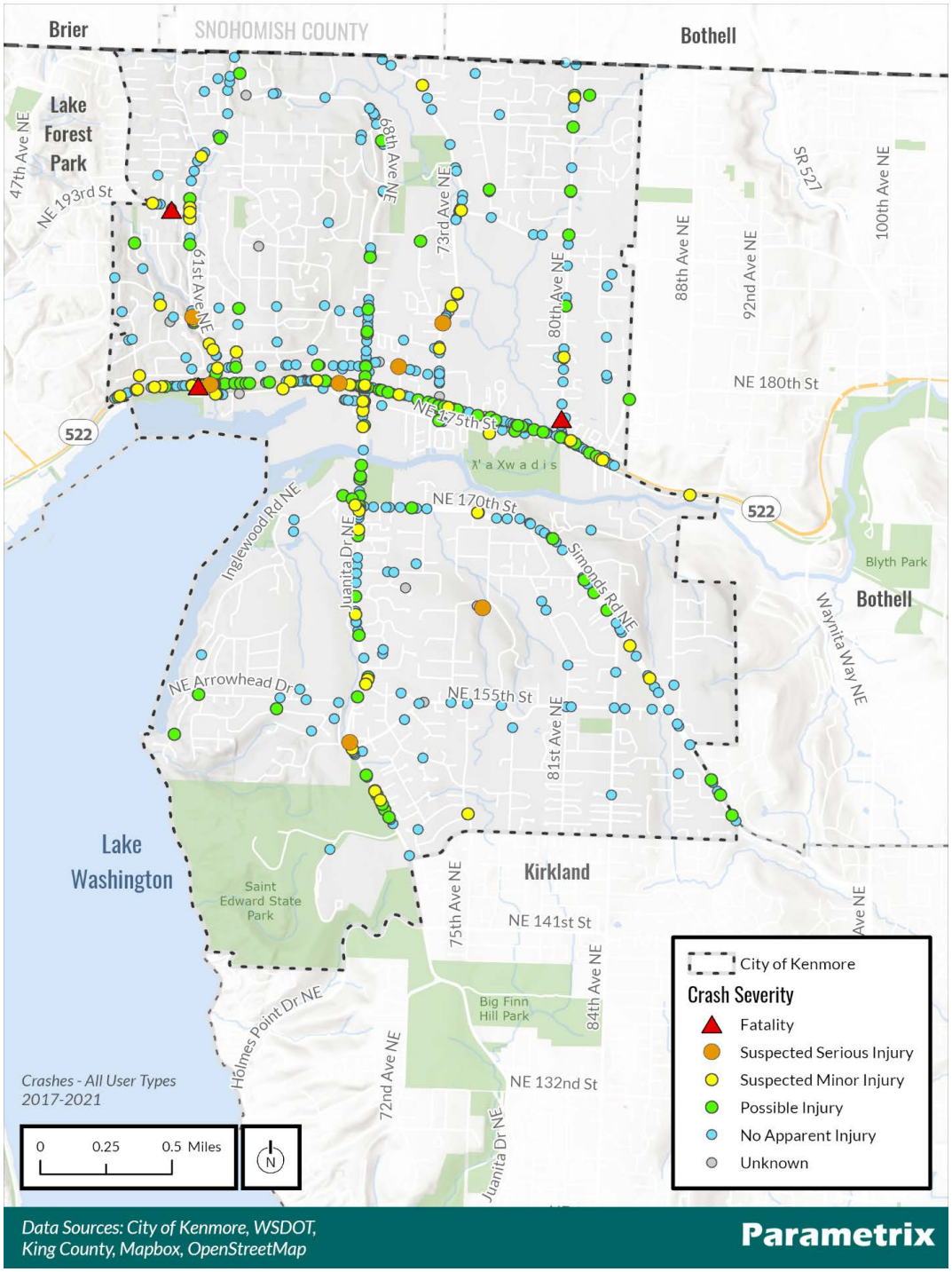
Figure T-12: Crash Density



4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-13: Crash Severity



4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-14: Crashes Involving Bicycles and Pedestrians

4. Comprehensive Plan Update: Transportation Element (continued)

The City of Kenmore's Target Zero Initiative was adopted in April of 2014. The goal of this program is to achieve zero pedestrian and bicyclist fatalities and serious injuries in Kenmore by 2025 by increasing awareness of pedestrian, bicyclist, and driver safety issues. The City works toward its Target Zero goal by engaging the Three E's: Engineering, Enforcement, and Education. These efforts include creating safer pedestrian and bicycle pathways, offering helmets at a low price, educating bicyclists, pedestrians, and drivers through events and pamphlets, offering safety vests annually at no charge (while supplies last), and enforcing traffic safety laws for all road users - among many other citywide improvements.

Kenmore has made many pedestrian improvements in recent years as the City strives for a more walkable/bikeable city. Sidewalk and crosswalk improvements along SR 522 have created a better environment for pedestrians moving around the City's commercial areas and connecting with public transit services or the Burke Gilman Trail. There are seven pedestrian actuated crossings that are also ADA compliant. Four are located near SR 522 and 61st Avenue NE and three are located near Juanita Drive and NE 170th Street.

The Burke-Gilman Trail provides a major bicycle route through Kenmore and is a major asset to the community for both transportation and recreational purposes. Creating safer and more attractive connections from neighborhoods to the trail will encourage residents to make more walking and biking trips and visitors to patronize local businesses near the trail.

As a part of Walkways & Waterways, a voter-approved bond passed in 2016, the 68th Avenue/Juanita Drive corridor received pedestrian and bicycle safety treatments:

(1) Juanita Drive NE Pedestrian and Bicycle Safety Improvements: 1.5 miles of new sidewalk on the east side of Juanita Drive from 143rd Street to NE 170th Street, buffered bicycle lanes in each direction, bus stop improvements, improved lighting, and some traffic signal modifications.

(2) The 68th Avenue NE Pedestrian and Bicycle Improvements: 1.5 miles of new sidewalk on one side of 68th Avenue NE from NE 182nd Street to 61st Place NE, new bicycle lanes in each direction, and lighting improvements.

In addition to the Walkways and Waterways projects, several other projects were initiated and completed that provided sidewalk and/or bicycle safety treatments:

(1) The West Sammamish River Bridge Replacement Project: New sidewalk and bike facilities on the west side of the road between NE 170th Street and NE 175th Street, lighting improvements and some traffic signal improvements.

(2) SR522 West A Project: New sidewalk on the north and south side of SR522 from 61st Avenue NE to 65th Avenue NE along with street lighting and traffic signal improvements.

(3) Simonds Road Overlay: New bike lanes added from 92nd Avenue NE to 84th Avenue NE.

(4) 62nd Avenue NE Sidewalk Project: New sidewalk on the east side of 62nd Avenue NE from SR522 to 185th Avenue NE.

(5) NE 181st Street Sidewalks: New sidewalk along the north and south side of NE 181st from 68th Avenue NE to 73rd Avenue NE and new sidewalk on the north side from 65th Avenue NE to 67th Avenue NE. Improvements included new street lighting.

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(6) 73rd Avenue NE Overlay: New bike lanes added from NE 181st St to NE 192nd St.

(7) NE 153rd Street Sidewalks: New sidewalks on the south side of NE 153rd Street from 70th NE to Juanita Drive.

Transit Availability and Access to High Capacity Transit

Many people use public transit in Kenmore, as evidenced by 2019 ridership and park-and-ride occupancy levels. The opening of the Lynnwood Link light rail extension in 2024, particularly the Shoreline South/148th Street station, will provide an opportunity to greatly expand options for Kenmore residents wishing to ride transit to destinations throughout the Puget Sound region. Sound Transit's BRT Stride service on SR 522, planned for implementation in 2026, will provide high-capacity transit service directly in Kenmore, providing residents with a direct connection to light rail in Shoreline and Stride service on I-405. There are no planned improvements to parking capacity in Kenmore, by Sound Transit or Metro, until 2034. Robust local transit options and nonmotorized access improvements that connect Kenmore neighborhoods to bus service on SR 522 will be critical components to facilitating reliable access to these regional transit investments.

Kenmore is also interested in creation of a Metro-operated water taxi route that would connect the City to the University of Washington, providing another transit option for residents to access this regional employment and education center.

Service cuts are likely to hurt public transit as an attractive travel mode so the City should closely monitor these developments and advocate for its desire to maintain quality service. Additionally, infrequent or poorly timed service connections might further dissuade residents from using transit if it does not provide a fast and reliable trip compared with auto travel. While Kenmore cannot control transit service levels, the City's land use vision is designed to create a supportive environment for transit.

Limited Nonmotorized Connectivity

The existing transportation network in Kenmore was developed with limited facilities that can accommodate travel across the City. The 68th Avenue Bridge is the only public crossing over the Sammamish River in the City and currently acts as one of Kenmore's most congested points for all roadway users. In 2022, the City completed replacement of the southbound bridge, which included construction of new sidewalk and bicycle facilities on the west side of the road between NE 170th Street and NE 175th Street. Even with the bridge improvements, the intersection with SR 522 frequently backs up traffic for long stretches during peak hours.

Similarly, SR 522 serves as another major barrier to north-south connectivity. Its wide cross-section and limited number of signalized crossings affect all modes of travel, particularly pedestrians and cyclists. Additional signalized mid-block pedestrian crossings where warranted would improve crossing options for nonmotorized travelers.

East-west travel is also challenging, particularly north of SR 522 east of 73rd Avenue NE. A lack of walkways or paths for non-motorized users results in long, circuitous routes for pedestrians and cyclists wishing to travel in this area. Development of new non-motorized facilities could help to provide these connections.

Trends

Aside from existing conditions and challenges, there are other factors that will affect Kenmore's transportation system. Growth in downtown Kenmore and throughout the region generally plays a role in how the City will plan the improvements to its transportation network for the future.

Transportation Related Climate Impacts

The City of Kenmore's CAP establishes a multi-faceted approach for reducing greenhouse gas (GHG) emissions associated with transportation. The CAP describes policies, programs, and infrastructure investments that will help the City achieve its goal of net zero GHG emissions by 2050. Changes to municipal operations, construction of dense, mixed-use, and transit-oriented development (TOD), reduced single-occupancy vehicle (SOV) trips, and incentives for drivers to use electric vehicles (EVs) are the key transportation-focused strategies included in the CAP.

Downtown Development

In 2021, King County updated the 2021 Countywide Planning Polices to include a new category—Countywide Growth Centers—with zoned densities that support high capacity transit along existing or planned transit corridors. Designated countywide growth centers make efficient use of urban land by sufficiently providing housing, employment, and services in a compact form and density near the high capacity transit areas. Additionally, designated countywide growth centers use strategies to mitigate identified displacement impacts of residents and businesses, particularly for Black, Indigenous, and other People of Color communities; immigrants and refugees; low-income populations; people with disabilities; and other communities at greatest risk of displacement.

Downtown Kenmore is preliminarily designated as a Countywide Growth Center. Policies focus on mixed use, higher density development, including affordable housing, in the downtown area as it develops along the SR 522 high capacity transit corridor. Future redevelopment will add mixed use projects to provide housing, dining, shopping, and other services in the downtown. These land uses will generate additional travel in the downtown area and, while many people will be able to walk or use public transit for these trips, the transportation network must be able to support this concentrated growth.

Regional Growth

Regional development outside of the City itself is the other major aspect of growth affecting Kenmore by 2044. South Snohomish County, Bothell, and Woodinville are all expected to add a substantial number of residents and jobs during this time period and many of them travel through Kenmore en route to other regional destinations. The continued tolling of SR520 bridge and expected regional growth south of Kenmore are likely to have a continued impact on SR522.

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Kenmore Travel Demand Forecasting

The GMA requires that the Transportation Element supports the land uses envisioned in the Comprehensive Plan. Thus, an important component of the work was forecasting how the future land uses envisioned in the City, as well as regional growth, would influence demand on Kenmore's transportation network. A description of the travel demand modeling process is summarized below with more detail about land use assumptions in **Appendix D-2.**

- **The Tool.** The PSRC regional Activity Based Travel Demand model was used for travel demand forecasting.
- **Estimate Land Use Growth in the City.** The City is planning for expected growth in housing units and employment over the next 20 years through 2044. The City allocates the growth throughout Kenmore based on adopted zoning, observed development patterns, and other city policies.
- **Capture Regional Growth Patterns.** Other communities throughout the region are going through this very same process, based on direction from PSRC. Since travel does not stop at a jurisdiction's borders, it is important to capture how regional growth could influence travel patterns on Kenmore's streets.
- **Translating Land Uses into Trips.** The next step is evaluating how the City and regional growth assumptions described above translate into walking, biking, transit, and auto trips. The travel model represents the number of housing units and employees in spatial units called traffic analysis zones (TAZs). TAZs can be as small as a few street blocks to as large as an entire neighborhood. They provide a simplified means to represent trip making rather than modeling individual parcels. The travel model estimates trips generated from each TAZ (both inside and outside of the City) using established relationships between different land use types with trip making. These trips are then assigned onto the roadway network to estimate how much traffic would be on each street during the evening commute hour.
- **Model Refinements.** The final step is refining the forecasts based on reality checks that the travel model may not capture. In this case, forecasts were refined to reflect the more walkable, urban characteristic planned for Kenmore's downtown, by recognizing that some short trips could be made by walking and biking, rather than driving. Moreover, travel patterns were refined to reflect existing driver preferences, including recognizing the relative attractiveness of the Simonds Road / 170th Corridor over Juanita Drive.

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GOALS, OBJECTIVES, AND POLICIES

Kenmore has established eight goals to accomplish its overall vision for transportation in the future. The goals establish overarching priorities that serve the vision of this Transportation Element while objectives and policies lay out specific actions. The consolidated set of goals, objectives, and policies is included in this chapter.

GOAL 1. PROVIDE A COMPREHENSIVE TRANSPORTATION NETWORK THAT SAFELY ACCOMMODATES LOCAL AND REGIONAL TRAVEL FOR PEDESTRIANS, BICYCLISTS, TRANSIT USERS, AND MOTORIZED VEHICLES.

OBJECTIVE 1.1: Develop and maintain a Layered Network that provides connectivity and recognizes that not all streets provide the same quality of travel experience. Classify streets as State Highways, Major Arterials, Minor Arterials, Collectors, and Local Roads.

Policy T-1.1.1: Ensure that the Layered Network continues to provide for all varieties of street uses including regional mobility and cross-town trips, commuting, shopping, recreational travel, property and business access, and parking, regardless of mode.

Policy T-1.1.2: Guide the development of new streets and maintenance of existing streets to form a well-connected network that accommodates safe, direct, and convenient access to the existing roadway network for pedestrians, bicyclists, transit, and automobiles. Prioritize non-motorized connections to reinforce the City's vision of a pedestrian-friendly and robust downtown.

Policy T-1.1.3: New development should be consistent with the Future Roadway Network. Cul-de-sac construction should require the approval of the City Engineer. Pedestrian facilities identified in the City's Sidewalk Priority Network should be prioritized using the Pedestrian Facilities Plan. Bicycle facilities should be considered for streets identified within the Bicycle Priority Network.

Policy T-1.1.4: Coordinate with park-and-ride and transit service providers to reinforce the City's designation as a high capacity transit community, attracting residential and employment densities that support ridership along the high capacity corridors. Pursue improvement projects that are consistent with the Layered Network and which benefit transit users in Kenmore.

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Policy T-1.1.5: Continue to enhance the City's Layered Network by using the following methods:

a. Require dedication of rights-of-way as a condition for development when the need for such rights-of-way is linked to the development or where shown on the Future Roadway Network;

b. Request donations of rights-of-way to the public;

c. Purchase rights-of-way in accordance with State laws and procedures

d. Acquire development rights and easements from property owners; and

e. Implement traffic impact fees with new development consistent with the City's Traffic Impact Analysis Guidelines to allocate funding for new multimodal facilities.

Policy T-1.1.6: Maintain criteria to consider street vacations. Criteria should address:

a. State laws regarding street vacations;

b. Consistency with the Layered Network, including the effects of the street vacation on existing and future circulation;

c. Ability to utilize excess right-of-way for other public purposes such as parks, recreation, waterfront access, viewpoints, stormwater management, or affordable housing;

d. Public benefit of the street vacation; and

e. Fair compensation.

OBJECTIVE 1.2: Design and maintain transportation facilities consistent with the community vision.

Policy T-1.2.1: Consider the environmental consequences of street design standards and maintenance practices. Design City-sponsored transportation projects to minimize impacts to the environment and water quality to the greatest extent feasible. When preparing City-sponsored transportation project designs or reviewing development proposals, the City should follow steps outlined in the *Street Planning Toolkit (**Figure T-15**)*.

Policy T-1.2.2: Require new development to minimize and consolidate access points along all major and minor arterials, especially along SR 522 and any new arterials that may be developed. Coordinate this effort with local businesses, property owners, and WSDOT.

Policy T-1.2.3: Protect rights-of-way from encroachment by structures, fences, retaining walls, substantial landscaping, or other obstructions to preserve the public's use of the right-of-way, safety, and mobility. Protection methods may include minimum setback requirements for property improvements allowing future roadway expansion, street use agreements, and

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development of specific guidelines regarding installation and maintenance of landscaping within the public right-of-way.

Policy T-1.2.4: Maintain a right-of-way use permit application process and criteria to ensure that temporary development and utility construction activities do not create adverse safety, environmental, or traffic impacts.

Policy T-1.2.5: Ensure pedestrian facilities are designed consistent with ADA guidelines and that existing infrastructure is updated per the city's *ADA Transition Plan* to accommodate users of all ages and abilities. Design curb cuts, ramps, and other facilities to accommodate pedestrians with a disability or mobility challenges.

Policy T-1.2.6: Implement the Street Planning Toolkit to provide uniform street design and maintenance methods that enhance safety for pedestrians, bicyclists, and motorists.

Policy T-1.2.7: Ensure structured parking facilities incorporate context sensitive, preemptive designs that can accommodate changing parking demand as a result of increased walkability in high-density areas, such as downtown.

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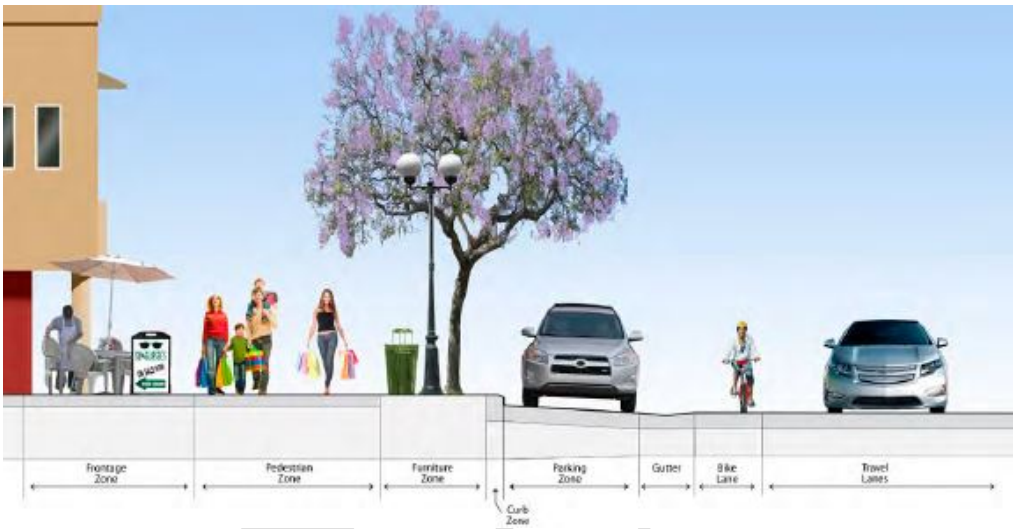
Figure T-15: Street Planning Toolkit

When planning for new streets or redesigning existing ones, the City should implement uniform designs and maintenance methods that create a safe, effective, environmentally sensitive, and welcoming transportation system for all users in line with the City's vision and Comprehensive Plan policies. Throughout this process, the City must consider the various financial and non-financial costs of development and operation of the transportation system in addition to the concerns of interested parties.



- Align and locate transportation facilities away from environmentally sensitive areas, consistent with other Comprehensive Plan policies;
- Minimize and mitigate significant environmental impacts whenever possible, including the incorporation of improvements, such as larger stormwater treatment facilities, to respond to the impacts of climate change. Minimize and mitigate water quality impacts from the transportation network to the environment and aquatic habitats.
- Whenever practical, incorporate the use of native grasses, shrubs, and trees, and drought-resistant species in the design of streets, landscape strips, and medians.
- Enhance the safety of pedestrians, bicyclists, and motorists through sidewalk or other separated pedestrian facilities and on-street facility location, design, and maintenance, lighting requirements, signs, lane widths and geometrics, and access to properties using the Layered Network as a guide.
- Consider the conflicts between different users in the design of multi-purpose paths, including the use of separate paths, striping different lanes for pedestrians and cyclists, speed limits, and increased use of protected bicycle facilities on streets to provide additional options for cyclists.
- Establish standards that discourage excessive parking. Provide options or incentives to reduce underutilized parking lots and encourage alternate modes of travel.

OBJECTIVE 1.3: Improve street safety and function with a particular reference to the "Target Zero" goal (adopted City Resolution 14-235) to have no pedestrian or bicycle deaths or serious injuries as the result of a collision with a motorized vehicle.

Policy T-1.3.1: Continue to collect data on traffic speed and volume and collisions to support studies, operational changes, and designs, enhance efforts when possible.

Policy T-1.3.2: Include emergency service providers in review of roadway designs to ensure emergency vehicle passage. Design considerations include dead-end street lengths, turn-arounds, travel lane widths, maximum road grades, and parking location.

Policy T-1.3.3: Implement the City's Target Zero strategy to focus on transportation improvements, education, and enforcement measures to improve safety conditions for pedestrians and bicyclists on Kenmore's streets. Use the Local Road Safety Plan to identify and prioritize low-cost, quick build, effective enhancements.

OBJECTIVE 1.4: Develop a transportation system that achieves the following LOS metrics:

Policy T-1.4.1: Vehicular LOS:

- Major Arterials: LOS E or better
- Minor Arterials and Connectors: LOS D or better
- Local Streets: LOS C or better
- Roadways in the Kenmore countywide growth center
    - Signalized intersections shall operate at LOS F or better and not exceed 100 seconds of average total vehicle delay of all movements
    - Unsignalized intersections shall operate at LOS F or better on the minor street approach until a signal warrant is met using the current version of the Manual for Uniform Traffic Control Devices

LOS along SR 522 and 68th Avenue (south of SR 522) / Juanita Drive will be measured as average delay at the corridor level rather than the intersection level.

Policy T-1.4.2: Pedestrian LOS as described in Table T-4, bicycle LOS as described in Table T-5, and transit LOS as described in Table T-6

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Table T-4. Pedestrian LOS – Sidewalk Requirements

LOS	Within Pedestrian Priority Network*
🟢	Pedestrian facility** on both sides of the street with a buffer as indicated in Pedestrian Priority Network
🟡	Pedestrian facility** provided on one side of the street with or without a buffer as indicated in Pedestrian Priority Network
🔴	No pedestrian facility

* The pedestrian LOS standard does not pertain to local streets outside downtown

** Pedestrian facility includes sidewalks and paved shoulders protected by a raised curb.

Table T-5. Bicycle LOS – Facility Requirements

LOS	Within Bicycle Priority Network
🟢	Provides minimum treatment* recommendation, as shown within Bicycle Priority Network
🟡	Provides a lower-level facility* than recommended in the Bicycle Priority Network
🔴	No bicycle facility

* Bicycle facilities – lowest-level to highest-level of treatment: shared; bike lanes; buffered bike facility; separated trail.

Table T-6. Transit Priority Corridor Level of Service

LOS	Transit Stop Amenities	Pedestrian Access	Frequency of Service
🟢	High level	Sidewalks and marked crosswalks serving stops	All day service. Peak service 15 minutes or less, midday 30 minutes or less
🟡	Some amenities	Sidewalks and marked crosswalks serving some stops	All day service. Peak services 30 minutes or less, midday service 60 minutes or less
🔴	Little or no amenities	General lack of sidewalks and marked crosswalks	Low level of service

OBJECTIVE 1.5: Perform periodic review and monitoring (every 2-4 years) of the transportation system to ensure it adequately serves existing and future land uses.

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Policy T-1.5.1: Forecast travel to identify needed transportation improvements. The forecasts should:

a. Account for expected changes in personal travel behavior, funded capital improvements, and feasibility of mode choices;

b. Use current data and policies;

c. Be compatible with other jurisdictions and the regional growth strategy; and

d. Reflect the Vision Statement and land use policies.

Policy T-1.5.2: Identify the improvements and strategies needed to fully implement the City's *Layered Network* and meet LOS requirements for transportation.

Policy T-1.5.3: Monitor growth in population and employment in relation to the land use and growth assumptions of the Transportation Element. Reassess the Land Use and Transportation Elements as needed to ensure that planned improvements will address the potential impacts of growth.

Policy T-1.5.4: Require construction of necessary transportation improvements from the private or public sector at the time of development or within six years of development.

GOAL 2. COORDINATE WITH LOCAL, REGIONAL, STATE, AND FEDERAL AGENCIES AS WELL AS NON-GOVERNMENTAL ENTITIES TO DEVELOP AND OPERATE THE TRANSPORTATION SYSTEM.

OBJECTIVE 2.1: Support and complement the transportation functions of the State of Washington, transit agencies, and other entities responsible for transportation facilities and services to meet Kenmore's needs.

Policy T-2.1.1: Coordinate planning, construction, and operation of transportation facilities and programs with the State, Counties, neighboring cities, PSRC, Metro, Sound Transit, and other entities. This coordination will be achieved by:

a. Participating in the transportation-related activities of King County and other advisory committees;

b. Working with other jurisdictions to plan, fund, and implement multi-jurisdictional projects necessary to meet shared transportation needs; and

c. Making transportation decisions consistent with the City's adopted transportation plans in coordination with the State, PSRC, transit agencies, King County, Snohomish County, and neighboring jurisdictions.

Policy T-2.1.2: Support increased transit service for the Kenmore Downtown area based upon existing and future population and employment densities. Support

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additional market demand for TOD along the SR 522 corridor to promote Kenmore's status as a High Capacity Transit community and provide residents with access to regional transit.

Policy T-2.1.3: Work with private property owners to create multimodal transportation options around the Downtown area to achieve a walkable city center that reinforces the community identity and provides connections to housing and community destinations.

Policy T-2.1.4: Coordinate planning, construction, and operation of transportation facilities and programs with the State, Counties, neighboring cities, PSRC, Metro, Sound Transit, and other entities to minimize impacts to the environment and aquatic habitats and ensure critical infrastructure is in place to respond to both natural disasters, human-caused disasters, and climate change impacts.

OBJECTIVE 2.2: Cooperate with neighboring cities, King and Snohomish Counties, transit agencies, PSRC, and WSDOT to address regional transportation issues.

Policy T-2.2.1: In partnership with State, regional and local agencies, address regional transportation issues. These include:

d. Regional air, rail, and water transportation facilities and services;

e. Operation of and improvements to the State highway network, including SR 522;

f. Improvements to roadways connecting Kenmore to the surrounding region, including SR 522;

g. Improvements to major roadways bordering, yet having an influence upon internal traffic flows within Kenmore, including those located in Snohomish County;

h. Improved access to I-5 and I-405 corridors and other employment corridors;

i. Regional pedestrian and bicycle facility needs;

j. Transit access to meet the diverse needs of residents for populations of all income levels; and

k. Consideration of last-mile connection to transit stops for local and regional users.

Policy T-2.2.2: Work with neighboring jurisdictions to ensure that new development outside of Kenmore does not unreasonably affect transportation systems, transportation LOS, and the quality of life in Kenmore. Utilize the following approaches:

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a. Promote thoughtful planning by neighboring jurisdictions consistent with comprehensive plans and the regional growth strategy; and

b. Support the establishment of regional traffic planning, expanded access to transit, improved non-motorized facilities, and mitigation payment system.

Policy T-2.2.3: Coordinate transit levels of service with Metro, Sound Transit, and private transit operators.

Policy T-2.2.4: In partnership with state and other agencies, support development of a corridor plan for SR 522 to consistently maintain travel conditions for all users along this route.

OBJECTIVE 2.3: Ensure regional transportation improvements and services are compatible with the Comprehensive Plan and the City's *Layered Network*.

Policy T-2.3.1: Continue to take a lead role in the planning, design, and implementation of SR 522 improvements within Kenmore. Encourage multi-agency cooperation (such as WSDOT and Sound Transit) and ensure that improvements in Kenmore are coordinated with adjacent communities.

Policy T-2.3.2: Work with the adjacent jurisdictions to coordinate planned improvements along connecting roads.

Policy T-2.3.3: Work with WSDOT to identify and mitigate the impact that reconstruction and existing and planned toll projects have on Kenmore; particularly on SR 522.

OBJECTIVE 2.4: Work with business leaders, private owners, and other local organizations to support transportation efforts in reaching mutual goals.

Policy T-2.4.1: Attract and retain future development to Kenmore by directing growth into its Countywide Growth Center and providing multi-modal connections to downtown and equitable access to regional transit.

Policy T-2.4.2: Provide additional incentives to minimize surface parking within walkable areas, such as downtown. Ensure that regulations require appropriate parking for business customers.

Policy T-2.4.3 Provide local transit connections from the City's residential areas to the regional high capacity transit system along the SR 522 corridor.

OBJECTIVE 2.5: Position Kenmore to respond to technological innovations, such as EVs, connected/autonomous vehicles, and intelligent transportation systems.

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Policy T-2.5.1: Coordinate with PSRC and other regional entities to understand regional plans for EV charging and accommodation of other alternative fuel sources.

Policy T-2.5.2: Review vehicle regulations periodically to ensure accordance with current technologies that can support Kenmore's transportation system.

Policy T-2.5.3: Keep pace with evolving technologies to understand their impacts on the financing, expansion, and evolving operational and maintenance needs for transportation facilities.

Policy T-2.5.4: Explore micromobility transportation options as an alternate transportation mode to SOVs. Implement policies and pilot programs in coordination with other jurisdictions to test their efficacy in Kenmore.

GOAL 3. PROMOTE A TRANSPORTATION SYSTEM THAT IS SUSTAINABLE FROM FISCAL, ENVIRONMENTAL, AND EQUITY PERSPECTIVES WITH PARTICIPATION FROM BOTH THE PUBLIC AND PRIVATE SECTORS.

OBJECTIVE 3.1: Emphasize priorities of the community when prioritizing transportation system improvements needed to fully implement the City's *Layered Network*, including safety, multi-modal mobility, access to transit, maintenance, and congestion relief.

OBJECTIVE 3.2: Regularly prepare and adopt a Six-Year Transportation Improvement Program to implement the Transportation Element.

Policy T-3.2.1: In preparation of specific planning and implementation documents, including the Six-Year Transportation Improvement Program, the City will involve the public, interested agencies, and other jurisdictions through a clearly stated process that provides opportunities for review and comments regarding the City's priorities and recommendations.

Policy T-3.2.2: Ensure that plans consider the best available lifecycle cost of an improvement, including operation and maintenance costs; environmental, climate change, economic, and social impacts; and any replacement or closure costs.

OBJECTIVE 3.3: Leverage City resources and secure adequate funding sources for transportation improvements and services through a variety of mechanisms, including those required as a result of development.

Policy T-3.3.1: Seek to secure adequate funding sources for transportation through a variety of methods. These methods may include:

a. Seeking federal and state funds;

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b. Encouraging public/private partnerships for financing transportation projects that remedy existing transportation problems or foster economic growth in Kenmore; and

c. Encouraging the use of Local Improvement Districts (LIDs) by property owners to upgrade roads to meet City road standards.

Policy T-3.3.2: Ensure shared responsibility of mitigating development impacts between the public and private sector. Require that developers contribute their fair share toward transportation improvements needed to accommodate development through implementation of the City's Traffic Impact Fee program, by providing additional transportation facilities and services in proportion to the impacts and needs generated by the development and encouraging developers to design projects that generate less traffic.

Policy T-3.3.3: Require traffic analyses for new development proposals consistent with the City's *Traffic Impact Analysis Guidelines* that determine the need for transportation improvements that address traffic impacts. Ensure new developments are accordant with the City's vision as a high capacity transit community.

OBJECTIVE 3.4: Ensure improvements to the transportation network occur concurrently with development.

Policy T-3.4.1: Allow development only when those proposals are concurrent with specific documentation or plans showing how the transportation system can adequately support existing and proposed development needs.

OBJECTIVE 3.5: Cooperate regionally and strive locally to mitigate transportation impacts to air quality through interconnected land use and transportation strategies.

Policy T-3.5.1: Support ongoing efforts for improving air quality throughout the Kenmore area and develop a transportation system compatible with the goals of the Federal and State Clean Air Acts.

Policy T-3.5.2: Support local and regional efforts to reduce vehicle emissions. Support installation of EV charging stations on local privately owned property and explore options for the development of charging facilities on publicly owned property. Reduce emissions from City fleet by implementing a green vehicle selection process, identifying green fleet resources for new or replacement vehicles, and installing electric car charging stations in City-owned facilities.

Policy T-3.5.3: Coordinate with Metro, Sound Transit, and other jurisdictions on Commute Trip Reduction (CTR) programs for major employers in Kenmore.

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Policy T-3.5.4: Reduce vehicle miles traveled (VMT) of SOVs by implementing Transportation Demand Management (TDM) programs and strategies.

OBJECTIVE 3.6: Reduce impacts to water quality with new development and maintenance of the existing transportation system.

Policy T-3.6.1: Design roadway improvements to be consistent with the City's Surface Water Management Plan, CAP, and stormwater regulations. Implement, where feasible, green stormwater infrastructure to reduce stormwater runoff and minimize and mitigate water quality impacts to aquatic habitats.

Policy T-3.6.2: Determine potential surface water retrofitting or treatments that could be applied in conjunction with transportation improvements.

Policy T-3.6.3: Support expanding stormwater facilities along with new projects to accommodate stormwater runoff adjacent to the project area, when feasible, to expand treatment to undisturbed but currently untreated areas.

GOAL 4. ENCOURAGE PUBLIC TRANSPORTATION, NON-MOTORIZED TRAVEL, AND OTHER TRANSPORTATION STRATEGIES THAT REDUCE THE NEED FOR AUTOMOBILE TRAVEL, ESPECIALLY BY SOVs.

OBJECTIVE 4.1: Support expansion of transit service within Kenmore that provides connections to local destinations as well as the regional high capacity transit network.

Policy T-4.1.1: Support the implementation of Sound Transit's planned and funded regional BRT along SR 522 and prioritize investments that support high capacity transit stations.

Policy T-4.1.2: Work with Metro and other transit providers to establish local transit service that provides Kenmore residents access to the regional high capacity transit network, as well as connections to the Downtown, major commercial and mixed centers in Kenmore, and other key destinations in the City, and destinations in surrounding communities.

Policy T-4.1.3: Examine the opportunities for increasing transit service with Metro and Sound Transit with priorities tailored to meet the needs of the community by:

a. Requiring transit facilities as mitigation where appropriate for new developments;

b. Identifying and developing locations that are accessible to public transportation for use as park-and-pool or park-and-ride lots;

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c. Requiring adequate right-of-way, sidewalk, and roadway improvements where transit stops are located;

d. Adopting design standards that promote safety and aesthetics in accordance with the *Street Planning Toolkit*; and

e. Encourage development and maintenance of passenger ferry, water taxi, and or other water-based transportation services on Lake Washington to connect Kenmore to other regional destinations

Policy T-4.1.4: Maintain BAT lanes on SR 522 for use by transit and business access only to encourage transit usage and improvements, and to preserve its use for transit over the long term.

OBJECTIVE 4.2: Work with local and regional transit agencies to site, size, and design park-and-ride facilities that reflect the land use vision for the areas in which they are located.

Policy T-4.2.1: Design structured parking facilities as integrated elements of mixed use developments with ground floor uses that support TOD, improve transit access to support the downtown plan, and improve and encourage non-motorized travel to and from high capacity transit areas.

Policy T-4.2.2: Explore the potential for joint use of park-and-ride lots with the public and private sectors for commercial and residential use.

OBJECTIVE 4.3: Create an accessible sidewalk and pedestrian trail network linking neighborhoods, the Downtown, and key community destinations consistent with that laid out in the *Pedestrian Priority Network*.

Policy T-4.3.1: Focus early sidewalk improvements on the *Pedestrian Priority Network*. Prioritize sidewalk investments consistent with the *Pedestrian Facilities Plan*, which rank projects based on safety, community connections, network connectivity, proximity to schools, connections to opportunities, and potential population served.

Policy T-4.3.2: Prioritize implementation of the Americans with Disabilities Act (ADA) Transition Plan.

Policy T-4.3.3: Require development to provide sidewalks along one side of the roadway or pay a contribution to a sidewalk fund to complete missing links, increase pedestrian safety, and provide linkages to key destinations in accordance with the *Pedestrian Priority Network*.

Policy T-4.3.4: Design and construct accessible pedestrian facilities in accordance with the *Pedestrian Priority Network*, *ADA Transition Plan*, and street classification system.

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Policy T-4.3.5: As part of the *Pedestrian Priority Network*, provide crosswalks at key locations such as in the Downtown, on SR 522 near park-and-ride lots and transit stops, near schools, and at other locations with significant pedestrian volumes.

Policy T-4.3.6: Explore opportunities to utilize undeveloped rights of way to develop and maintain safe pedestrian connections.

Policy T-4.3.7: Consider future bond measures to fund pedestrian projects that expand the pedestrian network.

OBJECTIVE 4.4: Implement a comprehensive *Bicycle Priority Network* in Kenmore.

Policy T-4.4.1: Require roadway development to include bicycle facilities in accordance with the *Bicycle Priority Network*.

Policy T-4.4.2: Prioritize future bicycle facility improvements that increase safety for bicyclists, link to key destinations, promote multi-modal trips, complete gaps in the existing bicycle system, provide linkages to the Burke-Gilman Trail and other key off-road facilities, and meet other priorities for bicyclists in Kenmore.

Policy T-4.4.3: Encourage off-road non-motorized vehicle facilities on designated trails. Promote the on-going maintenance and use of the Burke-Gilman Trail.

Policy T-4.4.4: Promote non-motorized vehicle trails in utility corridors or undeveloped rights of way where consistent with environmental constraints.

Policy T-4.4.5: Allow for a secondary pedestrian and bicycle loop around the downtown area with connections to the waterfront and high capacity transit areas.

Policy T-4.4.6: Accommodate bicycles and non-motorized vehicles in the design and management of the City's *Layered Network* in accordance with the *Bicycle Priority Network.*

OBJECTIVE 4.5: Implement programs and regulations that help reduce the use of SOVs.

Policy T-4.5.1: Create and implement development standards that:

a. Encourage continuous, direct, convenient non-motorized linkages;

b. Provide sufficient illumination in parking lots and along travel routes to increase visibility and security for non-motorists;

c. Minimize front yard parking along commercial street fronts, particularly in the Downtown;

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d. Establish standards that discourage excessive parking. Provide options or incentives to reduce underutilized parking lots and encourage alternate modes of travel;

e. Promote mixed-use development in the Downtown; and

f. Require minimum densities through floor area ratios, employment levels, and / or business retention and expansion activities in the Downtown and major commercial areas to support transit.

Policy T-4.5.2: Implement the City's CTR Ordinance applicable to large employers in accordance with State laws.

Policy T-4.5.3: Support the goals of the PSRC's Regional TDM Action Plan to manage travel behavior and reduce vehicle trips.

GOAL 5. MAINTAIN THE AVAILABILITY OF SAFE AIR TRAVEL SERVICES IN KENMORE.

OBJECTIVE 5.1: Support the continued operation of the Air Harbor to provide private air transportation services to the region and community.

Policy T-5.1.1: Recognize the Kenmore Air Harbor as a business that is economically and historically significant to the community.

Policy T-5.1.2 Provide multimodal connections from Kenmore Air Harbor to downtown commercial areas.

OBJECTIVE 5.2: Plan for appropriate uses and activities in the vicinity to minimize impacts to and from the Air Harbor.

Policy T-5.2.1: In consultation with the State and the Air Harbor operator, comply with State laws requiring plans and regulations that discourage the siting of incompatible uses adjacent to the Air Harbor.

Policy T-5.2.2: Ensure plans and regulations address the Air Harbor as an allowed use and, where appropriate, acknowledge compatibility issues including height hazards, safety, and noise that can affect the long-term viability of the Air Harbor. Consider WSDOT guidelines addressing airports and compatible land use as well as guidance from the PSRC Airport Compatible Land Use Program. Allow compatible uses, buildings, or land or water activities in the vicinity that do not present safety problems to normal Air Harbor operations, or that would not be sensitive to noise from the Air Harbor operations.

OBJECTIVE 5.3: Work with the Air Harbor to ensure compliance with appropriate noise and safety standards.

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Policy T-5.3.1: Work in partnership with the Air Harbor to address noise management and compliance with Federal, State and local noise ordinances. Consider a special overlay or property title process that identifies the noise-related impacts of the Air Harbor.

Policy T-5.3.2: Work in partnership with the Air Harbor to ensure safe operations in compliance with Federal and State aeronautic safety requirements.

GOAL 6. ***PROVIDE A TRANSPORTATION SYSTEM THAT FACILITATES FREIGHT MOBILITY AND ECONOMIC PROSPERITY.***

OBJECTIVE 6.1: Support the efficient movement of goods in Kenmore's commercial areas to support the local economy.

Policy T-6.1.1: Consider the needs for delivery and collection of goods at local businesses by truck and ensure future transportation improvements address the needs of large trucks in accordance with the *Freight Priority Network*.

Policy T-6.1.2: Monitor commercial truck traffic to ensure use of appropriate corridors to support efficient movement of goods and safety of local streets. Utilize the WSDOT classification system to determine freight and goods movement routes.

OBJECTIVE 6.2: Accommodate local deliveries and other goods movement that are necessary to serve Kenmore residents.

Policy T-6.2.1: Work with local industries and freight companies to understand their needs for adequately moving goods.

Policy T-6.2.2: Ensure roadway improvements do not unnecessarily impede delivery vans and other small freight trucks.

GOAL 7. PROMOTE TRANSPORTATION EQUITY THROUGH SERVICES AND INFRASTRUCTURE IMPROVEMENTS.

OBJECTIVE 7.1: Promote transportation improvements that provide equitable access and benefits for all Kenmore residents.

Policy T-7.1.1: Support transportation improvements that provide broad access to jobs, healthcare, goods and services, and social opportunities.

Policy T-7.1.2: Perform periodic review and monitoring of socio-demographic, economic, and geographic population trends to identify transportation facilities and services needed for all Kenmore residents.

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Policy T-7.1.3: Ensure transportation improvements do not impose external impacts on historically marginalized or underserved communities, such as increased air pollution, infrastructure costs, or crash risk.

Policy T-7.1.4: Prioritize implementation of the ADA Transition Plan

OBJECTIVE 7.2: Provide a transportation network that promotes inclusive and affordable services to all Kenmore residents, regardless of mode choice.

Policy T-7.2.1: Promote projects that expand bicycle and pedestrian facilities and access to transit for historically marginalized or underserved communities.

Policy T-7.2.2: Promote inclusive transportation modes and accessible community development that provide basic mobility to historically marginalized or underserved communities.

Policy T-7.2.3: Incorporate environmental justice criteria into the transportation improvement program review process to identify disproportionate effects on historically marginalized or underserved communities.

OBJECTIVE 7.3: Promote collaborative planning processes through authentic, active partnerships with historically underrepresented community groups.

Policy T-7.3.1: Work with historically marginalized or underserved communities and local organizations to identify transportation facilities improvements.

Policy T-7.3.2: Recognize and support individuals or groups who have historically been underrepresented in transportation planning and/or infrastructure development, such as people of color, indigenous and immigrant populations, to identify and correct structural or system inequities in the transportation network to promote social justice.

GOAL 8. SUPPORT TRANSPORTATION INVESTMENTS THAT MINIMIZE, MITIGATE, AND RESPOND TO THE EFFECTS OF CLIMATE CHANGE.

OBJECTIVE 8.1: Balance transportation demands with environmentally sustainable growth strategies consistent with the City's CAP to minimize long-term climate impacts.

Policy T-8.1.1: Prioritize dense, mixed-use, and transit-oriented development to reduce SOV travel and GHG emissions.

OBJECTIVE 8.2: Reduce VMT by promoting alternative transportation modes and access to high capacity transit.

Policy T-8.2.1: Implement TDM programs and strategies that facilitate transit use.

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Policy T-8.2.2: Prioritize infrastructure improvements that include new bicycle and pedestrian connections through project selection.

Policy T-8.2.3: Provide amenities that support bicycle and pedestrian users, such as bike lockers, bike racks, and wayfinding signage near the downtown area.

Policy T-8.2.4: Provide educational and encouragement programming that improves public awareness of Kenmore's bicycle and pedestrian networks.

FUTURE TRANSPORTATION SYSTEM

Kenmore envisions a future transportation system that serves all users and modes of travel by offering a safe and robust network of walkways, bicycle facilities, intersections, and roadways that connect neighborhoods and provide access to transit. This section describes Kenmore's vision for its future transportation network and the infrastructure improvements that will get the City there.

As identified in this element, most of the improvements are focused on the development of a 'layered' transportation network, which focuses less on providing vehicular capacity and more on accommodating all modes of travel. While some of the roadway improvements are needed to meet the City's vehicular LOS standard, most of the future improvements focus on providing safer and more complete facilities for walking, bicycling, and riding transit in order to improve access and mobility for all road users.

Introduction to the Layered Network

It can be a challenge for a single roadway to meet the demands and expectations of all modes at any given time. Accommodating all users and modes could result in wide or large roadways that are expensive to develop and maintain and do not necessarily reflect the neighborhood character. Alternately, trying to minimize roadway widths and infrastructure costs can result in a lack of facilities and thus less safe conditions for users.

In response to this challenge, the City of Kenmore has adopted a layered network approach that focuses on how the City's transportation network can function as a system to meet the needs of all users. In such a system, individual travel modes are prioritized on different facilities throughout the overall network. This approach promotes a balanced transportation system to serve diverse user needs including sidewalk and bicycle investments, improved access to transit, and roadway improvements for vehicles. **Figure T-16** illustrates the concept of a layered network.

The City implements this layered network through a system of roadway typologies that define each street's user priorities and associated infrastructure needs.

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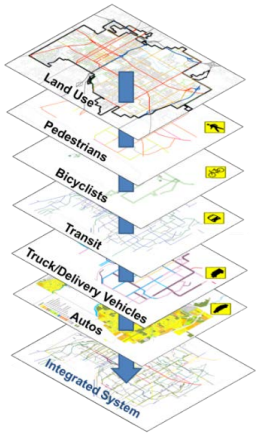
Figure T-16: Layered Network Concept



Roadway Typologies

The following street typologies dictate the form and intended functions of roadways in Kenmore. While some roadways are intended to serve regional travel and vehicle circulation, other facilities provide safe options for a more multimodal user base. A description of each roadway type follows and detailed fact sheets are available in **Appendix D-3**.

The roadway types are as follows and are summarized in **Figure T-17**:

- State Highway/Major Arterial – Most conducive for crosstown trips and focus on transit, freight, and auto mobility.
- Minor Arterial – Signals the entry into a higher-density commercial or residential zone. Emphasizes multimodal interactions and travel experience.
- Collector – Provides a connection between local streets and arterials for a safe travel experience for bicycles and pedestrians.
- Local Street – Prioritizes local access (driveways, on-street parking) and pedestrian travel. Bicycles share the roadway.

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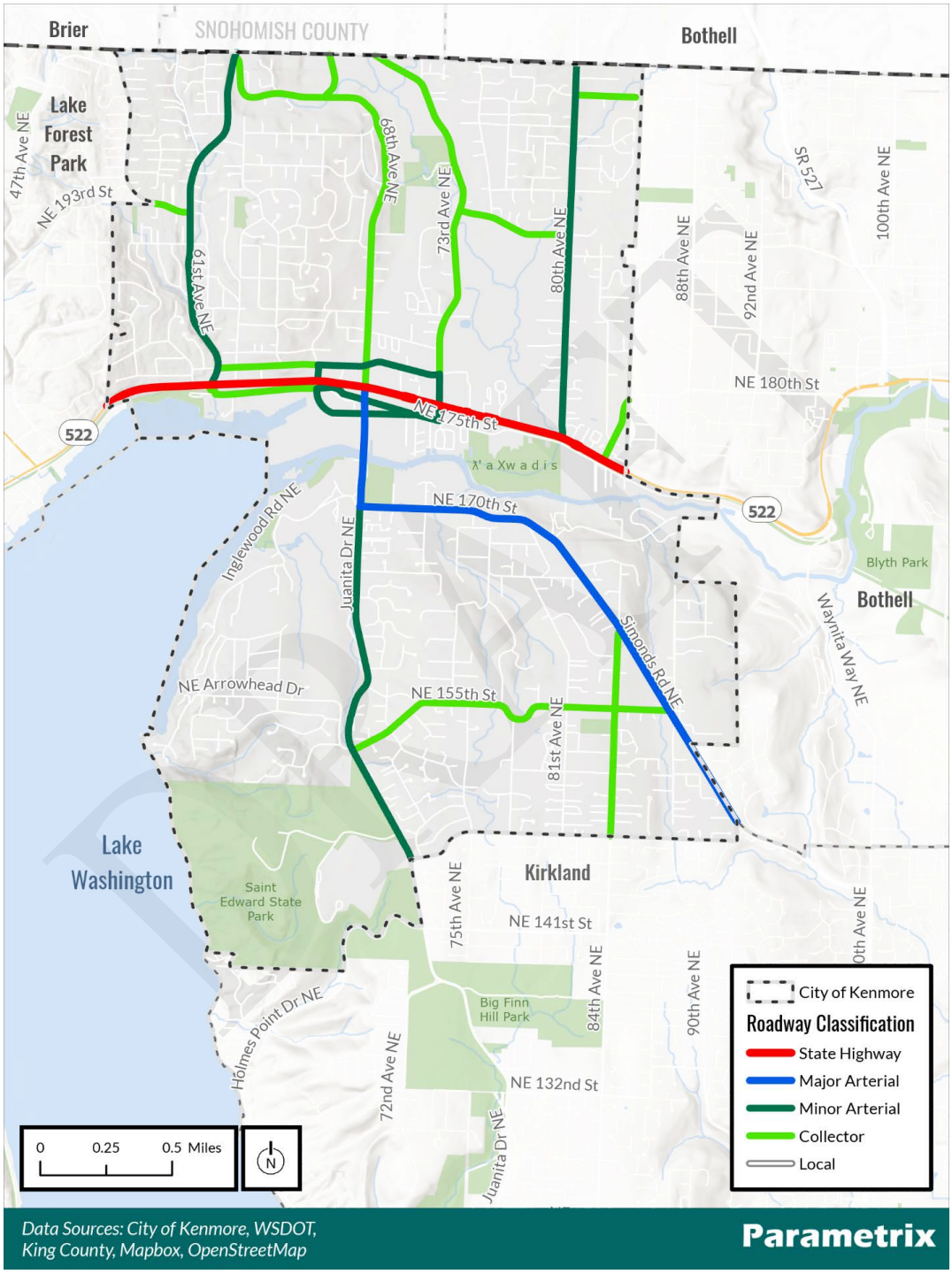
Figure T-17: City's Street Network



4. Comprehensive Plan Update: Transportation Element (continued)

Modal Networks

As the roadway descriptions specify, each type focuses on and prioritizes a different balance of users, both in terms of trip purpose and travel mode. The transportation network in Kenmore was developed by identifying desirable streets for each mode, combining them to locate overlaps, and then assigning priority to certain modes. The following sections review the priority networks for each mode and establish their LOS standards.

Walking

While Kenmore's local streets generally tend not to need fully separate sidewalks or paths due to their low traffic volumes and slow speeds, the City's state routes, arterials, collectors, and some local streets do warrant pedestrian infrastructure. **Figure T-18** highlights the Pedestrian Priority Network, indicating whether pedestrian infrastructure should be provided on both sides or one side of the street. The Pedestrian Facilities Plan identifies prioritized sidewalk projects throughout the city based on extending the existing sidewalk network, connections to the existing sidewalk network, and creating sidewalk on both sides of arterial and collector roads.

Building on the Pedestrian Priority Network above, **Table T-7** establishes the LOS standard for pedestrian facilities around the City. The best LOS for walking, indicated as the green standard, would provide walkways with buffers as shown in the Pedestrian Priority Network. The yellow LOS standard, which meets the basic needs for safe walking around the City, requires sidewalks or paved shoulders protected by raised curbs on one side of all the streets called out in the Pedestrian Priority Network. Incomplete or missing pedestrian facilities would fall into the red category and not satisfy the City's LOS for walking. The pedestrian LOS standard does not pertain to local streets, as low-volume roadways may be adequate for pedestrians without separated facilities based on their characteristics and should be evaluated on a case-by-case basis.

In addition to the presence of pedestrian facilities along a corridor, the City also emphasizes the importance of safe pedestrian crossings. Particularly downtown and within ½ mile of schools, the City is looking to provide enhanced crossings at regular intervals

Table T-7. Pedestrian LOS – Sidewalk Requirements

LOS	Within Pedestrian Priority Network*
🟢	Pedestrian facility** on both sides of the street with a buffer as indicated in Pedestrian Priority Network
🟡	Pedestrian facility** provided on one side of the street with or without buffer as indicated in Pedestrian Priority Network
🔴	No pedestrian facility

* The pedestrian LOS standard does not pertain to local streets outside downtown

** Pedestrian facility includes sidewalks and shoulders protected by a raised curb.

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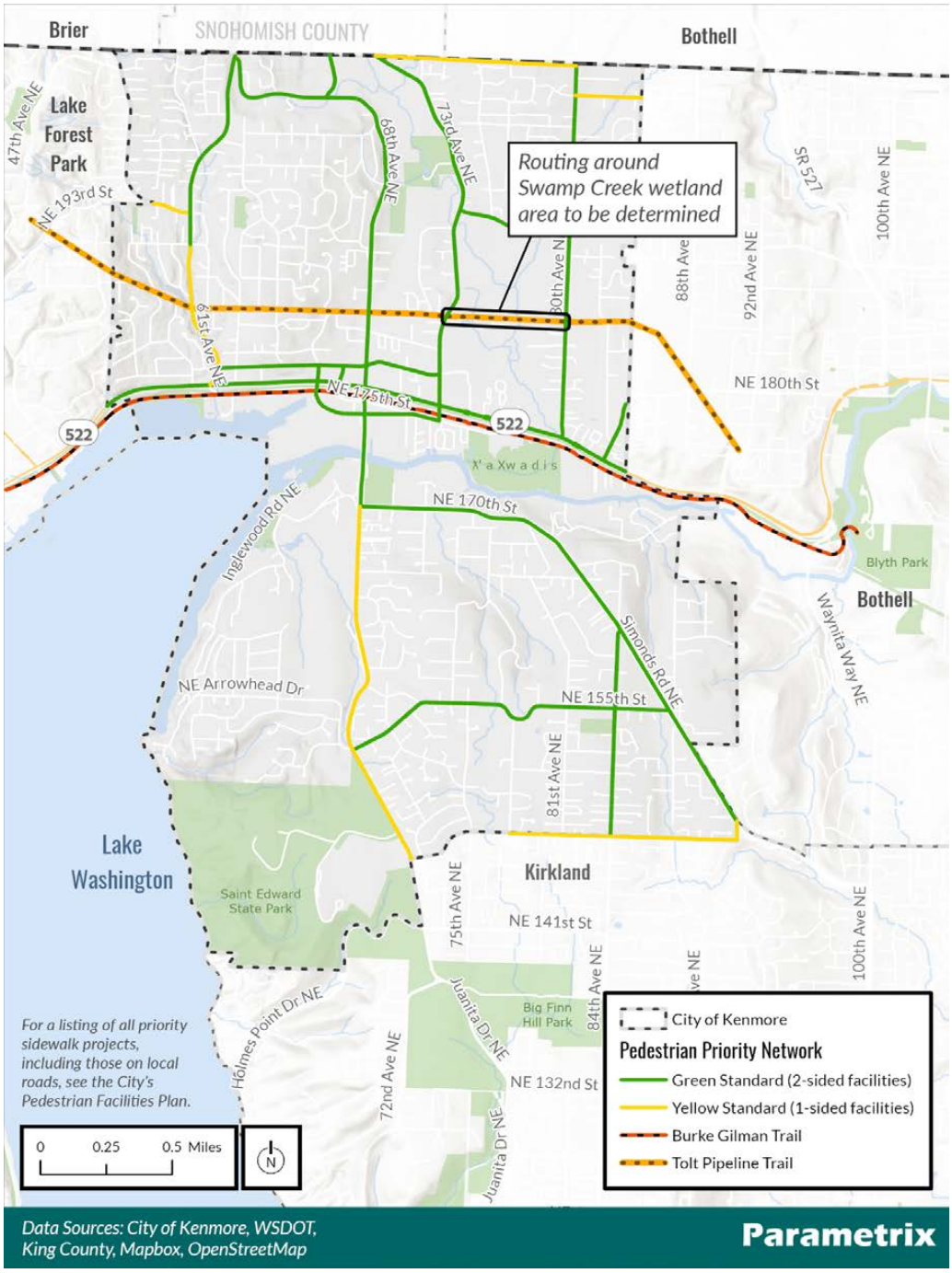
Figure T-18: Pedestrian Priority Network – Future Vision



Bicycling

Kenmore already sees significant levels of bicycling along the Burke-Gilman Trail and Juanita Drive, which serve as major commuter and recreational corridors. Connecting to these routes from other areas of the City can be difficult, however, due to challenging topography and limited through streets in some neighborhoods. Key mobility corridors for bicyclists include 68th Avenue / Juanita Drive / Simonds Road which have buffered bicycle facilities.

Similar to Pedestrian LOS, the City of Kenmore can strive for the green LOS for bicycling by installing the bicycle facilities depicted in the Bicycle Priority Network or a facility that offers more separation from vehicle traffic. At a minimum, the City plans to provide the yellow LOS by installing some sort of bicycle infrastructure on the streets identified in the Bicycle Priority Network (see **Figure T-19**). These facilities would be signed bike routes. Incomplete or missing bicycle facilities would fall into the red standard and not meet the City's LOS for bicycling. The LOS standards for bicycle facilities are described in **Table T-8.**

Table T-8. Bicycle LOS – Facility Requirements

LOS	Within Bicycle Priority Network
🟢	Provides minimum treatment* recommendation, as shown within Bicycle Priority Network
🟡	Provides a lower-level facility* than recommended in the Bicycle Priority Network
🔴	No bicycle facility

* Bicycle facilities – lowest-level to highest-level of treatment: shared; bike lanes; buffered bike facility; separated trail.

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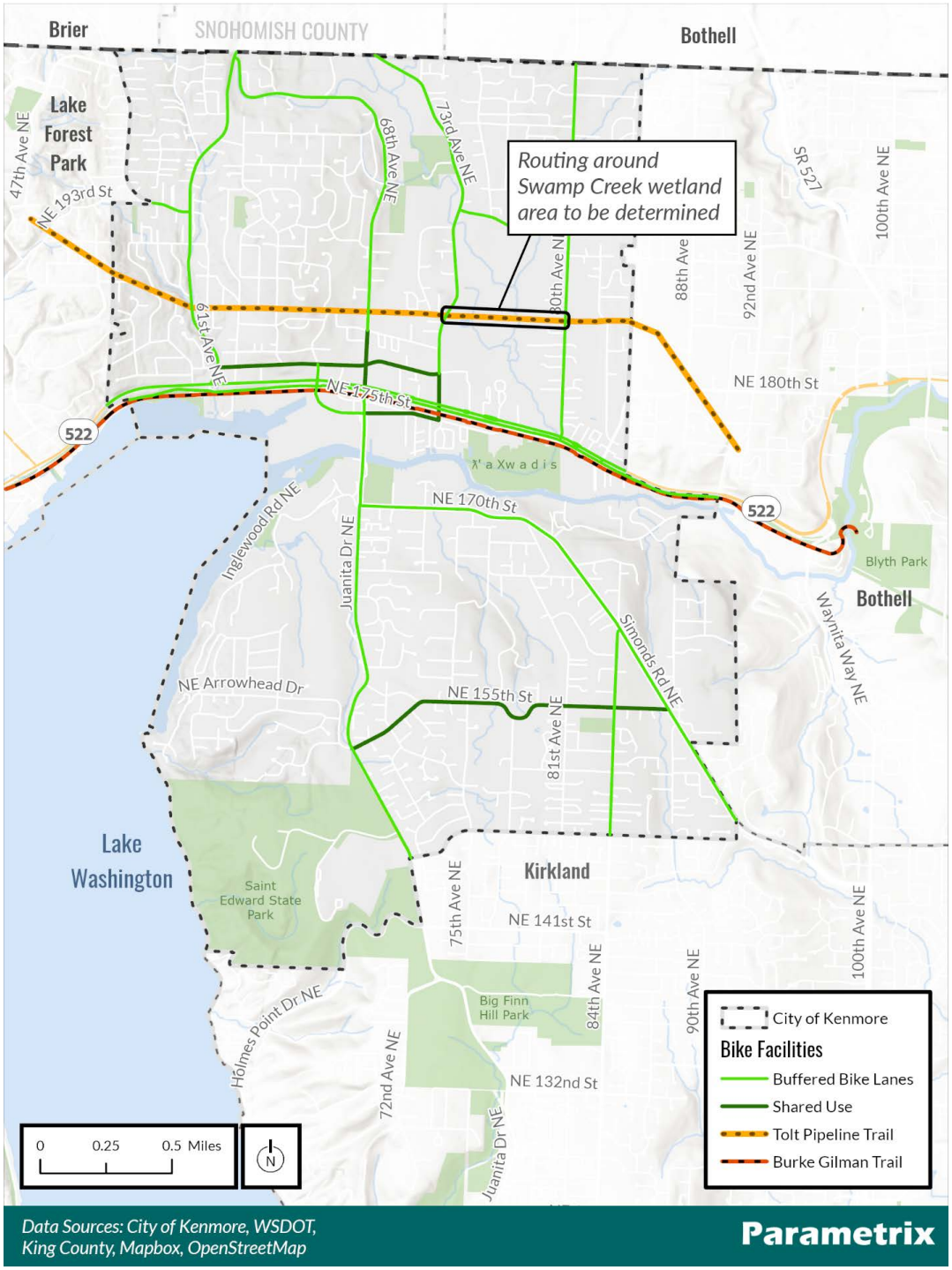
Figure T-19: Bicycle Priority Network – Future Vision



Transit

Transit operations are out of the City's direct control, but Kenmore can still aim to create corridors that are welcoming to transit. The Transit Priority Network identifies the corridors that the City should focus their efforts on and is shown in **Figure T-20**. The City can improve the transit user's comfort and safety by providing:

- Street lighting
- Right of way for bus shelters and benches or requiring installation of transit facilities as a condition of private development
- Safe routes for accessing transit stops

Kenmore's transit LOS is defined based on the amenities, access, and service frequencies discussed above. The City can achieve the green LOS standard by providing a high level of the transit supportive amenities at major stops, installing sidewalks and marked crosswalks at all stops, and encouraging and permitting housing and employment densities that support frequent, all day transit service, including Sound Transit's planned SR 522 BRT service. The yellow standard, which the City has adopted as its minimum target, includes some transit stop amenities, sidewalks and marked crosswalks at some stops, and all day service with headways of 30 minutes or less during the peak hour and 60 minutes or less during midday. Kenmore's measurement of transit LOS is summarized in **Table T-9**.

Table T-9. Transit Priority Corridor Level of Service

LOS	Transit Stop Amenities	Pedestrian Access	Frequency of Service
	High level	Sidewalks and marked crosswalks serving stops	All day service. Peak service 15 minutes or less, midday 30 minutes or less
	Some amenities	Sidewalks and marked crosswalks serving some stops	All day service. Peak services 30 minutes or less, midday service 60 minutes or less
	Few or no amenities	General lack of sidewalks and marked crosswalks	Low level of service

While the City itself does not operate transit, providing amenities and transit supportive uses and densities can encourage residents and employees to use transit and therefore justify additional service hours from Metro and Sound Transit.

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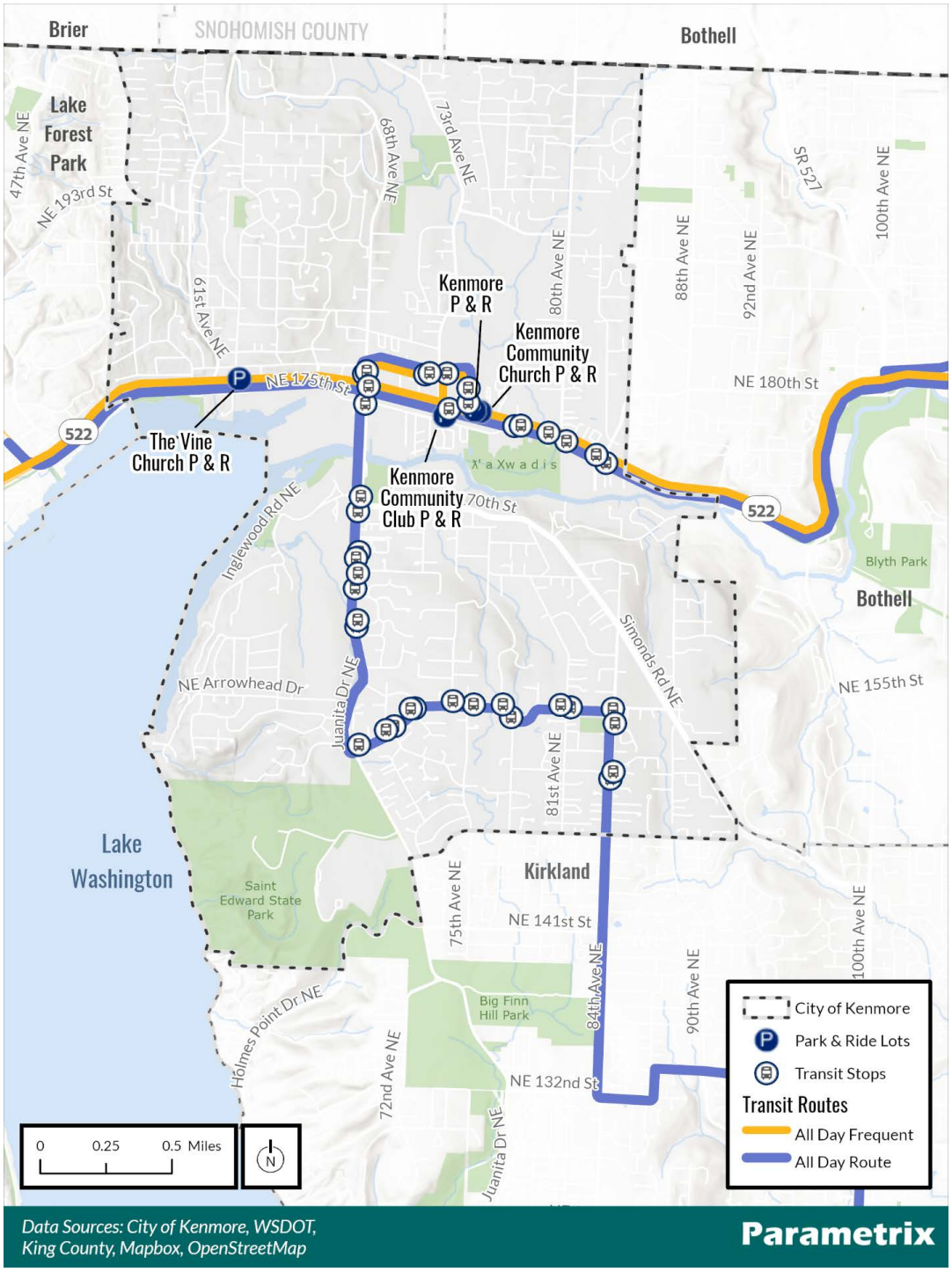
Figure T-20: Transit Priority Network



4. Comprehensive Plan Update: Transportation Element (continued)

Freight and Auto

Residents and workers in Kenmore use nearly every street in the roadway network at some point each day to access their homes, jobs, and other destinations. The highest volumes of automobile traffic currently occur on arterial and collector roadways whereas local streets do not see significant traffic volumes throughout the day. Similarly, goods movement predominantly utilize arterial and collector roadways, with local streets used mostly for residential deliveries~~.~~

Figure T-17 identifies the classification of each of Kenmore's streets, in terms of whether it is a state route, arterial, collector, or local road. These classifications indicate the intended function of each street, specifically in terms of its intended function in facilitating vehicle and freight mobility as well as other models. These classifications (further described in **Appendix D-3**) ~~should~~ guide future investments in streetscape and LOS objectives.

The expected growth in Kenmore and across the region over the next 20 years will generate higher auto volumes on City roadways and increase delay at several intersections. **Figures T-21 and T-22** displays the forecast level of service performance at several intersections in Kenmore's street network in 2030 and 2044, respectively.

While delays are forecasted to increase at some intersections, with the exception of several along SR 522, all intersections in Kenmore are forecast to perform at or better than the adopted LOS standard described in Policy T-1.4.1.

As noted in Policy T-1.4.1, the City measures LOS at the corridor level on SR 522 and 68th Avenue (south of SR 522) / Juanita Drive / Simonds Road rather than at the intersection level. Although several individual intersections on these corridors are forecast to experience longer delays than indicated by the standard, the safety and comfort of pedestrians and bicyclists is prioritized at intersections throughout the city. For this reason, average delay along the corridor is a more meaningful LOS standard than the experience at a single intersection.

The forecasted level of service along SR 522 in Kenmore does not meet WSDOT's current LOS standard of D but it does meet the City's concurrency standards of LOS E for Major Arterials. As a Highway of Statewide Significance, SR 522 is not subject to City concurrency standards and the City is not responsible for the regional traffic impacts that reduce the performance of the highway. The City notes that WSDOT considers exceeding LOS D to be an operational deficiency and will work with WSDOT as it addresses LOS conditions along SR 522.

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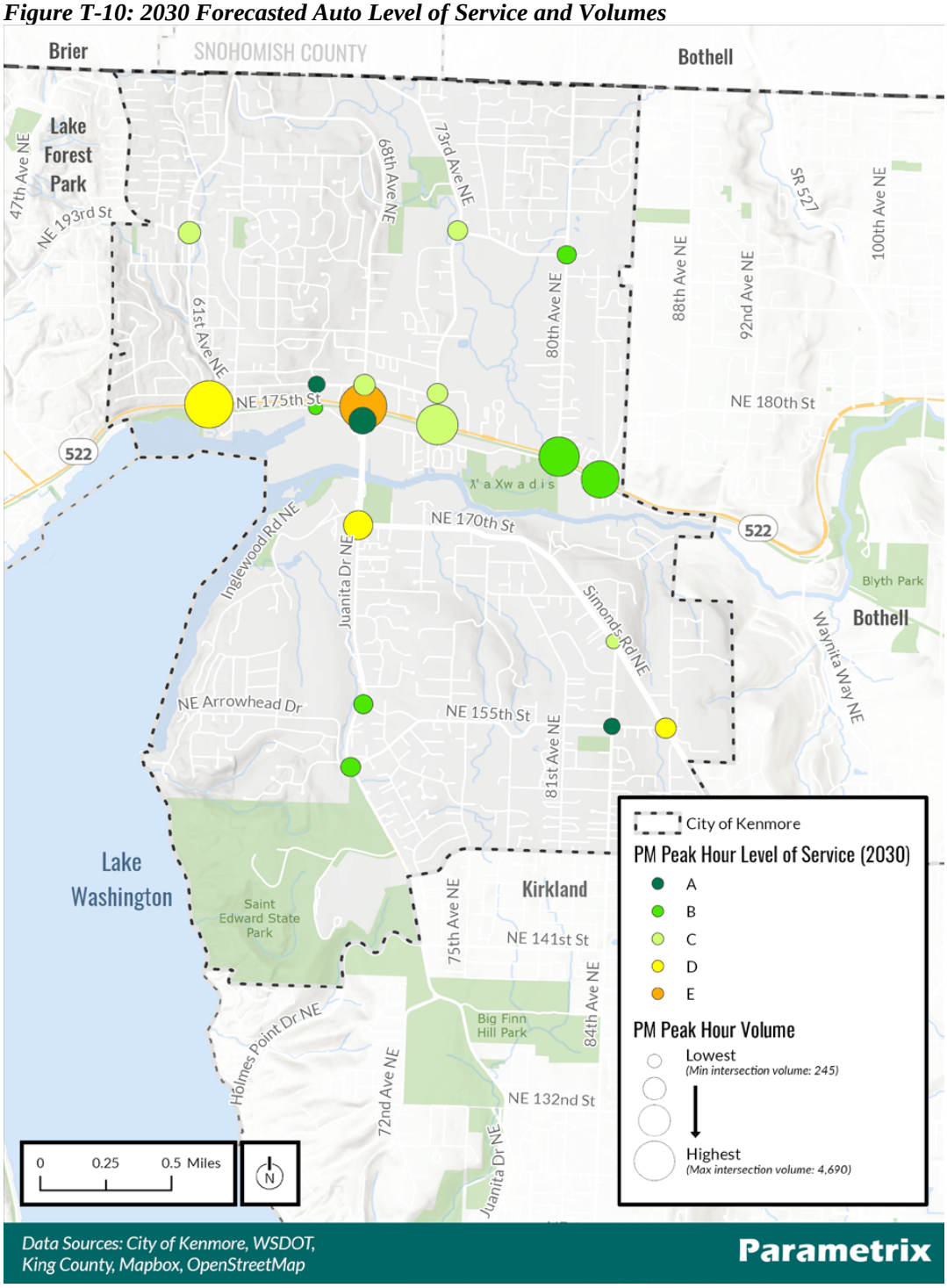
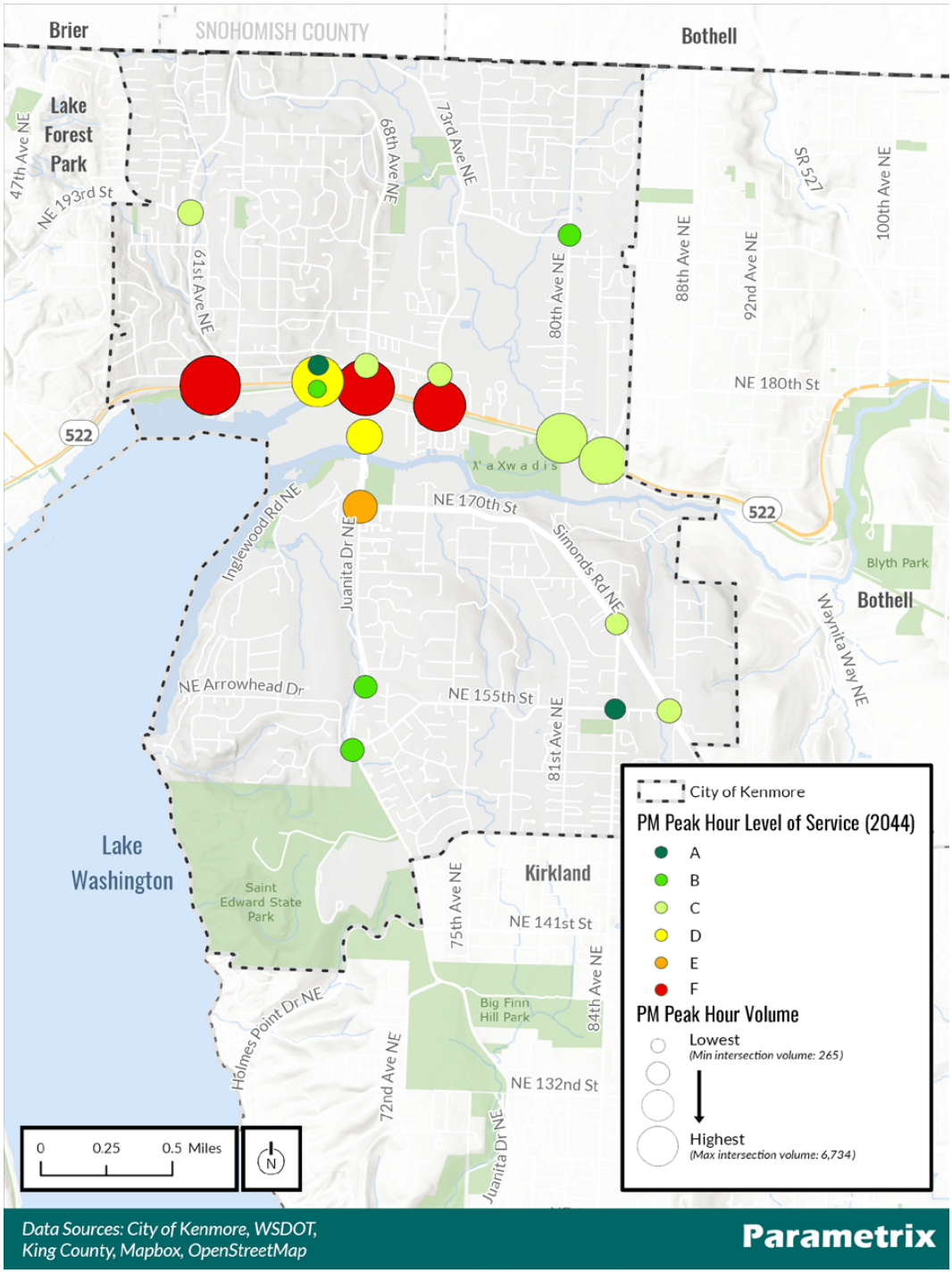
Figure T-10: 2030 Forecasted Auto Level of Service and Volumes



4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-22: 2044 Forecasted Auto Level of Service and Volumes



Downtown Parking

The City's on-street parking supply is currently available on a first-come, first-served basis, with time restrictions. Anticipated development in the Downtown quadrants may necessitate more active parking management in the future as demand for parking increases. The City should monitor parking use in downtown and consider the following actions, as appropriate, to manage demand:

- If parking spillover is perceived as an issue on nearby residential streets, consider establishing residential parking zones to maintain curb space for neighborhood residents.
- As downtown develops, review the City's parking code to ensure it is aligned with an urban setting.
- Consider encouraging more shared parking by developing a public parking facility that promotes a "park once" concept in the downtown.
- Consider installation of nonmotorized facilities to help balance demand.
- Develop structured parking standards to encourage the design of facilities that can adapt over time as parking demand changes.

There are 722 designated park and ride spaces in Kenmore of which 603 spaces are provided in the Kenmore Park and Ride at 73rd Avenue NE. The remainder of spaces in the City are distributed in two church parking lots and the Kenmore Community Club. The spaces are reserved for transit users who then access Metro and Sound Transit bus service. During weekdays in 2019, total utilization at these facilities were typically filled to 90 percent capacity, with the Kenmore Park and Ride being filled to 100 percent capacity. This results in overflow parking on adjoining streets and properties in the downtown area, thereby reducing the availability of downtown parking. Planned expansion to park and ride capacity may not occur until 2034 and the City will need to continue working with Metro and Sound Transit to identify opportunities to address park and ride demand for high capacity transit areas.

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NEAR TERM AND LONG TERM CAPITAL PROJECTS

This section identifies projects that will support implementation of the City's transportation vision. Collectively, this program adds up to over $118 million in transportation projects to be constructed over the next few decades. Projects are planned across two time frames. The Six Year (near term) list represents years 0 to 6 (2024-2030) and is financially constrained to only those projects that could realistically receive funding over the next six years[1]. The Twenty Year (long term) list reaches out to the 20 year time horizon (through 2044) and includes unfunded projects that may stretch beyond this time period. Detailed cost estimates are provided in Appendix D-4.

Table T-10 describes the Six and Twenty Year Project Lists and **Figure T-23** displays the locations of these projects around the City. These projects represent a balance of safety, maintenance, and operational improvements for all modes, with a focus on those that provide the most benefit to Kenmore residents and leverage outside funds to the greatest extent possible. The full set of projects would help complete the layered network and realize the City's transportation vision. The Pedestrian Facilities Plan and ADA Transition Plan will inform the sequence of projects for the Sidewalk Program and ADA Transition Plan Program, respectively, undertaken in both the six and twenty year time horizons. No projects are identified to maintain LOS, as all streets are forecast to operate within the City's adopted LOS standards.

Projects included on the Six Year Project List are considered community priorities that the City would move forward in the near term should funds become available. These projects provide a starting point for the City in developing its financially constrained Six Year CIP, which is updated every two years, and the annually updated 6-year Transportation Improvement Plan, and are developed based on more updated knowledge related to project feasibility and funding availability.

The Twenty Year Project List also represents important projects, but these projects tend not to have identified funding. While the scope of the 20-year project list exceeds revenues from exclusively city sources over the next few decades, it has been sized to fit within reasonable assumptions for grants and other outside funding sources.

The expected City contribution noted in Table T-10 includes anticipated grant funds. It is recognized that the availability of outside funds is not always predictable. As a result, the projects included in the Six and Twenty Year Project Lists could be advanced should funding become available.

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[1] It should be noted that it is unlikely that all of the projects on the 6-year list would receive funding. However, at this time, it is uncertain which ones will move forward in the near term and which will not. All of these projects are high priority projects that the City would move forward with if funds are available.

Table T-10. Six- and Twenty-Year Project List

Projects	Benefit to Kenmore	Primary Benefit	Total Cost	Expected City Contribution	Goal Met
Near Term (0-6 year) Projects					
SR 522 West B (West boundary to 61st Ave NE)	Improve pedestrian and bicycle accessibility, improve safety	Regional, Local	$2,200,000	$200,000	1, 3, 4, 7, 8
NE 181st St South Side (61st Ave NE-63rd Ave NE) Sidewalk	Improve pedestrian safety and encourage walking	Local	$1,300,000	$200,000	1, 3, 4, 7, 8
61st Ave NE Sidewalk Replacement (NE 181st St-62nd Ave NE)	Improve pedestrian safety, add accommodation for bicycles, enhance stream environment	Local	$5,110,000	$247,000	1, 3, 4, 7, 8
80th Ave NE Sidewalks (SR 522-NE 185th St)	Improve pedestrian and bicycle accessibility, improve safety	Local	$2,470,000	$247,000	1, 3, 4, 7, 8
NE 192nd St Sidewalks (73rd Ave NE - 75th Ave NE)	Improve pedestrian accessibility, improve safety	Local	$800,000	$39,000	1, 3, 4, 7, 8
Arrowhead Drive Sidewalks (NE 151st St - 64th Ave NE)	Improve pedestrian accessibility, improve safety	Local	$2,220,000	$222,000	1, 3, 4, 7, 8
84th Ave NE Sidewalks (NE 150th St - NE 155th St)	Improve pedestrian and bicycle accessibility, improve safety	Local	$2,370,000	$237,000	1, 3, 4, 7, 8
Lower Swamp Creek Bridge Replacement	Safely accommodate all uses by replacing aging bridge, maintain public access to residents.	Local	$4,100,000	$50,000	2, 6, 8
Pavement Preservation Program	Maintain the city's investment in roads and the safety for users	Local	$5,360,000	$5,360,000	2, 6, 8
ADA Transition Plan Program	Improve pedestrian safety, access, and accommodation for all users	Local	$2,750,000	$2,750,000	1, 3, 4, 7, 8

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Projects	Benefit to Kenmore	Primary Benefit	Total Cost	Expected City Contribution	Goal Met
Pedestrian Facilities Plan Program (Sidewalk Program)	Improve pedestrian circulation, accessibility, safety, and encourage walking.	Local	$2,000,000	$1,000,000	1, 3, 4, 7, 8
	Total		**$30,680,000**	**$10,552,000**	
	Longer Term (7-20 year) Projects				
Pedestrian Facilities Plan Program (Sidewalk Program)	Improve pedestrian circulation, accessibility, safety, and encourage walking.	Local	$31,000,000	$19,000,000	1, 3, 4, 7, 8
ADA Transition Plan Program	Improve pedestrian safety, access, and accommodation for all users	Local	$8,750,000	$8,750,000	1, 3, 4, 7, 8
Pavement Preservation Program	Maintain the city's investment in roads and the safety for users	Local	$12,000,000	$12,000,000	2, 6, 8
Lakepointe Development Mitigation	Intersection, pedestrian, bicycle, and access improvements to accommodate increased volumes related to the Lakepointe development. Improvements include: • Construction of a new road (Lakepointe Drive) from 65th Avenue/SR522 to 68th Avenue NE • Extending Lakepointe Drive east of 68th Avenue NE • Construction of the new Lakepointe Drive/68th Avenue intersection, including a new traffic signal • Elimination of the signal at 175th Street/68th Avenue • Installation of a signalized full-access intersection at 65th Avenue/SR 522	Local	To be determined	$0	1, 2, 3, 4, 7, 8
61st Ave NE/NE 193rd St Intersection	Intersection treatment to improve safety and vehicle operations	Local	$2,200,000	$220,000	1, 2, 4, 6, 7

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Projects	Benefit to Kenmore	Primary Benefit	Total Cost	Expected City Contribution	Goal Met
73rd Ave NE/NE 192nd St Intersection	Intersection treatment to improve safety and vehicle operations	Local	$3,700,000	$740,000	1, 2, 4, 6, 7
Nonmotorized crossing of SR 522	Improved nonmotorized access across SR 522 in the vicinity of 67th Avenue NE	Local	$17,160,000	$3,430,000	1, 2, 4, 6, 7
NE 181st Street/SR 522 East Connection	Improved local access between future developments near the Kenmore Park & Ride, SR 522, and downtown Kenmore	Local	$14,000,000	$2,800,000	1, 2, 4, 7
	Total		$88,810,000	$46,940,000	

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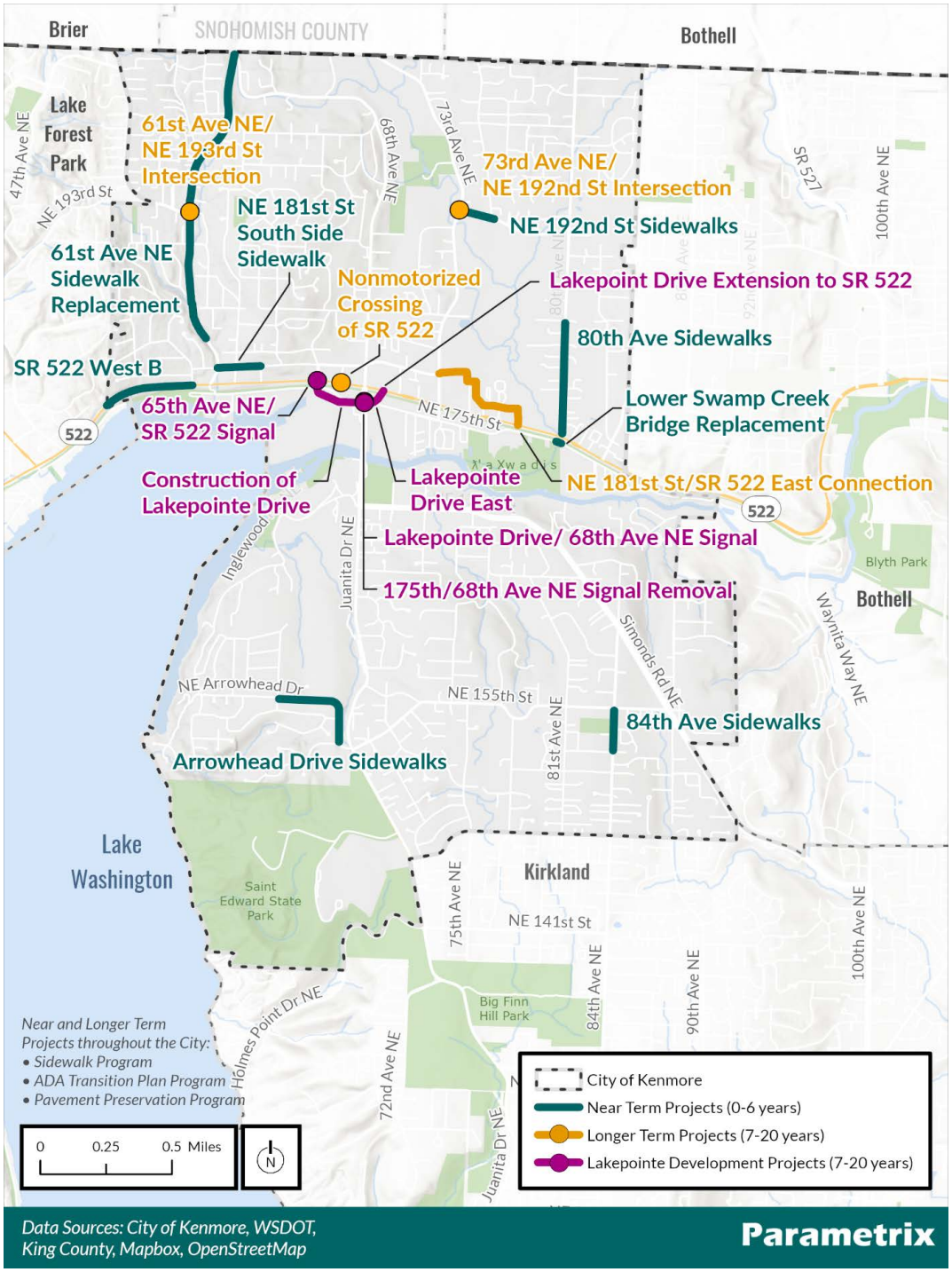
Figure T-23: Six- and Twenty-Year Transportation Improvement Projects



Non-City Projects

State Facilities

There are projects outside of Kenmore's purview that will also affect travel in and around the City. WSDOT oversees planning and operations of SR 522, a Highway of Statewide Significance and Kenmore's major east-west corridor. The City coordinates with WSDOT and provides input on potential roadway projects on SR 522, but the State ultimately has control of this corridor.

Another State-controlled project affecting travel in Kenmore is the tolling of the SR 520 Bridge across Lake Washington. Future increases in this toll, or potential tolling of I-90, may cause additional drivers to divert along Lake Washington, adding volume to Kenmore's already busy 68th Avenue / Juanita Drive and SR 522 corridors. The City will continue to monitor congestion changes along these corridors and work with the State to identify potential solutions.

Downtown Development South of SR 522

The southern two downtown quadrants between SR 522 and the Sammamish River (including the Lakepointe properties, Glacier/Cal Portland properties and properties within the Plywood Supply Special Study Area) have long been envisioned as sites for future master planned urban mixed-use development. These properties are subject to additional development regulations called P-Suffix regulations. P-Suffix regulations are property specific and include requirements for transportation infrastructure improvements that would need to be in place to accommodate full development.

Transportation infrastructure improvements described within the P-Suffix regulations include:

- Construction of a new road (Lakepointe Drive) from 65th Avenue/SR522 to 68th Avenue NE
- Extending Lakepointe Drive east of 68th Avenue NE
- Construction of the new Lakepointe Drive/68th Avenue intersection, including a new traffic signal.
- Elimination of the signal at 175th Street/68th Avenue.
- Installation of a signalized full-access intersection at 65th Avenue/SR 522.
- Construction of a pedestrian overcrossing of SR 522.

The approved Master Plan for the southern two downtown quadrants was originally approved in 1998 and did not account for many of the existing and planned transportation investments that currently and will influence travel to, from, and within Kenmore. For example, Sound Transit's Stride BRT service was not a consideration when assessing the impacts of these developments. Additional traffic modelling would be required in accordance with future planned development for these sites. Modifications to the transportation infrastructure improvements described within the P-Suffix regulations and/or new projects or additional improvements, including revised SR522 connection points, may be necessary.

The City assumes that the Lakepointe property will redevelop within the next 20 years, accompanied by construction of the required transportation improvements. All of the required improvements are expected to be fully funded by the developer(s) of the Lakepointe properties,

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with the exception of the SR 522 pedestrian crossing. The City anticipates contributing to the cost of this improvement, which may include securing grant funding. Should the redevelopment not be fully realized in the 20-year horizon, the associated transportation improvements would not be implemented in that time frame.

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IMPLEMENTATION STRATEGIES

The Transportation policies would require new, continuing, or increased commitments of City resources to implement projects and programs, create educational or incentive programs, or coordinate with adjacent jurisdictions. Implementing the Transportation Element will require close coordination among the City departments, citizens, businesses, and other agencies within the region.

In order to guide the City's implementation of the transportation element, project priorities should be assigned to assist in assembling an updated six-year CIP, working toward the 2044 planning horizon. This section summarizes the recommended future projects and documents the criteria used to prioritize them.

The Transportation Element is a living document and serves as the blueprint for transportation in Kenmore over the next several years. Several implementation steps should be initiated over the next couple of years to determine if changes are needed, or to reaffirm a particular strategy.

Overview of Costs and Revenues

A key GMA planning requirement is the concept of fiscal restraint in transportation planning. A fiscally constrained Transportation Element must first allow for operation and maintenance of existing facilities, and then capital improvements. To introduce fiscal constraint into the Transportation Element, an inventory of revenues and costs was undertaken to identify funds that are likely to be available for capital construction and operations.

The proposed Transportation Element for the City of Kenmore contains a variety of projects that will likely cost the city approximately $118.5 million over 20 years. **Table T-11** summarizes the costs of the major types of transportation improvements. The Transportation Element focuses on capital projects that will complete the layered network plan. The Transportation Element also includes ongoing pavement maintenance to ensure that the roadway network is kept in good condition.

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Table T-11. Costs of Kenmore Transportation Element (20 years)

Project Needs	*Description*	*Estimated Costs*			*Expected City Cost*
		2024-2030	*2030-2044*	*Total*	
Auto/Truck Priority Projects	Bridges, traffic signals, intersection channelization, SR 522 improvements	$6,300,000	$19,900,000	$26,200,000	$3,810,000
Pedestrian Projects	Sidewalks, crossings	$19,020,000	$39,750,000	$58,770,000	$32,692,000
Multimodal Projects	Multimodal corridors, SR 522 crossings	$0	$17,160,000	$17,160,000	$3,430,000
Pavement Maintenance	Overlay and pavement repair	$5,360,000	$12,000,000	$17,360,000	$17,360,000
	Total			**$119,490,000**	**$57,492,000**

*Costs denoted in millions; 2022 dollars used (no escalation)

Revenues for transportation capital and operations include those from outside sources and grants, general city funds, real estate excise taxes, impact fees, photo enforcement fees, and gas tax receipts. If the city were able to maintain this level of revenue, the City could afford between $80-$100 million in transportation projects over the next 20 years. Other potential revenue sources include:

- Proceeds from General Obligation Bonds
- Creation of LIDs
- Reciprocal impact fees with adjacent jurisdictions
- Business license fee per employee

Table T-12 identifies the anticipated funding sources for transportation projects in the City through 2044.

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Table T-12. Costs of Kenmore Anticipated Transportation Funding Sources (20 years)

	Estimated Funding Level		
Funding Sources	***2024-2030***	***2030-2044***	***Total***
Local (City), including Transportation Impact Fees	$10,552,000	$46,940,000	$57,492,000
Other Agencies/Jurisdictions (State and Local)	$0	$0	$0
Grants (State and Federal)	$20,128,000	$41,870,000	$61,998,000
New Taxes and Fees	$0	$0	$0
Total	**$30,680,000**	**$88,810,000**	**$119,490,000**

The comparison of revenues to costs indicates that the city will need to carefully prioritize its projects, since not all of the transportation needs are likely to be affordable with existing revenue sources during the 20-year period. If this occurs, the City has several options:

- Increase the amount of revenue from existing sources, including impact fees, real estate excise taxes, transportation benefit district, or increased general fund revenues.
- Adopt new sources of revenue.
- Lower the LOS standard, and therefore reduce the need for some transportation improvements.

The city can explore the feasibility and likely revenue amounts from these or other sources as the Transportation Element is implemented over the next several years. A summary of potential project funding sources is included in Appendix D-5.

Setting Priorities

Project prioritization is needed to help identify when best to fund and implement the projects since funding is limited. Criteria were established to help prioritize the projects and implementation. These unweighted criteria include:

(1) Meets City's transportation goals

(2) Maintains/improves safety of traveling in Kenmore

(3) Provides improved mobility and accessibility within Kenmore

(4) Leverages non-city (federal, state, private) funds freeing up city revenues for additional projects

(5) Responds to capacity needs using strategies identified in the Comprehensive Plan.

Using these criteria, the identified projects will need to be evaluated and ranked based on how well each could meet the criteria. Since one of the criteria relates to funding availability, priorities may shift over time as fund sources change.

High priority projects for Kenmore are those that meet multiple criteria in terms of effectiveness, benefit to the community, and ability to be implemented. These attributes will allow the City to take advantage of a variety of public and private funding sources to complete key projects.

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TRANSPORTATION ELEMENT

ATTACHMENT 2

INTRODUCTION

~~EXECUTIVE SUMMARY~~

Since its incorporation ~~incorporating~~ in 1998, the City of Kenmore has continuously made investments that enhance its position as ~~strides toward becoming~~ a vibrant community in which to live, work, and play. New civic facilities ~~The new City Hall, Library, Fire Station, and the businesses and streetscape investments around them contribute toward a vibrant~~ downtown and multimodal transportation facilities throughout the City have been key contributors that ~~the City intends~~ to the City's vitality. Building on previous improvements, this ~~strengthen. This~~ Transportation Element aims to support the vision of Kenmore as a high-capacity transit community with an activated, thriving downtown, as described in the Land Use Element. It also describes a network that supports travel by walking, biking, and riding transit throughout Kenmore, in addition to supporting adequate mobility when traveling by car in Kenmore through ~~2035.~~

~~The~~ 2044. The Element supports the City's Diversity, Equity, and Inclusion Policy, adopted in 2020, to allocate resources in areas with historically disadvantaged communities. Recognizing that vehicle emissions are Washington State's largest contributor to greenhouse gases, the Element reflects the goals and policies described in ~~overall vision for~~ Kenmore's Climate Action Plan (CAP), emphasizing a shift to transportation modes and technologies that reduced vehicle emissions. ~~Transportation Element is to provide a safe, balanced, and efficient multi-modal transportation system that is consistent with the City's overall vision and adequately serves anticipated growth. Guidance from City staff, the Planning Commission, the Pedestrian & Bicycle Safety Ad Hoc Citizen Committee, stakeholders, and citizens helped identify several priorities:~~

- ~~Improve safety for all road users in Kenmore through street designs that accommodate all modes~~
- ~~Provide connectivity to support local travel in Kenmore while allowing through trips to occur in a timely fashion~~
- ~~Encourage placemaking and the creation of a vibrant, walkable identity for Kenmore's downtown~~

~~The Transportation Element sets a framework for understanding, prioritizing, measuring, and creating a transportation network to help Kenmore achieve its vision. This document includes six chapters:~~

- ~~**Chapter 1 – Introduction:**~~
  ~~Describes the purpose of the Transportation Element and the planning requirements it need to address. Also provides an overview of Kenmore's position in the region and the outreach activities that occurred as a part of this plan.~~

Purpose

The purpose of the Transportation Element is to describe the City's vision for a safe, balanced, and efficient multi-modal transportation system that supports the Land Use element. The Transportation Element includes goals, policies, and objectives for maintenance and development of Kenmore's transportation system. It also identifies future transportation investments needed to realize the city's vision for multi-modal mobility within Kenmore. The Transportation Element informs the development of the Capital Improvement Program (CIP) by identifying the types of projects the City should undertake to support future transportation needs in the 6- and 20-year horizons. The plan also evaluates how these projects coincide with the City's financial resources.

This Transportation Element includes the following sections:

- ***Existing Conditions***: ~~**and Trends:**~~ Describes conditions for all travel modes in the existing transportation system. This section ~~chapter~~ also identifies current challenges and trends that will affect Kenmore's transportation network in the future.
- ~~**Chapter 3 – Transportation Vision and**~~ ***Goals, Objectives, and Policies***: Explains Kenmore's vision for transportation and the goals that serve as the basis for the Transportation Element.
- ~~**Chapter 4 –**~~ ***Future Transportation*** ~~**Vision:**~~ ***System***: Describes the City's ~~Introduces a~~ layered transportation network concept to ~~that forms the foundation of this plan to accommodate all modes of travel and~~ create a complete, multimodal transportation network in Kenmore. This section also ~~details how to accommodate each travel mode and~~ establishes the City's level of service (LOS) standards.
  ~~**Chapter 5 –**~~ ***Near Term and Long Term Capital Projects:*** ~~**Plans:**~~ Provides near-term and long-range project lists based on the community values expressed in the transportation goals and layered network.
  ~~**Chapter 6 – Implementing the Transportation Element:**~~ ***Implementation Strategies***: Evaluates Kenmore's financial conditions over the next 20 years and provides guidance on plan implementation.

~~To serve as a useful document for community, including both City staff and the general public, this Transportation Element focuses on the City's vision and the projects and programs intended to meet that vision. Technical and supporting information are available in technical appendices.~~

~~**CHAPTER 1: INTRODUCTION**~~

~~Since incorporating in 1998, the City of Kenmore has made strides toward becoming a vibrant community in which to live, work, and play. The new City Hall, Library, Fire Station, and the businesses and streetscape investments around them contribute toward a vibrant downtown that the City intends to strengthen. This Transportation Element aims to support travel by walking, biking, and riding transit, in addition to supporting adequate mobility when traveling by car in Kenmore through 2035.~~

~~**PURPOSE**~~

~~The overall vision for Kenmore's Transportation Element is to provide a safe, balanced, and efficient multi-modal transportation system that is consistent with the City's overall vision and~~

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~~adequately serves anticipated growth. Guidance from City staff, the Planning Commission, the Pedestrian & Bicycle Safety Ad Hoc Citizen Committee, stakeholders, and citizens helped identify several priorities:~~

- ~~Improve safety for all road users in Kenmore through street designs that accommodate all modes~~
- ~~Provide connectivity to support local travel in Kenmore while allowing through trips to occur in a timely fashion~~
- ~~Encourage placemaking and the creation of a vibrant, walkable identity for Kenmore's downtown~~

~~PLANNING REQUIREMENTS~~

Regional Context

The Transportation Element sets a framework for understanding, prioritizing, measuring, and creating a transportation network to help Kenmore achieve its land use vision. Kenmore's regional setting, shown in **Figure T-1**, is important. Nestled on the north shore of Lake Washington, the City forms the northern edge of King County and is bisected by State Route 522 (SR 522), a Highway of Statewide Significance. Given this strategic location, transportation conditions in the City are strongly influenced by pass-through traffic travelling ~~connecting~~ between Seattle and east side cities, as well as growth in Snohomish County. The Kenmore Air Harbor provides connections to additional regional destinations, such as the Olympic Peninsula, the San Juan Islands, and British Columbia. The City must coordinate its transportation planning with a variety of jurisdictions, including neighboring cities, King County (including King County Metro), Sound Transit, the Puget Sound Regional Council (PSRC), and the Washington State Department of Transportation (WSDOT). ~~State of Washington. **Figure 1** shows the location of Kenmore in this regional setting.~~

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Figure T-1: City of Kenmore and Surrounding Area

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4. Comprehensive Plan Update: Transportation Element (continued)

~~GMA~~

~~The State's Growth Management Act of 1990 requires communities to prepare a transportation plan that ties directly to the City's land use decisions and financial planning. This Transportation Element Update fulfills the mandate.~~

~~In addition to this state act, the Washington State Department of Transportation (WSDOT) controls SR 522, which runs east-west through Kenmore. As such, this plan aims to coordinate with WSDOT and other neighboring communities to ensure that SR 522 and all of Kenmore's streets serve local as well as regional travel needs.~~

Growth Management Act (GMA)

The State's Growth Management Act (GMA) of 1990 requires communities to prepare a transportation plan consistent with the City's Land Use Element. Specific GMA requirements for the Transportation Element include addressing:

- Land use assumptions used in estimating travel
- Estimated traffic impacts to state-owned transportation facilities resulting from growth
- Future transportation facilities and services needs, including those for air, water, and ground transportation
- LOS standards for arterials, state highways, and transit routes
- Specific actions and requirements for bringing locally owned transportation facilities and services into compliance with established LOS standards
- Forecasts of future traffic based on the adopted land use plan
- State and local system needs to meet current and future demands
- Financing capability to judge needs against probable resources
- A multiyear financing plan based on needs, which will serve as the basis for the City's six-year transportation program
- Strategies to address issues if probable funding falls short of meeting identified needs
- Intergovernmental coordination efforts
- Demand-management strategies
- Bicycle and pedestrian improvements

This Transportation Element addresses the required transportation components of the GMA.

~~Other plans~~ **VISION 2050**

~~The Puget Sound Regional Council (PSRC) is the region's metropolitan planning organization made up of cities, towns, counties, ports, tribes, transit agencies, and major employers. PSRC has~~

~~set policy for King, Pierce, Snohomish, and Kitsap Counties through Vision 2040, which lays out the long term goals for growth management, economic, and transportation issues.~~

The Puget Sound Regional Council (PSRC) is the region's metropolitan planning organization. Comprising cities, towns, counties, ports, tribes, transit agencies, and major employers, PSRC sets regional growth policies for King, Pierce, Snohomish, and Kitsap Counties. Adopted in 2020, VISION 2050, establishes the long term goals for growth management, economic, and transportation issues. This Transportation Element is consistent with the VISION 2050 priorities.

VISION ~~2040~~ 2050 identifies several key goals for transportation in the region:

- **Maintenance, Management, and Safety** – Maintain, preserve, and operate the existing transportation system in a safe and usable state.
- **Support the Growth Strategy** – Support the regional growth strategy by focusing on connecting centers with a highly efficient multimodal transportation network.
- **Greater Options, Mobility, and Access** – Invest in transportation systems that offer greater options, mobility, and access in support of the regional growth strategy.

~~This Transportation Element is consistent with the Vision 2040 priorities.~~

~~ROLE OF THE TRANSPORTATION ELEMENT~~

Countywide Planning Policies (CPPs)The Regional Growth Strategy identifies ~~Transportation Element serves both as~~ a network of walkable, compact, ~~functional plan to guide the City's transportation investments~~ and transit-oriented communities, including the city of Kenmore, ~~as the overarching framework for transportation in Kenmore's Comprehensive Plan. The document also ensures coordination with the City's Land Use Element and other major planning efforts~~, including ~~improvements along Juanita Drive and SR 522.~~

~~In essence, the Transportation Element informs the development of the Capital Improvement Program by identifying the types of projects the City of Kenmore should undertake to support future travel trends. The plan also evaluates how these projects coincide with the community's values and financial resources.~~

~~PUBLIC OUTREACH~~

~~This plan included public outreach through workshops and committee meetings. The City held an open public workshop in May, 2014 to gain insight on how Kenmore citizens would like to prioritize transportation for the next 20 years. City staff and the consultant team met with City Council, the Planning Commission, and the Pedestrian & Bicycle Safety Ad Hoc Citizen Committee throughout the course of the planning effort.~~

~~REGIONAL COORDINATION~~

~~As part of the planning process the City reached out to other agencies and government bodies~~ that are the focus of urban development. The Regional Growth Strategy envisions an efficient, multimodal ~~have an interest in or influence on transportation in Kenmore. Groups that the City has met with include:~~

- ~~Neighboring cities and counties~~
- ~~Transit providers in the region~~
- ~~Schools and senior centers~~

~~The City is also coordinating relevant planning efforts with Bothell and Kirkland to ensure a smooth transition on facilities that cross jurisdictional boundaries.~~

~~PLAN ORGANIZATION~~

~~This Transportation Element includes five chapters in addition to the Introduction **(Chapter 1)**:~~

- ~~**Chapter 2 – Conditions and Trends:**~~
  ~~Describes conditions for all travel modes in the existing~~ transportation system that provides various options for moving people and goods into and among centers. ~~This chapter also identifies current challenges and trends that will affect Kenmore's transportation network in the future.~~
- The overarching ~~**Chapter 3 – Transportation Vision and Goals:**~~
  ~~Explains Kenmore's vision for~~ transportation goal in ~~and~~ the Countywide Planning Policies (CPPs) is ~~goals~~ that ~~serve as~~ the region is well served by an integrated, multimodal ~~basis for the Transportation Element.~~
- ~~**Chapter 4 – Future Transportation Vision:**~~
  ~~Introduces a layered network concept that forms the foundation of this plan to accommodate all modes of travel and create a complete~~ transportation system that supports the regional vision for growth, efficiently moves people and goods, and is environmentally and functionally sustainable over the long term". The CPPs support ~~network in Kenmore. This section also details how to accommodate each travel mode and establishes the City's level of service standards.~~
- ~~**Chapter 5 – Near Term and Long Term Capital Plans:**~~

~~Provides near-term and long-range project lists based on the community values expressed in the~~ transportation vision in the Regional Growth Strategy with policies focused on: ~~goals and layered network.~~

- Supporting Growth – focusing on serving the region with a transportation system that furthers the Regional Growth Strategy;
- Mobility – addressing the full range of travel modes necessary to move people and goods efficiently within the region and beyond; and
- System Operations – encompassing the design, maintenance, and operation of the transportation system to provide for safety, efficiency,
- ~~**Chapter 6 – Implementing the Transportation Element:**~~
- ~~Evaluates Kenmore's financial conditions over the next 20 years~~ and sustainability.

Other Plans

WSDOT controls SR 522, which runs east-west through Kenmore. As such, the City coordinates with WSDOT and neighboring communities regarding impacts to and needed investments on SR 522.

Sound Transit provides regional, high capacity transit service throughout the Puget Sound via Link light rail, Sounder commuter rail, and ST Express bus service. Sound Transit is currently advancing the capital and service investments included in the ST2 and ST3 ballot measures approved in 2008 and 2016, respectively. The ST2 ballot measure included funding for the

Lynnwood Link light rail extension, planned for completion in 2024. The Shoreline South/148th Street and Shoreline North/185th Street stations will be the closest light rail stations to Kenmore, providing nearby access for Kenmore residents wishing to ride transit to destinations throughout the Puget Sound region. Sound Transit's Stride bus rapid transit (BRT) service on SR 522 was funded by the ST3 ballot measure. Planned for ~~guidance on plan~~ implementation in 2026, Stride will provide high-capacity transit service directly in Kenmore, providing residents with a direct connection to light rail in Shoreline and Stride service on I-405.

Metro Connects is King County Metro's (Metro's) 30-year vision for mobility. It is a long-range service and capital vision that describes planned future service networks and the capital investments needed to support those networks. The plan envisions multimodal connections to the places people want to go with safe and secure operations and facilities for passengers, employees, and communities. Metro Connects emphasizes Metro's core values of safety, equity, and sustainability, incorporates the recommendations of the King County Metro Mobility Framework, and aligns with Metro's Strategic Plan for Public Transportation and its Service Guidelines. The service networks envision changes to Kenmore's transit services, particularly in relation to the implementation of Sound Transit's investments in the regional HCT system.

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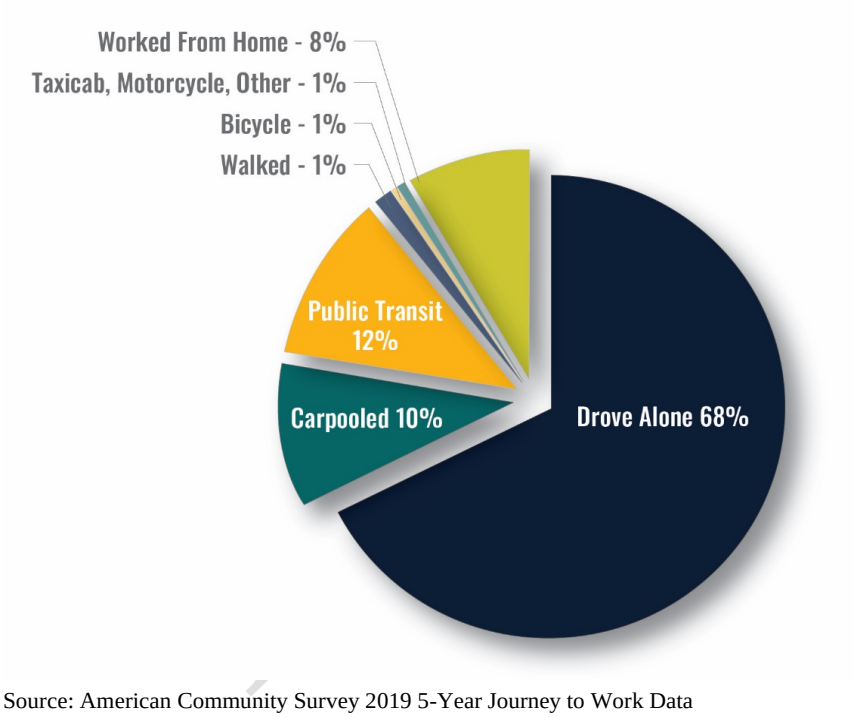
~~CHAPTER 2: CONDITIONS AND TRENDS~~

EXISTING CONDITIONS

Transportation Network Overview

Kenmore's transportation network accommodates many modes of travel, including walking, bicycling, public transit, driving, and flying. Vehicular travel for commuting to work, which generally occurs during the morning (AM) and evening (PM) peak when traffic volumes are highest, is ~~Vehicular travel is still~~ the primary choice for many travelers in and around Kenmore, as shown in the Census journey-to-work data (see **Figure T-2**). The peak volumes for vehicles, pedestrians, bicyclists, and transit can occur during different times by location. For example, areas near schools are influenced by the start and end of classes, resulting in increased pedestrians and vehicles volumes during these times.

Figure T-2: Commute Mode to Work



Source: American Community Survey 2019 5-Year Journey to Work Data

City streets form the backbone of the transportation framework with roadways shaping how residents and visitors experience Kenmore. The City of Kenmore currently classifies its roadways into major ~~principal~~ arterials, minor arterials, collectors, and local streets, as shown in **Table T-1~~Table 1~~** and displayed in **Figure T-3.~~Figure 3.~~** Examples of each roadway type and the intended uses served are described in ~~below.~~ **Table T-1**.

Table T-1. Functional Classification of Roadways

Roadway Type	Description / Purpose	Example
Major ~~Principal~~ Arterial	A roadway that serves through trips and connects Kenmore with the rest of the area.	• ~~SR 522~~ • Simonds Road NE • 68th Avenue NE (SR 522 to NE 170th Street)
Minor Arterial	Minor arterial streets provide inter-neighborhood connections and serve both local and through trips.	• 61st Avenue NE • NE 181st Street (65th Avenue NE to 73rd Avenue NE) • Juanita Drive NE
Collectors	Collectors distribute trips between local streets and arterials and serve as transition roadways to or from residential areas.	• 68th ~~84th~~ Avenue NE (north of SR 522) • 73rd Avenue NE • NE 153rd Place
Local	Local streets provide circulation and access within residential neighborhoods.	• 62nd ~~64th~~ Avenue NE • NE 150th Street

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Figure T-3: Roadway Functional Classification

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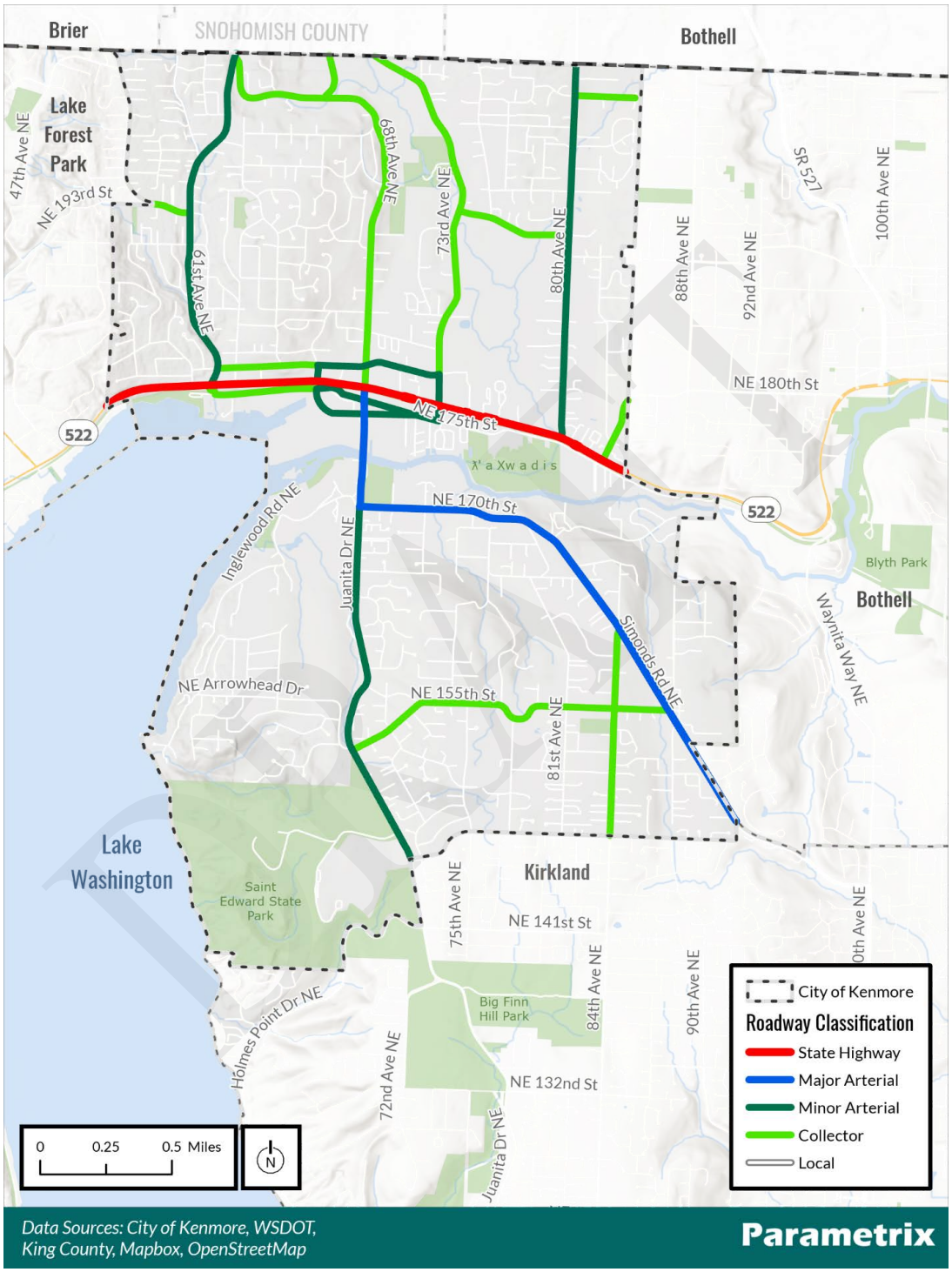

4. Comprehensive Plan Update: Transportation Element (continued)

There are approximately 45 ~~Approximately 15~~ linear miles of concrete sidewalks ~~sidewalk~~ and 120 marked ~~enhanced~~ crosswalks in the City ~~have been installed since incorporation from King County~~, but sidewalks are still absent from many streets. On quiet residential streets, sidewalks may not be necessary; however, Kenmore has a number of arterials connecting residents from their homes to commercial areas, employment centers, schools, and transit stops that lack adequate pedestrian facilities.

Figure T-4 ~~**Figure 4**~~ displays different types of existing pedestrian infrastructure in Kenmore ~~and~~ **Figure T-5** shows where existing sidewalks and trails ~~these facility types~~ are located ~~spatially~~ as well as average pedestrian volumes (2022) at key intersections during the 2-hour evening peak for vehicular traffic. ~~the number of pedestrians that were observed on each facility in the fall of 2013.~~

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Figure T-4: Existing Sidewalks~~, Shoulders,~~ and ~~Pedestrian Crossings~~ Trails

Source: Google Maps, City of Kenmore

4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-5: Existing Sidewalks ~~Shoulders,~~ and Trails

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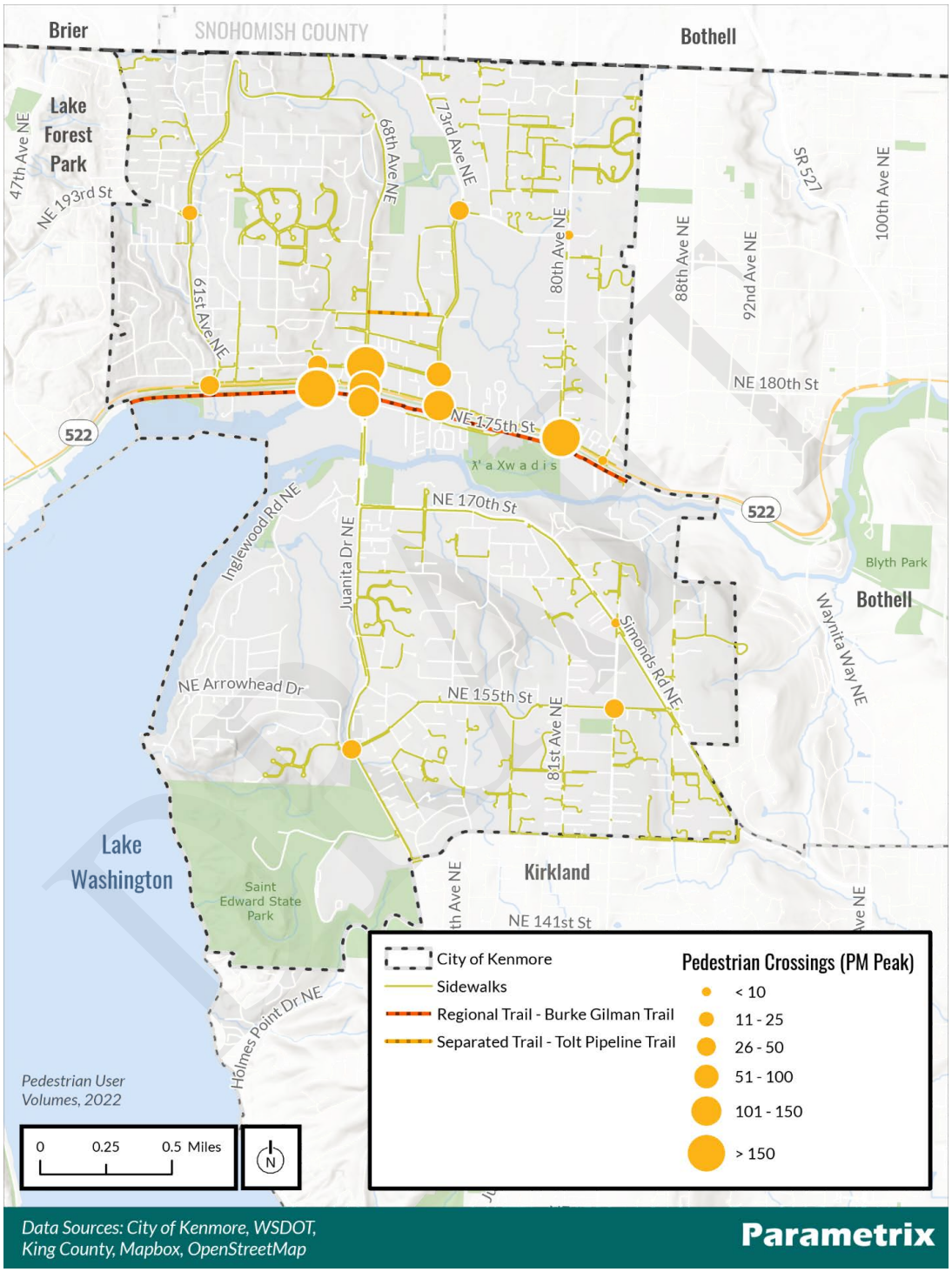

4. Comprehensive Plan Update: Transportation Element (continued)

~~Pedestrian Crossings~~

Kenmore hosts a section of the Burke-Gilman Trail, a regional multi-use trail that connects residents to Seattle and other area cities. However, for many Kenmore residents, connecting from home to the Burke-Gilman Trail or other non-motorized facilities can be challenging due to the topography and curvilinear streets in parts of the city. SR ~~State Route~~ 522 and 68th Avenue NE / Juanita Drive NE create additional barriers to bicycling in Kenmore due to their high traffic volumes and difficult crossings. **Figure T-6** presents Kenmore's existing bicycle facilities, ~~network as identified in the 2008 Transportation Element,~~ as well as average bicyclist volumes (2022) at key intersections during the 2-hour evening peak for vehicular traffic ~~the number of cyclists counted at key locations in fall 2013~~.

~~© Vladimir Menkov~~

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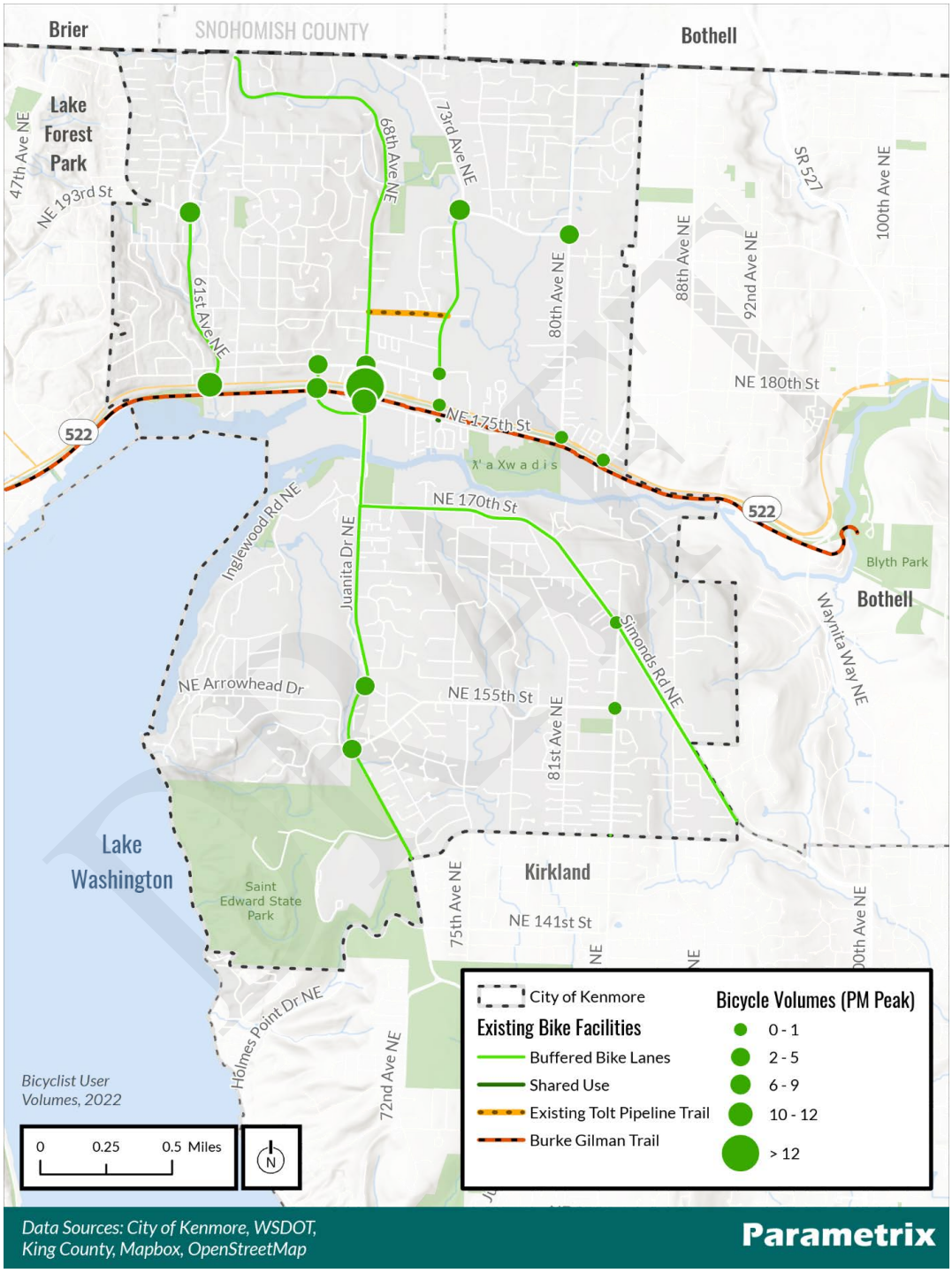
Figure T-6: Existing ~~Priority~~ Bicycle Facilities ~~Routes~~ and Volumes



4. Comprehensive Plan Update: Transportation Element (continued)

Many Kenmore residents and employees use public transit for trips around and outside of the City. Public transit in Kenmore consists of fixed-route and dial-a-ride bus service provided by ~~King County~~ Metro and Sound Transit. Metro also provides on-demand, point-to-point transportation between south Kenmore, North Kirkland, and downtown Bothell. The Northshore Senior Center also provides door-to-door shuttle service to many of its patrons. ~~The potential King County Metro service cuts are a particular concern to the Kenmore community, as these will likely affect the level of public transit service provided in the City. **Figure 7** provides further information about the twelve~~

~~Goods movement in Kenmore runs predominantly along the City's primary arterials of 68th Avenue, NE 170th Street, Simonds Road NE, and SR 522, as shown in **Figure 8**. Because 68th Avenue provides the only Sammamish River crossing option in Kenmore, this roadway plays a particularly important role in facilitating commerce. Beyond these primary routes, delivery vehicles use many other streets to reach their final destination. For example, NE 175th Street sees a fair amount of freight traffic due to the nature of the surrounding land uses it serves.~~

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Figure T-7 and **Table T-2** display the Spring 2019 transit routes serving Kenmore, average daily boardings at each stop, and park and ride utilization. These volumes reflect a high level of bus ridership in the City, particularly on routes that serve SR 522. SR 522 and the corridor south of SR 522 currently served by Route 225 (previously served by Routes 234 and 244) have been designated as high capacity transit lines by PSRC. The Kenmore Park and Ride and the park and ride at the Vine Church, both located on SR 522, were 100 and 96 percent full, respectively, on an average weekday. As shown, there was no service in the City north of SR 522/NE 181st Street.

Transit ridership declined dramatically throughout the Puget Sound region during the COVID-19 pandemic. Metro and Sound Transit reduced service levels across their networks, including the elimination of several routes in Kenmore. Additionally, both transit agencies restructured several routes that serve the city in conjunction with the opening of the North Link light rail extension in October 2021. Sound Transit Route 522, which previously provided service between Woodinville and downtown Seattle, was revised to serve the Roosevelt Link station. This change required riders to transfer to light rail to continue to downtown Seattle. A new peak only route, Route 320, was created, providing service connecting Kenmore to the Northgate Link station, South Lake Union, and downtown Seattle. Additionally, a new leased park and ride was opened at the Kenmore Community Club. Fall 2021 ridership in Kenmore is summarized in **Table T-2.**

Table T-2. Bus Service in Kenmore

Route	Service Type	2019 Average Daily Weekday Spring Boardings	2021 Average Daily Weekday Fall Boardings
225	All Day	N/A	100
234	All Day	249	N/A
243	Peak Only	1	N/A
244	Peak Only	28	N/A
309	Peak Only	110	N/A
312	Peak Only	440	N/A
320	Peak Only	N/A	21
331	All Day	98	72

Route	Service Type	2019 Average Daily Weekday Spring Boardings	2021 Average Daily Weekday Fall Boardings
342	Peak Only	36	8
372	All Day	527	204
522	All Day	680	154
981	DART	1	2

Source: King County Metro

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Figure T-7: Existing Transit Routes, Facilities, and Boardings (2019)

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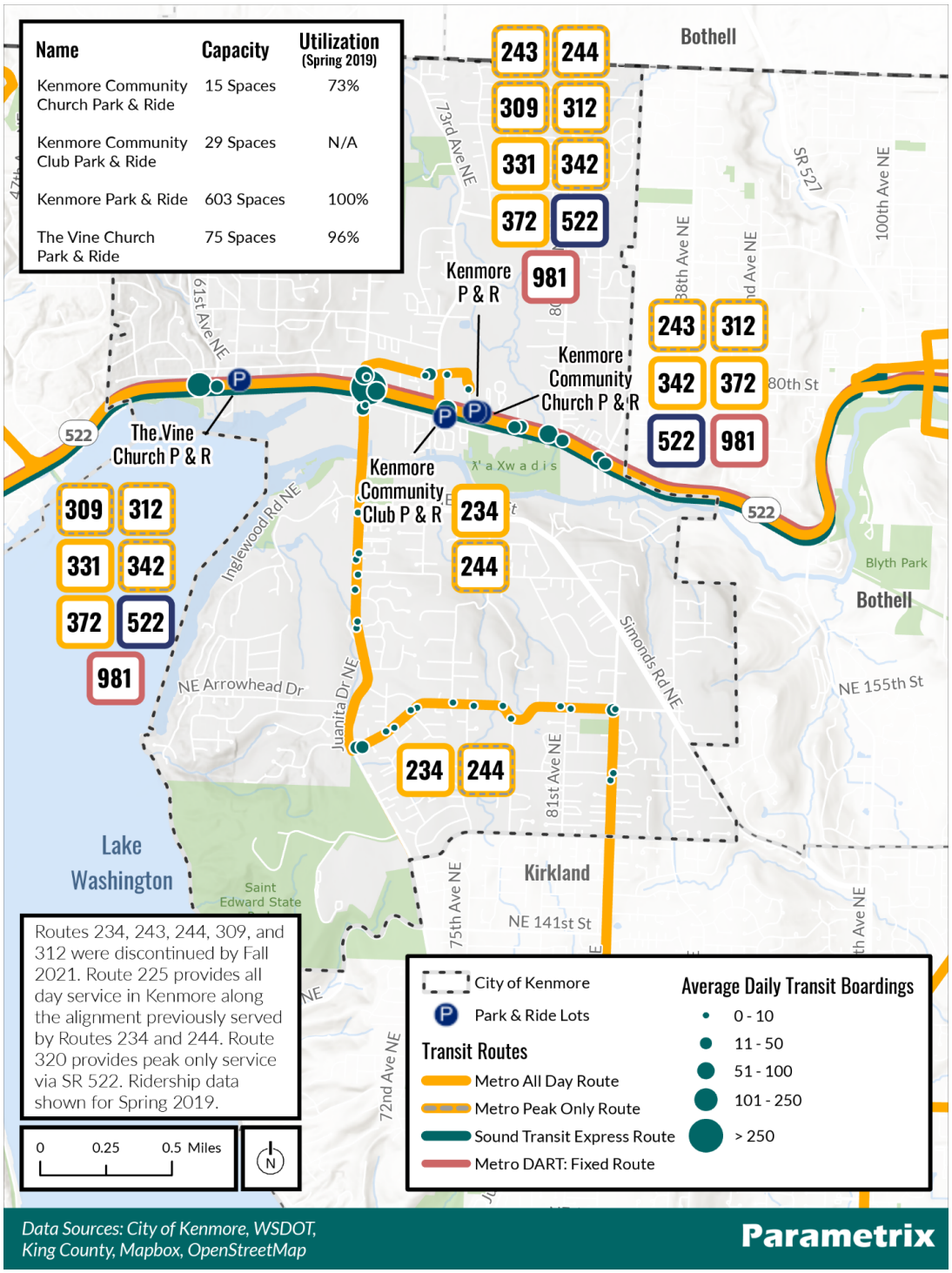

4. Comprehensive Plan Update: Transportation Element (continued)

Washington State's Freight and Goods Transportation System (FGTS) classifies the state's freight corridors by modes based on annual freight tonnage moved through truck, rail and waterway freight corridors. Goods movement in Kenmore runs predominantly along the City's major arterials of 68th Avenue, NE 170th Street, Simonds Road NE, and SR 522 ~~existing level of service policy sets the following standards for its roadways:Primary.~~ Because 68th Avenue provides the only Sammamish River crossing option in Kenmore, this roadway plays a particularly important role in facilitating commerce. FGTS classified routes in the City of Kenmore are shown in **Figure T-8**.

Beyond these primary routes, delivery vehicles use many other streets to reach their final destination. For example, although it is not an FGTS classified route (and thus not displayed on **Figure T-8**),NE 175th Street sees a fair amount of freight traffic due to the nature of the surrounding land uses it serves. Additionally, a wide array of freight companies provide deliveries to residents and businesses using all types of roadways, including local streets.

The Kenmore Air Harbor is also a facility of the City's transportation network. The location of the Kenmore Air Harbor is displayed on **Figure T-9** and a description of its area, fleet size, operations, and travel take-off and landing areas on Lake Washington and general aircraft flight paths used on take-off and landing can be found in the Land Use element.

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Figure T-8: WSDOT FGTS Classified Truck Routes

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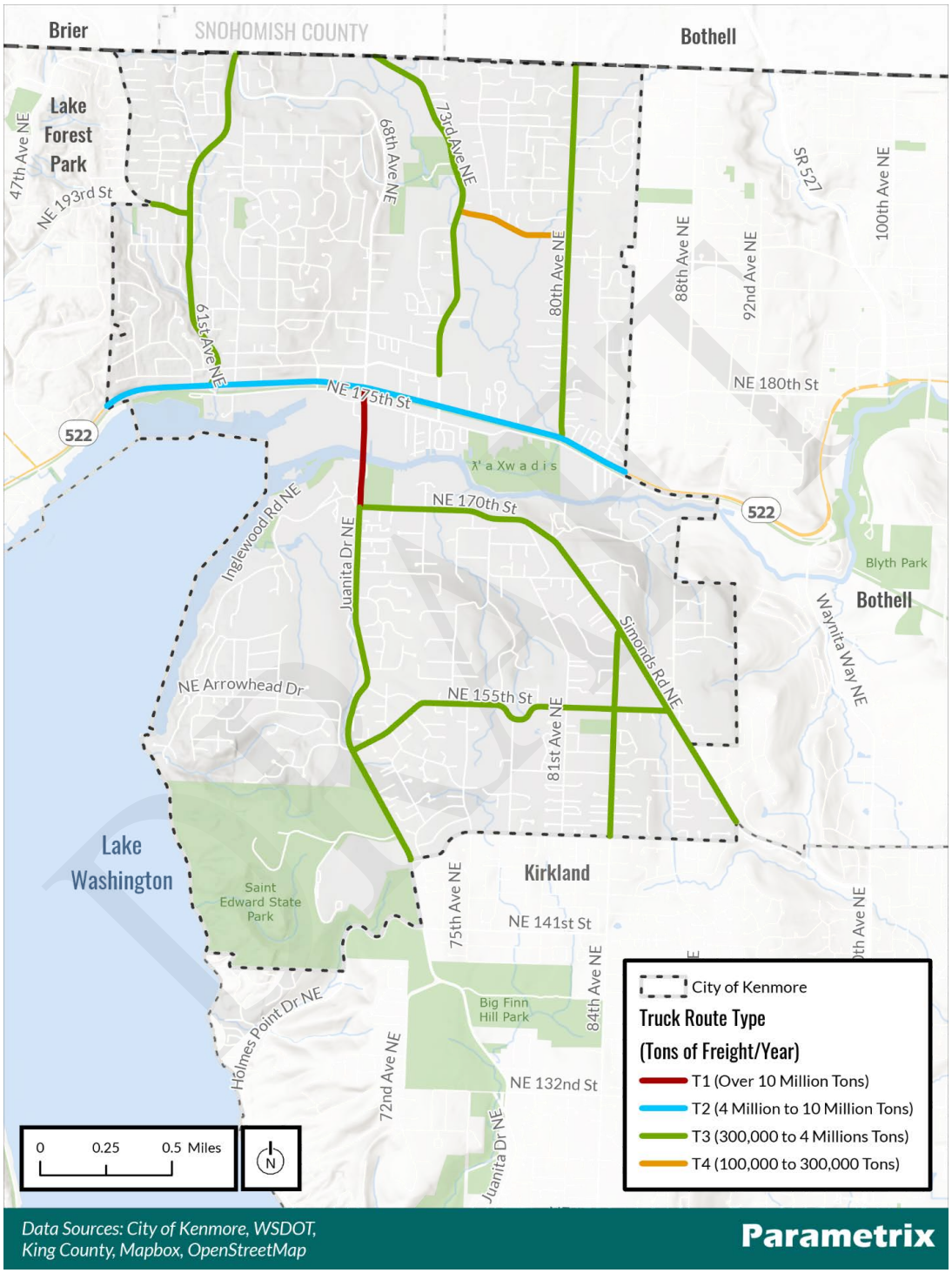
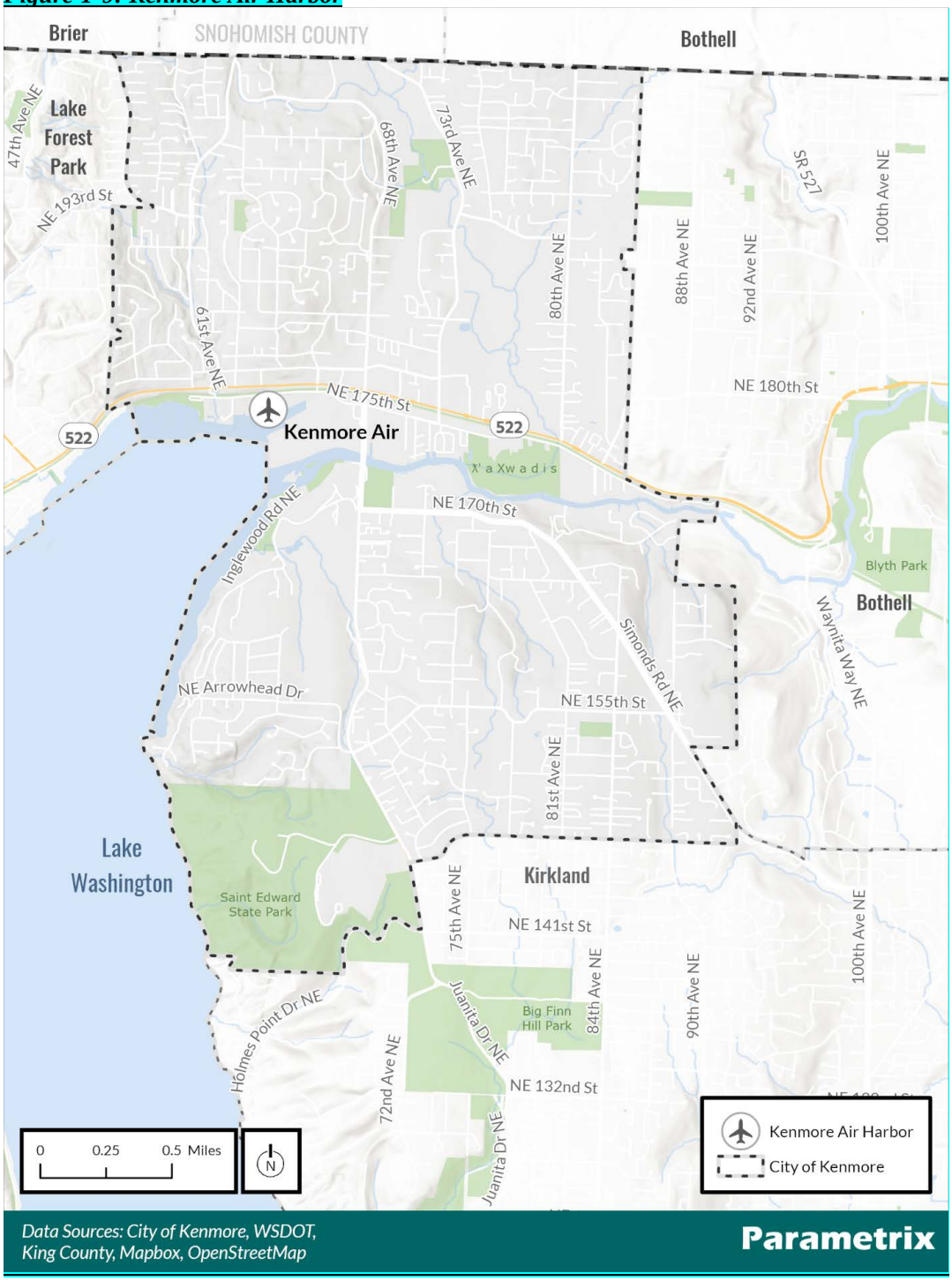


4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-9: Kenmore Air Harbor



4. Comprehensive Plan Update: Transportation Element (continued)

Most Kenmore residents (about 68 percent ~~80%)~~ choose motor vehicles as their primary mode of transportation to work. Moreover, many more non-resident travelers pass through the City on SR 522 / 68th Avenue / Juanita Drive / Simonds Road. Severe congestion during peak hours illustrates this issue with many intersections experiencing long delays (see **Figure T-10**).

~~Analysis of Kenmore's congestion for motorists is based on the traffic counts collected in October 2013. To understand the level of congestion experienced during the evening commute, 19 intersections were evaluated based on their ability to accommodate PM peak hour demand in their existing configuration (number of lanes, traffic control, etc). Based on this analysis, intersections were scored into one of six level of service (LOS) categories that describe their operations in terms of vehicle delay. **Table 2** describes the Level of Service definitions laid out in Chapter 16 of the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2000), which is the methodology currently applied to Kenmore's transportation network.~~

Analysis of Kenmore's congestion for motorists is based on the traffic counts collected in January 2022. Since March 2020, traffic volumes have decreased in response to COVID-19 related initiatives. As future traffic volumes are built from forecasting from baseline conditions, the goal is to model an existing 2022 baseline condition that best reflects overall trends from the past several years. Overestimating volumes can lead to future forecasts that may be too high, potentially leading to infrastructure that is overbuilt for future conditions. Conversely, underestimating baseline conditions could lead to future forecasts that may be too low, leading to infrastructure that would be potentially underbuilt for future conditions.

~~***Table 2: Level of Service Definitions***~~

~~Level of Service~~	~~Description~~
~~**A**~~	~~Free-flowing conditions.~~
~~**B**~~	~~Stable operating conditions.~~
~~**C**~~	~~Stable operating conditions, but individual motorists are affected by the interaction with other motorists.~~
~~**D**~~	~~High density of motorists, but stable flow.~~
~~**E**~~	~~Near-capacity operations, with speeds reduced to a low but uniform speed.~~
~~**F**~~	~~Over capacity, with delays.~~

~~The City's existing level of service policy sets the following standards for its roadways:~~

- ~~Primary Arterials – LOS E or better~~
- ~~Minor Arterials – LOS D or better~~
- ~~Collectors – LOS C or better~~

To monitor changes in travel volumes related to the COVID pandemic, the City of Kenmore collected weekly travel data between May 2020 and August 2021. The data shows as of August 2021, the annual average daily traffic volumes in 2021 were 7 percent lower than 2019 volumes. Therefore, to be conservative, traffic counts collected in January 2022 for this analysis were adjusted upward by 7 percent.

To understand the level of congestion experienced during the evening commute, 19 intersections were evaluated based on their ability to accommodate PM peak hour demand in their existing configuration (number of lanes, traffic control, etc.). As noted previously, the peak volumes for vehicles, pedestrians, bicyclists, and transit can occur during different times by location. The PM peak period in Kenmore generally ranges between 3:00 PM and 6:00 PM. The PM peak period for each analyzed intersection is summarized in **Appendix D-1**. Based on this analysis, intersections were scored into one of six LOS categories that describe their operations in terms of vehicle delay. **Table T-3** describes the LOS definitions laid out in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016), which is the methodology currently applied to Kenmore's transportation network.

Table T-3. Level of Service Definitions

Level of Service	Description	Average Control Delay at (seconds per vehicle)	
		Signalized/Roundabout Intersections	Unsignalized Intersections
A	Free-flowing conditions.	< 10	< 10
B	Stable operating conditions.	> 10 and < 20	> 10 and < 15
C	Stable operating conditions, but individual motorists are affected by the interaction with other motorists.	> 20 and < 35	> 15 and < 25
D	High density of motorists, but stable flow.	> 35 and < 55	> 25 and < 35
E	Near-capacity operations, with speeds reduced to a low but uniform speed.	> 55 and < 80	> 35 and < 50
F	Over capacity, with delays.	> 80	> 50

The City's LOS policy sets the following standards for its roadways:

- Major Arterials – LOS E or better
- Minor Arterials and collectors – LOS D or better
- Local roads ~~Collectors~~ – LOS C or better
- Roadways in Kenmore Countywide Growth Center
  - Signalized intersections shall operate at LOS F or better and not exceed 100 seconds of average total vehicle delay of all movements
  - Unsignalized intersections shall operate at LOS F or better on the minor street approach until a signal warrant is met using the current version of the Manual for Uniform Traffic Control Devices

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It should be noted that as a highway of statewide significance, SR 522 is exempted from the City's LOS standards.

Figure T-10 shows weekday traffic volumes and **Figure T-11** shows the calculated LOS at each of the 19 intersections. As the figures show, Kenmore's major ~~primary~~ arterials see high traffic volumes and lower ~~corresponding low~~ levels of service. ~~The traffic spillback that occurs at the intersection of SR 522 and Juanita Drive / 68th Avenue over the course of several signal cycles creates worse congestion than displayed in isolated intersection results. Field observation found nearly all intersections on SR 522 and some on 68th Avenue operating at LOS E or F.~~ Detailed reports of LOS are available in **Appendix D-1**.

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Figure T-10: Auto Average Daily Volumes

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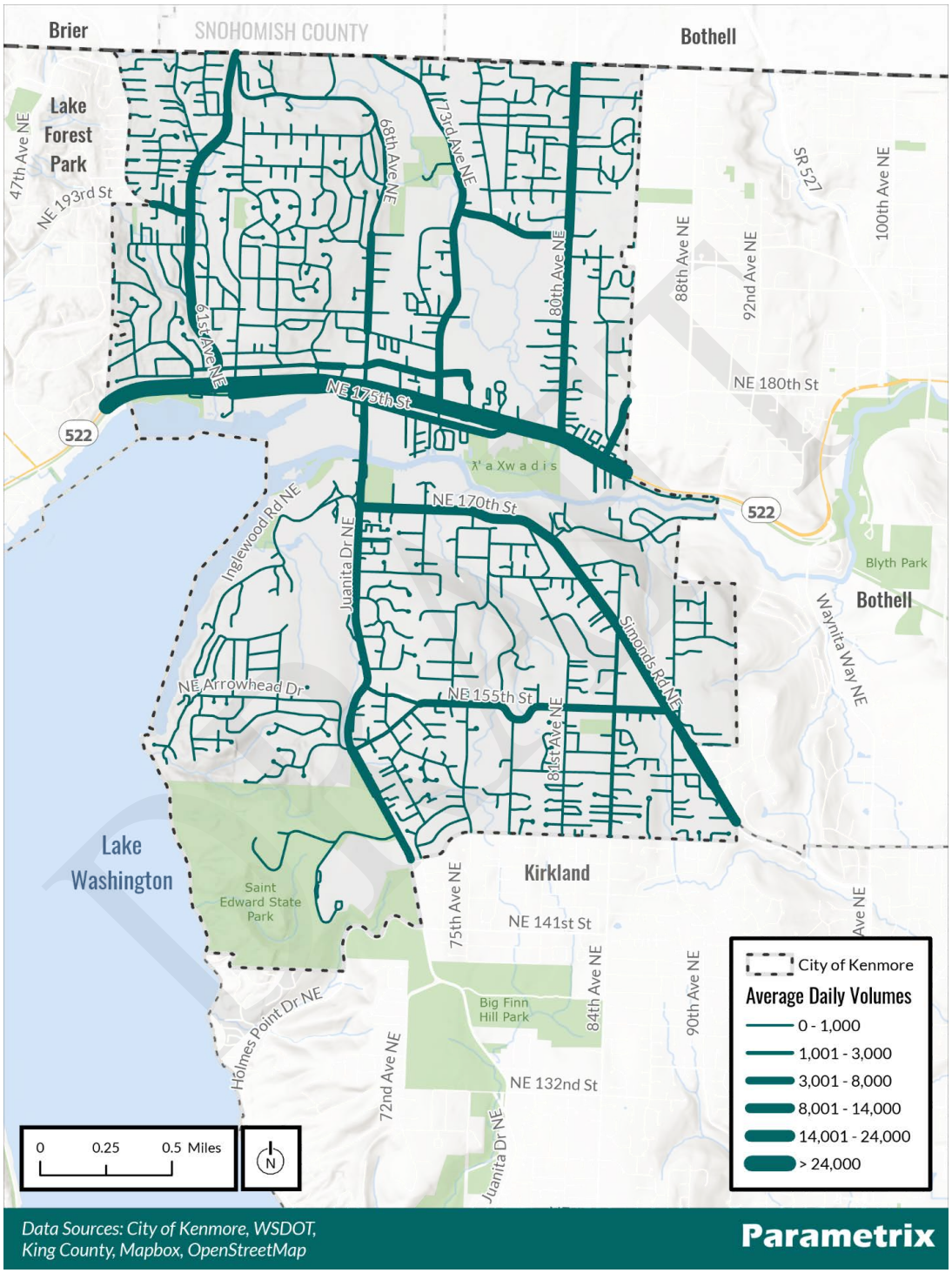

4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-9: Auto Level of Service and Volumes

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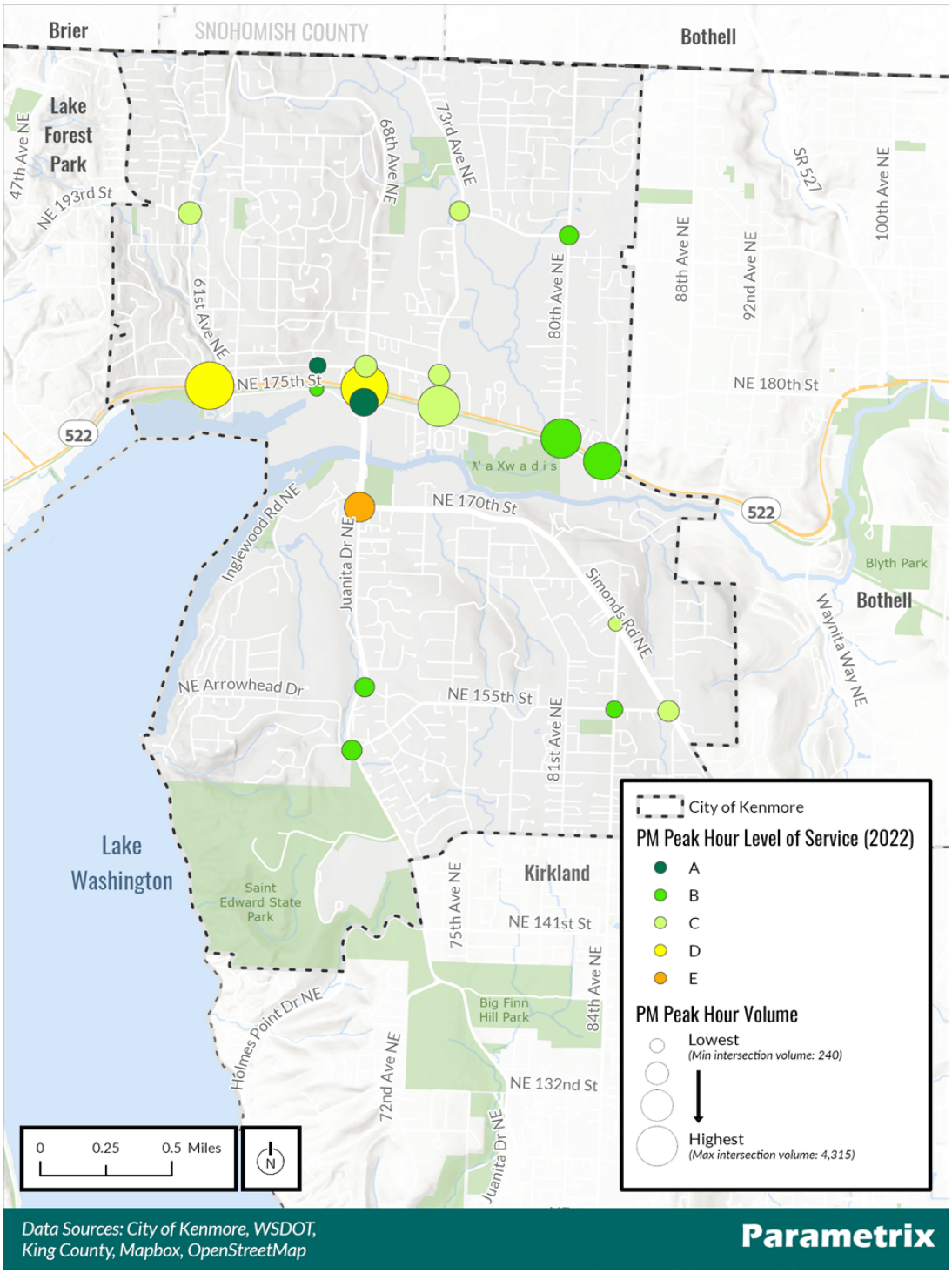

4. Comprehensive Plan Update: Transportation Element (continued)

Current Challenges and Observations

The City of Kenmore has several important challenges to face as it prepares for future growth and the development of its downtown core. Although Kenmore continues to invest in its multimodal transportation system, motor vehicle ~~Motor vehicle~~ travel dominates the City's transportation framework currently and many travelers view Kenmore as a "pass-through town." Kenmore is planning ~~working~~ to be ~~create~~ a walkable, bikeable, high-capacity transit community with ~~more~~ vibrant downtown and addressing the following ~~these~~ transportation challenges will be a key to the City's success:

- Safety and comfort, especially for pedestrians and bicyclists
- Transit availability and access to high capacity transit
- Limited ~~north-south~~ connectivity for all users

Bicycle and Pedestrian Safety

~~**Safe Routes for All, especially Pedestrians and Bicycles**~~

Since 2017~~2008~~, Kenmore has experienced nearly 175~~200~~ traffic collisions per year. Of the 871~~1,125~~ collisions in Kenmore from January 2017~~2008~~ to August 2021, ~~September 2013, 445~~ occurred on SR 522 and 207~~206~~ occurred on the 68th Avenue / Juanita Drive corridor – 61~~58~~ percent of the total city-wide.

Highlighting this issue, the period from Winter 2017 through Summer ~~fall 2013 to spring 2014~~ saw 41~~several deaths in~~ crashes that involved ~~involving~~ vehicles hitting pedestrians and bicyclists, including one pedestrian fatality. **Figure T-12** displays traffic crashes for all modes within the City, **Figure T-13** shows injury severity and **Figure T-14** shows crashes involving bicycles and pedestrians over ~~around the City over~~ a five-year period spanning 2017-2021 ~~2008-2013.~~

Crash severity is categorized by WSDOT into the following five categories:

- Fatal Injury: Any injury that results in death within 30 days after the motor vehicle crash in which the injury occurred.
- Suspected Serious Injury: Any injury other than fatal which results in one or more of the following: Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood; broken or distorted extremity (arm or leg); crush injuries; suspected skull, chest or abdominal injury other than bruises or minor lacerations; significant burns (second and third degree burns over 10 percent or more of the body); or unconsciousness when taken from the crash scene.
- Suspected Minor Injury: Any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).
- Possible Injury: Any injury reported or claimed which is not a fatal injury, suspected by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.

- No Apparent Injury: Situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function.

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Figure T-10: Crash ~~Collision~~ Density ~~and Type~~

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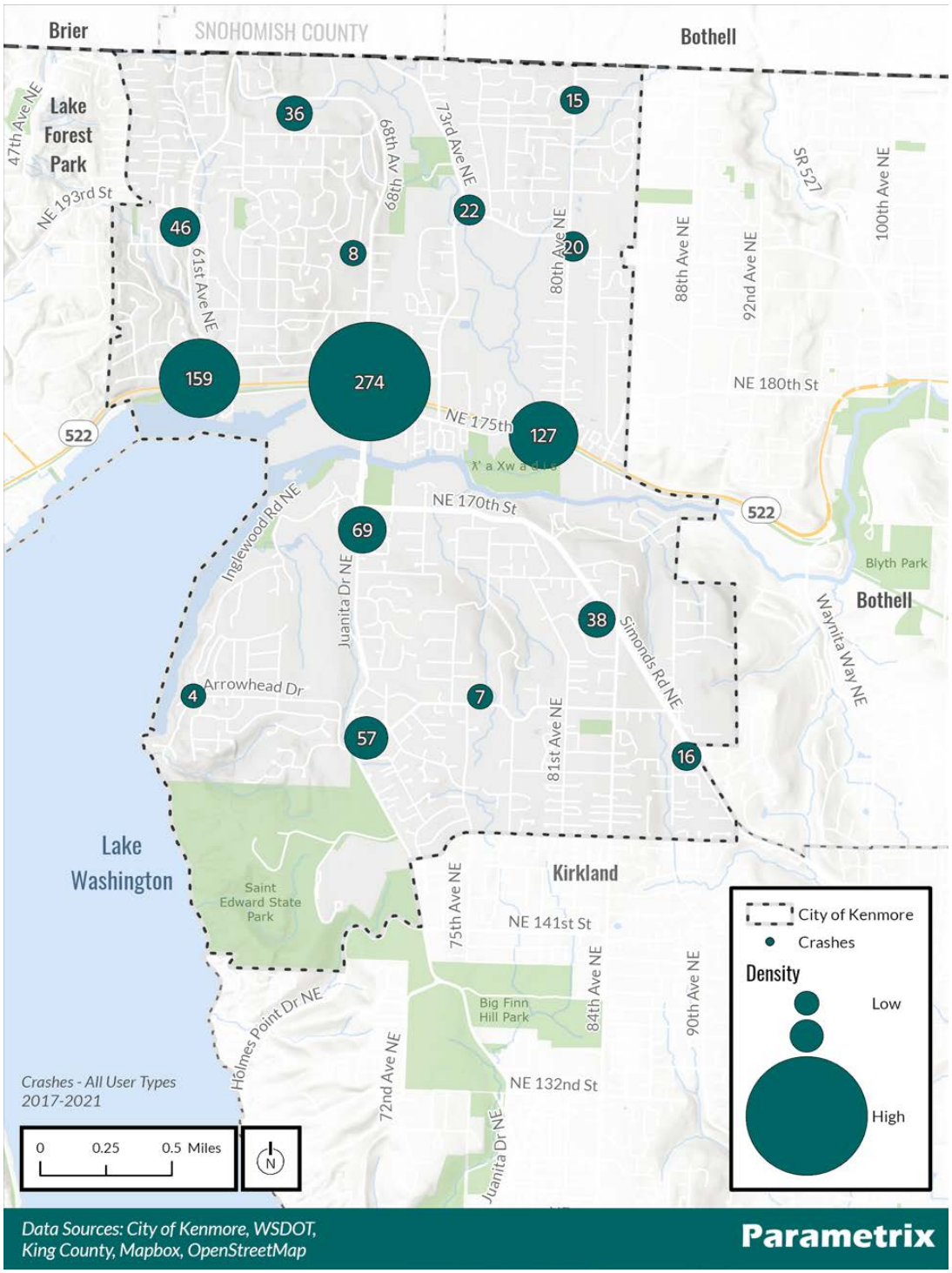

4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-11: Crash Severity

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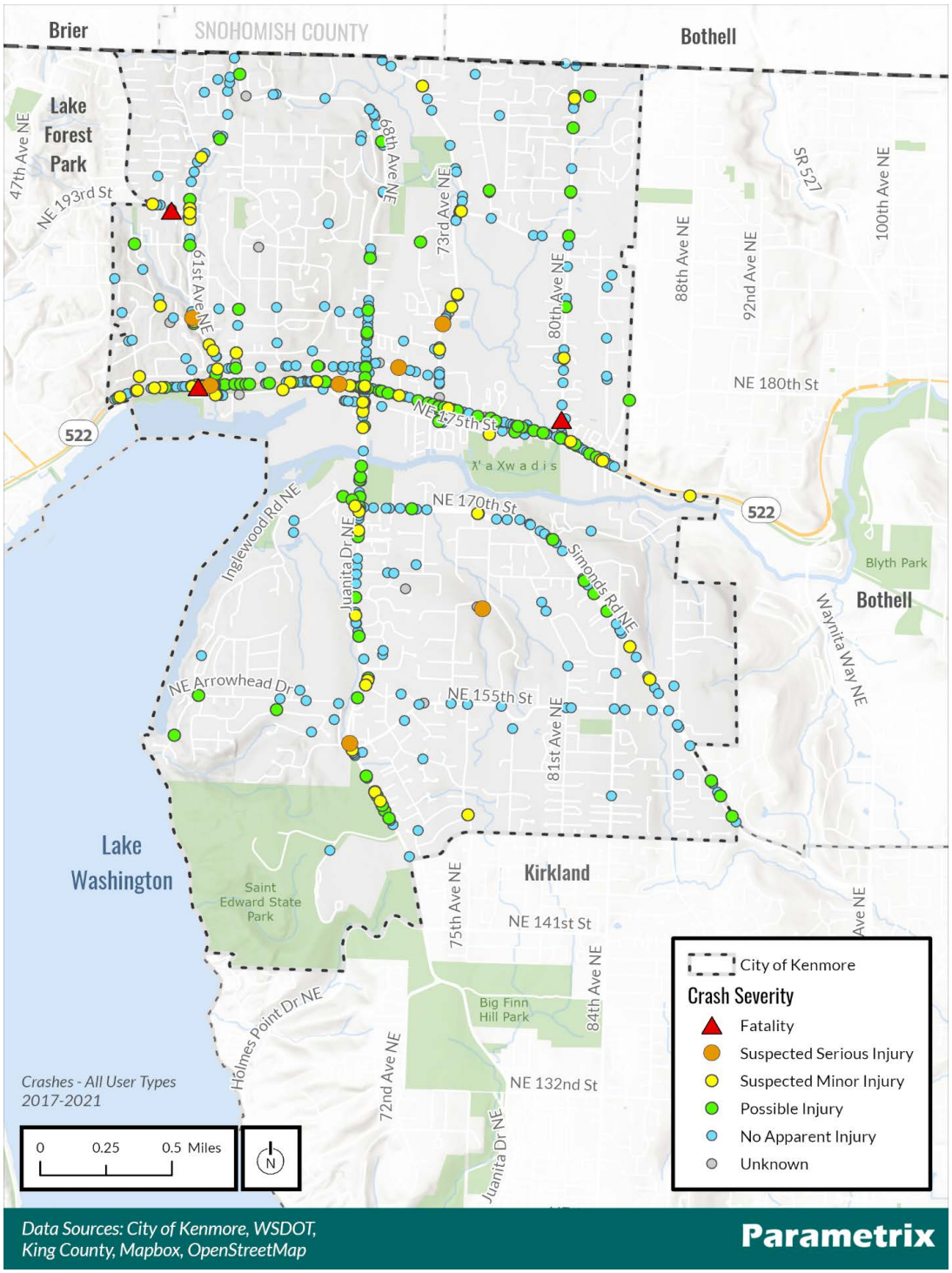

4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-14: Crashes Involving Bicycles and Pedestrians

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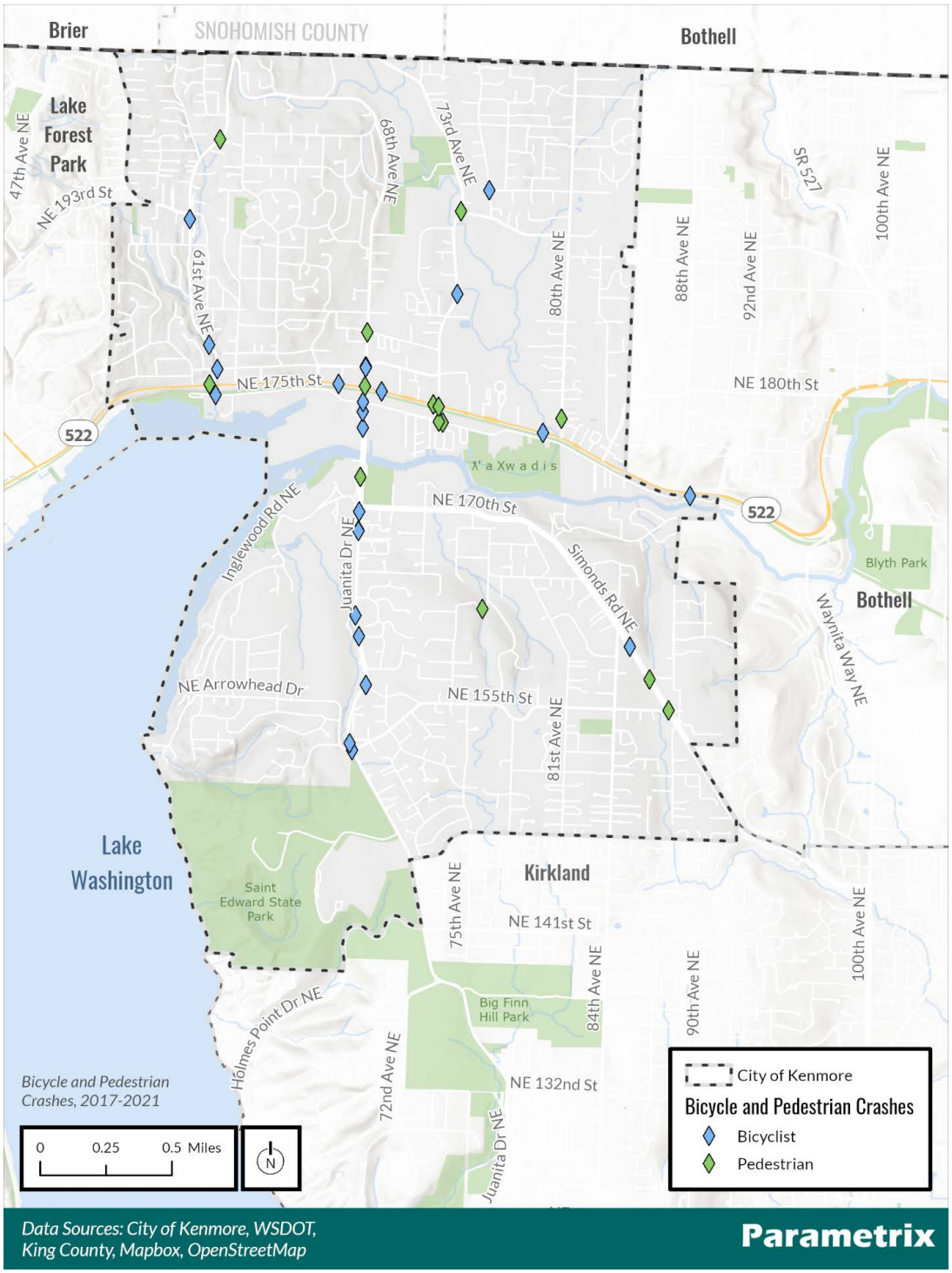

4. Comprehensive Plan Update: Transportation Element (continued)

The City of Kenmore's Target Zero Initiative was adopted in April of 2014. The goal of this program is to achieve zero pedestrian and bicyclist fatalities and serious injuries in Kenmore by 2025 by increasing awareness of pedestrian, bicyclist, and driver safety issues. The City works toward its Target Zero goal by engaging the Three E's: Engineering, Enforcement, and Education. These efforts include creating safer pedestrian and bicycle pathways, offering helmets at a low price, educating bicyclists, pedestrians, and drivers through events and pamphlets, offering safety vests annually at no charge (while supplies last), and enforcing traffic safety laws for all road users - among many other citywide improvements.

Kenmore has made many pedestrian improvements in recent years as the City strives for a more walkable/bikeable city ~~downtown core.~~ Sidewalk and crosswalk improvements along SR 522 have created a better environment for pedestrians moving around the City's commercial areas and connecting with public transit services or the Burke Gilman Trail. There are seven pedestrian actuated crossings that are also ADA compliant. Four are located near SR 522 and ~~In 2014, the City has installed rectangular rapid flashing beacons (RRFBs) along Juanita Drive,~~ 61st Avenue NE and three are located near Juanita Drive and NE 170th Street. ~~as well as at other citywide arterial crossing locations.~~

The Burke-Gilman Trail provides a major bicycle route through Kenmore and is a major asset to the community for both transportation and recreational purposes. Creating safer and more attractive connections from neighborhoods to the trail will encourage residents to make more walking and biking trips and visitors to patronize local businesses near the trail. ~~In July 2014, the City removed a travel lane on 61st Avenue and installed bike lanes to support north-south bicycle mobility and reduce conflicts with motor vehicles.~~

As a part of Walkways & Waterways, a voter-approved bond passed in 2016, the 68th Avenue/Juanita Drive corridor received pedestrian and bicycle safety treatments:

(1) Juanita Drive NE Pedestrian and Bicycle Safety Improvements: 1.5 miles of new sidewalk on the east side of Juanita Drive from 143rd Street to NE 170th Street, buffered bicycle lanes in each direction, bus stop improvements, improved lighting, and some traffic signal modifications.

(2) The 68th Avenue NE Pedestrian and Bicycle Improvements: 1.5 miles of new sidewalk on one side of 68th Avenue NE from NE 182nd Street to 61st Place NE, new bicycle lanes in each direction, and lighting improvements. In addition to the Walkways and Waterways projects, several other projects were initiated and completed that provided sidewalk and/or bicycle safety treatments: The West Sammamish River Bridge Replacement Project: New sidewalk and bike facilities on the west side of the road between NE 170th Street and NE 175th Street, lighting improvements and some traffic signal improvements

(3) SR522 West A Project: New sidewalk on the north and south side of SR522 from 61st Avenue NE to 65th Avenue NE along with street lighting and traffic signal improvements.

(4) Simonds Road Overlay: New bike lanes added from 92nd Avenue NE to 84th Avenue NE.

(5) 62nd Avenue NE Sidewalk Project: New sidewalk on the east side of 62nd Avenue NE from SR522 to 185th Avenue NE.

(6) NE 181st Street Sidewalks: New sidewalk along the north and south side of NE 181st from 68th Avenue NE to 73rd Avenue NE and new sidewalk on the north side from 65th Avenue NE to 67th Avenue NE. Improvements included new street lighting.

(7) 73rd Avenue NE Overlay: New bike lanes added from NE 181st St to NE 192nd St.

(8) NE 153rd Street Sidewalks: New sidewalks on the south side of NE 153rd Street from 70th NE to Juanita Drive.

Transit Availability and Access to High Capacity Transit

Many people use public transit in Kenmore, as evidenced by 2019 ridership and park-and-ride occupancy levels. The opening of the Lynnwood Link light rail extension in 2024, particularly the Shoreline South/148th Street station, will provide an opportunity to greatly expand options for Kenmore residents wishing to ride transit to destinations throughout the Puget Sound region. Sound Transit's BRT Stride service on SR 522, planned for implementation in 2026, will provide high-capacity transit service directly in Kenmore, providing residents with a direct connection to light rail in Shoreline and Stride service on I-405. There are no planned improvements to parking capacity in Kenmore, by Sound Transit or Metro, until 2034. Robust local transit options and nonmotorized access improvements that connect Kenmore neighborhoods to bus service on SR 522 will be critical components to facilitating reliable access to these regional transit investments.

Kenmore is also interested in creation of a Metro-operated water taxi route that would connect the City to the University of Washington, providing another transit option for residents to access this regional employment and education center.

~~The potential King County Metro service~~ Service cuts are likely to ~~may~~ hurt public transit as an attractive travel mode so the City should closely monitor these developments and advocate for its desire to maintain quality service. Additionally, infrequent or poorly timed service connections might further dissuade residents from using transit if it does not provide a fast and reliable trip compared with auto travel. While Kenmore cannot control transit service levels, the City's land use vision is designed ~~City can strive~~ to create a supportive ~~welcoming~~ environment for transit.

Limited Nonmotorized Connectivity ~~North-South connectivity~~

The existing transportation network in Kenmore was developed with limited facilities that can accommodate travel across the City. The 68th Avenue Bridge is the only public crossing ~~The 68th Avenue Bridge~~ over the Sammamish River in the City and currently acts as one of Kenmore's most ~~biggest~~ congested points for all roadway users. In 2022, the City completed replacement of the southbound bridge, which included construction of new sidewalk and bicycle facilities on the west side of the road between NE 170th Street and NE 175th Street. Even with the bridge improvements, the ~~The narrow right-of-way limits motor vehicle throughput and the congestion levels make walking and bicycling unattractive options on the corridor. The~~ intersection with SR 522 frequently backs up traffic for long stretches during peak hours.

Similarly, SR 522 serves as another major barrier to north-south connectivity. Its wide cross-section and limited number of signalized crossings affect ~~affects~~ all modes of travel, particularly

~~and~~ pedestrians and cyclists. Additional signalized mid-block pedestrian crossings where warranted would improve crossing options for nonmotorized travelers.~~in particular.~~

East-west travel is also challenging, particularly north of SR 522 east of 73rd Avenue NE. A lack of walkways or paths for non-motorized users results in long, circuitous routes for pedestrians and cyclists wishing to travel in this area. Development of new non-motorized facilities could help to provide these connections.

Trends

Aside from existing conditions and challenges, there are other factors that will affect Kenmore's transportation system. Growth in downtown Kenmore and throughout the region generally plays a role in how the City will plan the improvements to its transportation network for the future.

Transportation Related Climate Impacts

The City of Kenmore's CAP establishes a multi-faceted approach for reducing greenhouse gas (GHG) emissions associated with transportation. The CAP describes policies, programs, and infrastructure investments that will help the City achieve its goal of net zero GHG emissions by 2050. Changes to municipal operations, construction of dense, mixed-use, and transit-oriented development (TOD), reduced single-occupancy vehicle (SOV) trips, and incentives for drivers to use electric vehicles (EVs) are the key transportation-focused strategies included in the CAP.

Downtown Development

In 2021, King County updated the 2021 Countywide Planning Polices to include a new category—Countywide Growth Centers—with zoned densities that support high capacity transit along existing or planned transit corridors. Designated countywide growth centers make efficient use of urban land by sufficiently providing housing, employment, and services in a compact form and density near the high capacity transit areas. Additionally, designated countywide growth centers use strategies to mitigate identified displacement impacts of residents and businesses, particularly for Black, Indigenous, and other People of Color communities; immigrants and refugees; low-income populations; people with disabilities; and other communities at greatest risk of displacement.

Downtown Kenmore is preliminarily designated as a Countywide Growth Center. Policies focus on mixed use, higher density development, including affordable housing, in the downtown area as it develops along the SR 522 high capacity transit corridor. ~~The City is reshaping its downtown area to become more vibrant and walkable.~~ Future redevelopment will add mixed use projects to provide housing, dining, shopping, and other services in the downtown. These land uses will generate additional travel in the downtown area and, while many people will be able to walk or use public transit for these trips, the transportation network must be able to support this concentrated growth.

Regional Growth

Regional development outside of the City itself is the other major aspect of growth affecting Kenmore by 2044 ~~2035~~. South Snohomish County, Bothell, and Woodinville are all expected to add a substantial number of residents and jobs during this time period and many of them travel through Kenmore en route to other regional destinations. The continued ~~The toll on the SR 520 bridge and potential~~ tolling of SR520 bridge and expected regional growth south of Kenmore are likely to have a continued impact on SR522. ~~on I-90 may also cause further congestion along SR 522 if drivers opt for the route around Lake Washington to avoid the toll.~~

Kenmore Travel Demand Forecasting

The ~~Growth Management Act (~~GMA~~)~~ requires that the Transportation Element supports the land uses envisioned in the Comprehensive Plan. Thus, an important component of the work was forecasting how the future land uses envisioned in the City, as well as regional growth, would influence demand on Kenmore's transportation network. A description of the travel demand modeling process is summarized ~~provided~~ below with more detail about land use assumptions in **Appendix D-2.**

- ~~**The Tool.** As a part of the 2008 update, the City created a travel model with the Visum software package. This model forecasted traffic volumes during the evening commute hour (5-6pm) along many of Kenmore's key streets and intersections. This tool provides a reasonable foundation developing year 2035 forecasts, as the underlying land use assumptions have been updated to match the land use forecasts for the current Comprehensive Plan.~~ **The Tool.** The PSRC regional Activity Based Travel Demand model was used for travel demand forecasting.

- ~~**Estimate Land Use Growth in the City.** As a part of the Comprehensive Plan update, the~~ **Estimate Land Use Growth in the City.** The City is planning for expected growth in housing units and employment over the next 20 years through ~~2035.~~ 2044. ~~Based on growth estimates from the Puget Sound Regional Council (PSRC) and review by City staff, Kenmore is preparing for 3,682 new housing units and 3,217 new workers by 2035. The City then~~ The City allocates the growth throughout Kenmore based on adopted zoning, observed development patterns, and other city policies.

- **Capture Regional Growth Patterns.** Other communities throughout the region are going through this very same process, based on direction from PSRC. Since travel does not stop at a jurisdiction's borders, it is important to capture how regional growth could influence travel patterns on Kenmore's streets.

- **Translating Land Uses into Trips.** The next step is evaluating how the City and regional growth assumptions described above translate into walking, biking, transit, and auto trips. The travel model represents the number of housing units and employees in spatial units called traffic analysis zones (TAZs). TAZs can be as small as a few street blocks to as large as an entire neighborhood. They provide a simplified means to represent trip making rather than modeling individual parcels. The travel model estimates trips generated from each TAZ (both inside and outside of the City) using established relationships between different

land use types with trip making. These trips are then assigned onto the roadway network to estimate how much traffic would be on each street during the evening commute hour.

- **Model Refinements.** The final step is refining the forecasts based on reality checks that the travel model may not capture. In this case, forecasts were refined to reflect the more walkable, urban characteristic planned for Kenmore's downtown, by recognizing that some short trips could be made by walking and biking, rather than driving. Moreover, travel patterns were refined to reflect existing driver preferences, including recognizing the relative attractiveness of the Simonds Road / 170th Corridor over Juanita Drive.

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~~CHAPTER 3: TRANSPORTATION~~

GOALS, OBJECTIVES, AND POLICIES

Kenmore has established eight ~~six~~ goals to accomplish its overall vision for transportation in the future. The goals establish overarching priorities that serve the vision of this Transportation Element while objectives and policies lay out specific actions. The consolidated set of goals, objectives, and policies is included in this chapter.

- ~~**Goal T-1**: Provide a complete transportation network that serves local and regional circulation needs and safely accommodates all users.~~

~~The City recognizes the importance of people being able to reach local destinations conveniently as well as travel to other parts of the region by walking, bicycling, riding transit, and driving. Safety of all road users is the highest priority for the transportation network and the City will evaluate safety for all modes when considering roadway projects that are part of the planned future transportation system.~~

- ~~**Goal T-2**: Coordinate with local, regional, state, and federal agencies as well as non-governmental entities to develop and operate the transportation system.~~

~~The City of Kenmore is not the only body that has a stake in the future transportation system. Neighboring cities, King and Snohomish Counties, the State of Washington, and other agencies and organizations play a role in getting around Kenmore. The City of Kirkland has plans to improve safety along Juanita Drive and Kenmore is actively coordinating with Kirkland to support continuity along the corridor. Around the region, Kenmore is working with King County Metro and Sound Transit to support transit operations in the City. SR 522, Kenmore's primary east-west corridor, is operated by WSDOT and the City works with the department consistently to maintain travel conditions along the route. The City also works with local schools, advocacy groups, senior centers, and other organizations that have interests in transportation.~~

- ~~**Goal T-3**: Promote a transportation system that is sustainable from both fiscal and environmental perspectives with participation from both the public and private sectors. Kenmore values and supports its environment through taking both monetary and environmental cost into account when considering improvements to the transportation network. The City leads the way by establishing plans and policies that support sustainability and expects other bodies from the public and private sectors to follow suit in pursuing these same interests.~~

- ~~**Goal T-4**: Encourage public transportation, non-motorized travel, and other transportation strategies that reduce the need for automobile travel, especially by single-occupant vehicles (SOV).~~

~~many Kenmore residents choose to travel by car for nearby trips and to go elsewhere, the City supports providing options for people to get around by more active transportation modes. By creating a safe and welcoming transportation system for all users, the City can support a vibrant downtown core that is accessible in several ways. Kenmore's geographic size makes walking, bicycling, and transit attractive options for getting around with proper facilities in place.~~

- ~~**Goal T-5**: Maintain the availability of safe air travel services in Kenmore.~~

~~The Kenmore Air Harbor is an important employer and provider of regional transportation services. Any future improvements to the City's transportation network will recognize the role of the Air Harbor and be planned accordingly.~~

- ~~**Goal T-6**: Provide a transportation system that facilitates freight mobility and economic prosperity.~~

~~addition to moving people around Kenmore, the City also recognizes the importance of moving goods to support the local and regional economy. Stores need items to stock their shelves while manufacturers must get their products to customers outside of the City and all of these needs rely on freight and delivery trucks. While not all streets in Kenmore need to support these large vehicles, there are important routes that the City prioritizes to support goods movement and economic activity.~~

GOAL ~~T-~~1. PROVIDE A COMPREHENSIVE ~~COMPLETE~~ TRANSPORTATION NETWORK THAT ~~SERVES LOCAL AND REGIONAL CIRCULATION NEEDS AND~~ SAFELY ACCOMMODATES LOCAL AND REGIONAL TRAVEL FOR PEDESTRIANS, BICYCLISTS, TRANSIT ~~ALL~~ USERS, AND MOTORIZED VEHICLES.

OBJECTIVE 1.1: Develop and maintain a Layered Network that provides connectivity and recognizes that not all streets provide the same quality of travel experience. Classify streets as State Highways, Major Arterials, Minor Arterials, Collectors ~~Boulevards, Urban Avenues, Neighborhood Connections,~~ and Local Roads ~~Streets.~~

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Policy T-1.1.1: Ensure that the Layered Network continues to provide for all varieties of street uses including regional mobility and cross-town trips, commuting, shopping, ~~and~~ recreational travel, property and business access, and parking, regardless of mode.

Policy T-1.1.2: Guide the development of new streets and maintenance of existing streets to form a well-connected network that accommodates ~~provides for~~ safe, direct, and convenient access to the existing roadway network for ~~automobiles, bicycles, and~~ pedestrians, bicyclists, transit, and automobiles. Prioritize non-motorized connections to~~. Transportation investments downtown that~~ reinforce the City's vision of ~~developing a compact~~ pedestrian-friendly and robust downtown ~~transit-oriented center shall be the City's investment priority.~~

Policy T-1.1.3: New ~~residential~~ development should be consistent with the Future Roadway Network~~ and new streets or extensions should be publicly owned.~~ Cul-de-sac construction should require the approval of the City engineer. Engineer. Pedestrian facilities identified

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~~Policy T-1.1.4: Develop a Street Planning Toolkit that recognizes and balances the competing needs of mobility and safety~~ in the City's Sidewalk Priority Network should be prioritized using the Pedestrian Facilities Plan. Bicycle facilities should be considered for streets identified within the Bicycle Priority Network. ~~residential neighborhoods~~

Policy T-1.1.4~~5~~: Coordinate with park-and-ride and transit service providers to reinforce the City's designation as a high capacity transit community, attracting residential and employment densities that support ridership along the high capacity corridors. Pursue ~~pursue~~ improvement projects that are consistent with the Layered Network and which benefit transit users in Kenmore.

Policy T-1.1.5~~6~~: Continue to enhance the City's Layered Network by using the following methods:

a. Require dedication of rights-of-way as a condition for development when the need for such rights-of-way is linked to the development or where shown on the Future Roadway Network;

b. Request donations of rights-of-way to the public;

c. Purchase rights-of-way in accordance with State laws and procedures~~; and~~

d. Acquire development rights and easements from property owners; and

e. Implement traffic impact fees with new development consistent with the City's Traffic Impact Analysis Guidelines to allocate funding for new multimodal facilities.

Policy T-1.1.6~~7~~: Maintain criteria to consider street vacations. Criteria should address:

a. State laws regarding street vacations;

b. Consistency with the Layered Network, including the effects of the street vacation on existing and future circulation;

c. Ability to utilize excess right-of-way for other public purposes such as parks, recreation, waterfront access, viewpoints, stormwater management, ~~view points,~~ or affordable housing;

d. Public benefit of the street vacation; and

- Fair compensation.

OBJECTIVE ~~T~~ 1.2: Design and maintain transportation facilities ~~streets~~ consistent with the community vision.

Policy T-1.2.1: Consider the environmental consequences of street design standards and maintenance practices. Design City-sponsored transportation projects to minimize impacts to the environment and water quality to the greatest extent feasible. When preparing City-sponsored transportation project designs ~~street~~ or ~~driveway design projects or~~ reviewing development proposals, the City should follow steps outlined in the *Street Planning Toolkit* ***(Figure T-15)***.

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Policy T-1.2.2: Require new development to minimize and consolidate access points along all major ~~principal~~ and minor arterials, ~~but~~ especially along SR 522 and any new arterials that may be developed. Coordinate this effort with local businesses, property owners, and WSDOT.

Policy T-1.2.3: Protect rights-of-way from encroachment by structures, fences, retaining walls, substantial landscaping, or other obstructions ~~obstruction~~ to preserve the public's use of the right-of-way, safety, and mobility. Protection methods may include minimum setback requirements for property improvements allowing future roadway expansion, street use agreements, and development of specific guidelines regarding installation and maintenance of landscaping within the public right-of-way.

Policy T-1.2.4: Maintain a right-of-way use permit application process and criteria to ensure that temporary development and utility construction activities do not create adverse safety, environmental, or traffic impacts.

Policy T-1.2.5: Ensure pedestrian facilities are designed consistent with ADA guidelines and that existing infrastructure is updated per the city's *ADA Transition Plan* to accommodate users of all ages and abilities. Design curb cuts, ramps, and other facilities to accommodate pedestrians with a disability or mobility challenges.

Policy T-1.2.6: Implement the Street Planning Toolkit to provide uniform street design and maintenance methods that enhance safety for pedestrians, bicyclists, and motorists.

Policy T-1.2.7: Ensure structured parking facilities incorporate context sensitive, preemptive designs that can accommodate changing parking demand as a result of increased walkability in high-density areas, such as downtown.

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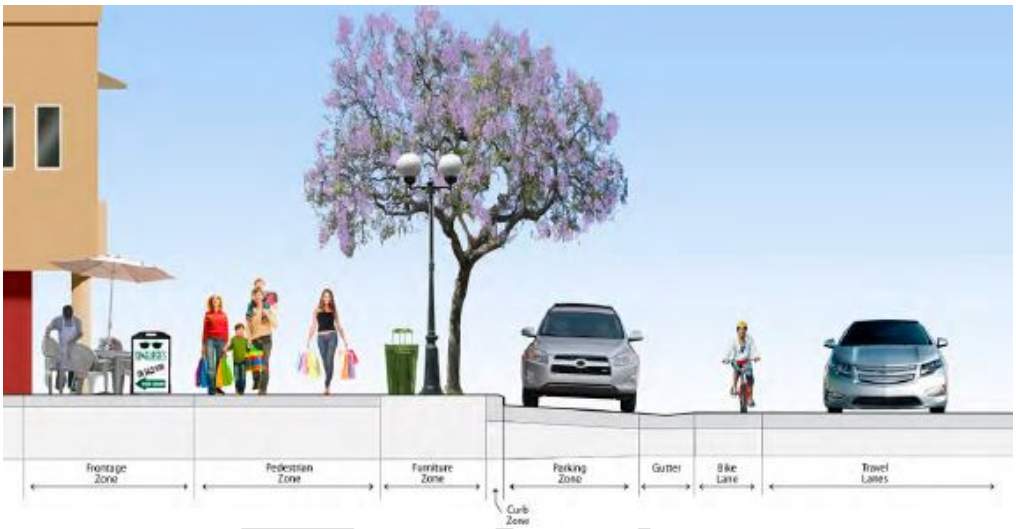
Figure ~~12~~ T-15 Street Planning Toolkit

When planning for new streets or redesigning existing ones, the City should implement ~~select~~ uniform designs and maintenance methods that create a safe, effective, environmentally sensitive, and welcoming transportation system for all users in line with the City's vision and ~~other~~ Comprehensive Plan policies. Throughout this process, the City must consider the various financial and non-financial costs of development and operation of the transportation system in addition to the concerns of interested parties.



- Align and locate transportation facilities away from environmentally sensitive areas, consistent with other Comprehensive Plan policies;
- Minimize and mitigate ~~Mitigate~~ significant environmental impacts whenever possible, including the incorporation of improvements, such as larger stormwater treatment facilities, to respond to the impacts of climate change. Minimize and mitigate water quality impacts from the transportation network to the environment and aquatic habitats.
- Whenever practical ~~possible~~, incorporate the use of native grasses, shrubs, and trees, and drought-resistant species~~, and pervious pavement~~ in the design of streets, landscape strips, and medians.
- Enhance the safety of pedestrians, bicyclists, and motorists through sidewalk or other separated pedestrian facilities and on-street facility location, design, and maintenance, lighting requirements, signs, lane widths and geometrics, and access to properties using the Layered Network as a guide.
- Consider the conflicts between different users in the design of multi-purpose paths, including the use of separate paths, striping different lanes for pedestrians and cyclists, speed limits, and increased use of protected bicycle facilities on streets to provide additional options for cyclists.

- Establish ~~parking~~ standards that discourage excessive parking. Provide options or ~~through shared parking, demand studies, and other~~ incentives ~~or requirements~~ to reduce underutilized parking lots and encourage alternate modes of travel.

OBJECTIVE ~~T~~ 1.3: Improve street safety and function with a particular reference to ~~emphasis on~~ the "Target Zero" goal (adopted City Resolution 14-235) ~~– by 2025~~ to have no pedestrian or bicycle deaths or serious injuries as the result of a collision with a motorized vehicle.

Policy T-1.3.1: Continue to collect data on traffic speed and volume ~~counts~~ and collisions to support studies, operational changes, and designs, enhance efforts when possible.

~~Policy T-1.3.2: Concentrate collision analysis at the most critical locations through identifying areas with a high number of incidents.~~

Policy T-1.3.2~~3~~: Include emergency service providers in review of roadway designs to ensure emergency vehicle passage. Design considerations include dead-end street lengths, turn-arounds, travel lane widths, maximum road grades, and parking location.

o Policy T-1.3.3: Implement the City's Target Zero ~~Develop a~~ strategy to focus on transportation improvements, ~~that addresses~~ education, and enforcement measures to improve safety conditions for pedestrians and bicyclists on Kenmore's streets. Use the Local Road Safety Plan to identify and prioritize low-cost, quick build, effective enhancements.

OBJECTIVE ~~T~~ 1.4: Develop a transportation system that achieves the following ~~level of service (~~LOS~~)~~ metrics:

Policy T-1.4.1: Vehicular LOS:

- Major Arterials: ~~boulevards should exhibit~~ LOS E or better
- Minor Arterials~~, urban avenues~~ and Connectors ~~neighborhood connections~~ LOS D or better
- Local Streets~~, and local streets~~ LOS C or better
- Roadways in the Kenmore countywide growth center
  - o Signalized intersections shall operate at LOS F or better and not exceed 100 seconds of average total vehicle delay of all movements
  - o Unsignalized intersections shall operate at LOS F or better on the minor street approach until a signal warrant is met using the current version of the Manual for Uniform Traffic Control Devices

LOS along SR 522 and 68th Avenue (south of SR 522) / Juanita Drive will be measured as average delay at the corridor level rather than the intersection level.

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Policy T-1.4.2: Pedestrian LOS as described in Table T-4, bicycle LOS as described in Table T-5, and transit LOS as described in Table T-6

Table T-4. Pedestrian LOS – Sidewalk Requirements

LOS	Within Pedestrian Priority Network*
	Pedestrian facility** on both sides of the street with a buffer as indicated in Pedestrian Priority Network
	Pedestrian facility** provided on one side of the street with or without a buffer as indicated in Pedestrian Priority Network
	No pedestrian facility

* The pedestrian LOS standard does not pertain to local streets outside downtown

** Pedestrian facility includes sidewalks and paved shoulders protected by a raised curb.

Table T-5. Bicycle LOS – Facility Requirements

LOS	Within Bicycle Priority Network
	Provides minimum treatment* recommendation, as shown within Bicycle Priority Network
	Provides a lower-level facility* than recommended in the Bicycle Priority Network
	No bicycle facility

* Bicycle facilities – lowest-level to highest-level of treatment: shared; bike lanes; buffered bike facility; separated trail.

Table T-6. Transit Priority Corridor Level of Service

LOS	Transit Stop Amenities	Pedestrian Access	Frequency of Service
	High level	Sidewalks and marked crosswalks serving stops	All day service. Peak service 15 minutes or less, midday 30 minutes or less
	Some amenities	Sidewalks and marked crosswalks serving some stops	All day service. Peak services 30 minutes or less, midday service 60 minutes or less
	Little or no amenities	General lack of sidewalks and marked crosswalks	Low level of service

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OBJECTIVE ~~T~~ 1.5: Perform periodic review and monitoring (every 2-4 years) of the transportation system to ensure it adequately serves existing and future land uses.

Policy T-1.5.1: Forecast travel to identify needed transportation improvements. The forecasts should:

a. Account for expected changes in personal travel behavior, funded capital improvements, and feasibility of mode choices;

b. Use current data and policies;

c. Be compatible with other jurisdictions and the regional growth strategy; and

d. Reflect the Vision Statement and land use policies.

Policy T-1.5.2: Identify the improvements and strategies needed to fully implement the City's *Layered Network* and meet LOS ~~the level of service~~ requirements for transportation.

Policy T-1.5.3: Monitor growth in population and employment in relation to the land use and growth assumptions of the Transportation Element. Reassess the Land Use and Transportation Elements as needed to ensure that planned improvements will address the potential impacts of growth.

Policy T-1.5.4: Require construction of necessary transportation improvements from the private or public sector at the time of development or within six years of development.

~~PEDESTRIAN LOS – SIDEWALK REQUIREMENTS~~

~~LOS~~	~~Within Pedestrian Priority Network~~
	~~Pedestrian facility* where indicated in Pedestrian Priority Network, with a buffer~~
	~~Pedestrian facility* provided on one side of the street~~
	~~No pedestrian facility~~

~~*Pedestrian facility includes sidewalks and shoulders protected by a raised curb.~~

~~BICYCLE LOS – FACILITY REQUIREMENTS~~

~~LOS~~	~~Within Bicycle Priority Network~~
	~~Provides recommended treatment* recommendation, as shown within Bicycle Priority Network~~

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	~~Provides a lower-level facility* than recommended in the Bicycle Priority Network~~
	~~No Facility~~

~~*Bicycle facilities – lowest level to highest level of treatment: shared; bike lanes; buffered bike facility; separated trail.~~

~~**TRANSIT PRIORITY CORRIDOR LEVEL OF SERVICE**~~

~~**LOS**~~	~~**Transit Stop Amenities**~~	~~**Pedestrian Access**~~	~~**Frequency of Service**~~
	~~High level~~	~~Sidewalks and marked crosswalks serving stops~~	~~All day service. Peak service 15 minutes or less, midday 30 minutes or less~~
	~~Some amenities~~	~~Sidewalks and marked crosswalks serving some stops~~	~~All day service. Peak services 30 minutes or less, midday service 60 minutes or less~~

GOAL ~~T~~ 2. COORDINATE WITH LOCAL, REGIONAL, STATE, AND FEDERAL AGENCIES AS WELL AS NON-GOVERNMENTAL ENTITIES TO DEVELOP AND OPERATE THE TRANSPORTATION SYSTEM.

OBJECTIVE ~~T~~ 2.1: Support and complement the transportation functions of the State of Washington, transit agencies, and other entities responsible for transportation facilities and services to meet Kenmore's needs.

Policy T-2.1.1: Coordinate planning, construction, and operation of transportation facilities and programs with the State, Counties, neighboring cities, PSRC ~~Puget Sound Regional Council~~, Metro, Sound Transit, and other entities. This coordination will be achieved by:

a. Participating in the transportation-related activities of King County and other advisory committees;

b. Working with other jurisdictions to plan, fund, and implement multi-jurisdictional projects necessary to meet shared transportation needs; and

c. Making transportation decisions consistent with the City's adopted transportation plans in coordination ~~plan and~~ with the State, PSRC ~~Puget Sound Regional Council,~~ transit agencies, King County, Snohomish County, and neighboring jurisdictions.

Policy T-2.1.2: Support increased transit service for the Kenmore Downtown area based upon existing and future population and employment densities. Support additional market demand for TOD along the SR 522 corridor to promote

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Kenmore's status as a High Capacity Transit community and provide residents with access to regional transit.

Policy T-2.1.3: Work with private property owners to create multimodal transportation options ~~a loop road circulation system~~ around the Downtown area ~~providing for automobile and non-motorized travel to~~ achieve a walkable city center that reinforces the community identity and provides connections to housing and community destinations. ~~linkages, and economic development goals.~~

Policy T-2.1.4: Coordinate planning, construction, and operation of transportation facilities and programs with the State, Counties, neighboring cities, PSRC ~~Puget Sound Regional Council~~, Metro, Sound Transit, and other entities to minimize impacts to the environment and aquatic habitats and ensure critical infrastructure is in place to respond to both natural disasters, ~~and~~ human-caused disasters, and climate change impacts.

OBJECTIVE ~~T~~ 2.2: Cooperate with neighboring cities, King and Snohomish Counties, transit agencies, PSRC ~~Puget Sound Regional Council~~, and WSDOT ~~the Washington State Department of Transportation~~ to address regional transportation issues.

Policy T-2.2.1: In partnership with State, regional and local agencies, address regional transportation issues. These include:

a. Regional air, rail, and water transportation facilities and services;

b. Operation of and improvements to the State highway network, including SR 522;

c. Improvements to roadways connecting Kenmore to the surrounding region, including SR 522;

d. Improvements to major roadways bordering, yet having an influence upon internal traffic flows within Kenmore, including those located in Snohomish County;

e. Improved access to I-5 and I-405 corridors and other employment corridors;

f. Regional pedestrian and bicycle facility needs; ~~and~~

g. Transit access ~~connections~~ to meet the diverse needs of residents for populations of all income levels; and

h. Consideration of last-mile connection to transit stops for local and regional users ~~region's urban centers.~~

Policy T-2.2.2: Work with neighboring jurisdictions to ensure that new development outside of Kenmore does not unreasonably affect transportation systems,

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transportation LOS ~~levels of service~~, and the quality of life in Kenmore. Utilize the following approaches:

a. Promote thoughtful planning by neighboring jurisdictions consistent with comprehensive plans and the regional growth strategy; and

b. Support the establishment of ~~a~~ regional traffic planning, expanded access to transit, improved non-motorized facilities, and mitigation payment system.

Policy T-2.2.3: Coordinate transit levels of service with ~~King County~~ Metro, Sound Transit, and private transit operators.

Policy T-2.2.4: In partnership with state and other agencies, support development of a corridor plan for SR 522 to consistently maintain travel conditions for all users along this route.

OBJECTIVE ~~T~~ 2.3: Ensure regional transportation improvements and services are compatible with the Comprehensive Plan and the City's *Layered Network*.

Policy T-2.3.1: Continue to take a lead role in the planning, design, and implementation of SR 522 improvements within Kenmore. Encourage multi-agency cooperation (such as WSDOT and Sound Transit) and ensure that improvements in Kenmore are coordinated with adjacent communities~~, such as Lake Forest Park and Bothell.~~

Policy T-2.3.2: Work with the adjacent jurisdictions ~~City of Kirkland~~ to coordinate planned improvements along connecting roads ~~Juanita Drive.~~

~~Policy T-2.3.3: In conjunction with WSDOT, study potential improvements along SR 522, including at 68th Avenue and potential future Sammamish River crossings, to address better north-south travel in the community.~~

Policy T-2.3.3~~4~~: Work with WSDOT to identify and mitigate the impact that reconstruction and existing and planned toll projects have on Kenmore; particularly on SR 522.

OBJECTIVE ~~T~~ 2.4: Work with business leaders, private owners, and other local organizations to support transportation efforts in reaching mutual goals.

o Policy T-2.4.1: Attract and retain future development ~~business enterprises~~ to Kenmore by directing ~~managing traffic~~ growth into its Countywide Growth Center and providing ~~through~~ multi-modal connections to downtown and equitable access to ~~improvements including: local and~~ regional transit. ~~improvements, carpool and vanpool programs,~~

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~~pedestrian and bicycle improvements, transportation demand management measures, and roadway efficiency improvements.~~

Policy T-2.4.2: Provide additional incentives to minimize surface parking within walkable areas, such as downtown. Ensure that regulations require appropriate parking for business customers.

Policy T-2.4.3 Provide local transit connections from the City's residential areas to the regional high capacity transit system along the SR 522 corridor.

OBJECTIVE ~~T~~ 2.5: Position Kenmore to respond to technological innovations, such as EVs, connected/autonomous ~~electric~~ vehicles, and intelligent transportation systems ~~driverless cars.~~

Policy T-2.5.1: Coordinate with PSRC and other regional entities to understand regional plans for EV ~~electric vehicle~~ charging and accommodation of other alternative fuel sources.

Policy T-2.5.2: Review vehicle regulations periodically to ensure accordance with current technologies that can support Kenmore's transportation system.

Policy T-2.5.3: Keep pace with evolving technologies to understand their impacts on the financing, expansion, and evolving operational and maintenance needs for transportation facilities.

Policy T-2.5.4: Explore micromobility transportation options as an alternate transportation mode to SOVs. Implement policies and pilot programs in coordination with other jurisdictions to test their efficacy in Kenmore.

GOAL ~~T~~ 3. PROMOTE A TRANSPORTATION SYSTEM THAT IS SUSTAINABLE FROM ~~BOTH~~ FISCAL, ~~AND~~ ENVIRONMENTAL, AND EQUITY PERSPECTIVES WITH PARTICIPATION FROM BOTH THE PUBLIC AND PRIVATE SECTORS.

OBJECTIVE ~~T~~ 3.1: Emphasize priorities of the community when prioritizing transportation ~~reviewing circulation~~ system improvements needed to fully implement the City's *Layered Network*, including ~~addressing~~ safety, multi-modal mobility, access to transit, maintenance, and congestion relief~~, multi-modal projects, transit, and growth.~~

OBJECTIVE ~~T~~ 3.2: Regularly prepare and adopt a Six-Year Transportation Improvement Program to implement the Transportation Element.

Policy T-3.2.1: In preparation of specific planning and implementation documents, including the Six-Year Transportation Improvement Program, the City will involve the public, interested agencies, and other jurisdictions through a

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clearly stated process that provides opportunities for review and comments regarding the City's priorities and recommendations.

Policy T-3.2.2: Ensure that plans consider the best available lifecycle cost of an improvement, including operation and maintenance costs; environmental, climate change, economic, and social impacts; and any replacement or closure costs.

OBJECTIVE ~~T~~ 3.3: Leverage City resources and secure adequate funding sources for transportation improvements and services through a variety of mechanisms, including those required as a result of development.

Policy T-3.3.1: Seek to secure adequate funding sources for transportation through a variety of methods. These methods may include:

a. Seeking federal and state funds;

b. Encouraging public/private partnerships for financing transportation projects that remedy existing transportation problems or foster economic growth in Kenmore; and

c. Encouraging the use of Local Improvement Districts (LIDs) by property owners to upgrade roads to meet City road standards.

~~d. Requiring impact fees for new development.~~

Policy T-3.3.2: Ensure shared responsibility of mitigating development impacts between the public and private sector. Require that developers contribute their fair share toward transportation improvements needed to accommodate development through implementation of the City's Traffic Impact Fee program, by ~~mitigation efforts may include:~~

a. ~~Requiring developers to assist in~~ providing additional transportation facilities and services in proportion to the impacts and needs generated by the development and encouraging

b. ~~Encouraging~~ developers to design projects that generate less traffic.~~; and~~

~~c. Requiring impact fees for new development.~~

Policy T-3.3.3: Require traffic analyses for new development proposals consistent with the City's *Traffic Impact Analysis Guidelines* that determine the need for transportation improvements that address traffic impacts. Ensure new developments are accordant with the City's vision as a high capacity transit community.

OBJECTIVE ~~T~~ 3.4: Ensure improvements to the transportation network occur concurrently with development.

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Policy T-3.4.1: Allow development only when those proposals are concurrent with specific documentation or plans showing how the transportation system can adequately support existing and proposed development needs.

OBJECTIVE ~~T~~ 3.5: Cooperate regionally and strive locally to mitigate transportation impacts to ~~improve~~ air quality through interconnected land use and transportation strategies ~~surface water quality.~~

Policy T-3.5.1: Support ongoing efforts for improving air quality throughout the Kenmore area and develop a transportation system compatible with the goals of the Federal and State Clean Air Acts~~. The City will:~~

~~a. Support vehicle emissions testing and cleaner burning fuels;~~

~~b. Coordinate with King County Metro, Sound Transit, and other jurisdictions on Commute Trip Reduction programs for major employers in Kenmore; and~~

~~c. Promote Transportation Demand Management programs.~~

Policy T-3.5.2: Support local and regional efforts to reduce vehicle emissions. Support installation of EV charging stations on local privately owned property and explore options for the development of charging facilities on publicly owned property. Reduce emissions from City fleet by implementing a green vehicle selection process, identifying green fleet resources for new or replacement vehicles, and installing electric car charging stations in City-owned facilities.

Policy T-3.5.3: ~~Support travel modes that minimize air pollutants and greenhouse gas emissions.~~ Coordinate with Metro, Sound Transit, and other jurisdictions on Commute Trip Reduction (CTR) programs for major employers in Kenmore

Policy T-3.5.4: Reduce vehicle miles traveled (VMT) of SOVs by implementing Transportation Demand Management (TDM) programs and strategies.

OBJECTIVE 3.6: Reduce impacts to water quality with new development and maintenance of the existing transportation system.

o Policy T-3.6.1: Design roadway improvements to be consistent with the City's Surface Water Management Plan, CAP, and stormwater regulations. Implement, ~~Install permeable pavements and biofiltration swales~~ where feasible, green stormwater infrastructure ~~possible~~ to reduce stormwater runoff and minimize and mitigate water quality impacts to aquatic habitats.

Policy T-3.6.2: Determine potential surface water retrofitting or treatments that could be applied in conjunction with transportation improvements.

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4. Comprehensive Plan Update: Transportation Element (continued)

Policy T-3.6.3: Support expanding stormwater facilities along with new projects to accommodate stormwater runoff adjacent to the project area, when feasible, to expand treatment to undisturbed but currently untreated areas.

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GOAL T-4. ENCOURAGE PUBLIC TRANSPORTATION, NON-MOTORIZED TRAVEL, AND OTHER TRANSPORTATION STRATEGIES THAT REDUCE THE NEED FOR AUTOMOBILE TRAVEL, ESPECIALLY BY SOVs.~~SINGLE-OCCUPANT VEHICLES (SOV).~~

OBJECTIVE T-4.1: Support expansion of ~~local and regional~~ transit service within Kenmore that provides connections ~~linkages~~ to local ~~regional~~ destinations as well as the regional high capacity transit network.

Policy T-4.1.1: Support the implementation of Sound Transit's planned and funded regional BRT along SR 522 and prioritize investments that support high capacity transit stations.

Policy T-4.1.2: Work with Metro and other transit providers to establish local transit service that provides Kenmore residents access to the regional high capacity transit network, as well as connections to the Downtown, major commercial and mixed centers in Kenmore, and other key destinations in the City, and destinations in surrounding communities.

Policy T-4.1.3: Examine the opportunities for increasing transit service with Metro and Sound Transit with priorities tailored to meet the needs of the community by:

~~a. Supporting additional routes or connections to surrounding communities and employment centers;~~

~~b.~~ a. Requiring transit facilities as mitigation where appropriate for new developments;

~~c.~~ b. Identifying and developing locations that are accessible to public transportation for use as park-and-pool or park-and-ride lots;

~~d.~~ c. Requiring adequate right-of-way, sidewalk, and roadway improvements where transit stops are located; and

~~e.~~ d. Adopting design standards that promote safety and aesthetics in accordance with the Street Planning Toolkit; and

e. Encourage development and maintenance of passenger ferry, water taxi, and or other water-based transportation services on Lake Washington to connect Kenmore to other regional destinations

~~Policy T-4.1.2~~: ~~Work with Metro and other transit providers to establish a local circulator transit service that provides intra-community transit service, connecting north and south Kenmore. The local circulator service would provide connections to the Downtown, major commercial and mixed centers in Kenmore, park-and-ride lots, and other key destinations.~~

Policy T-4.1.4.: Maintain BAT ~~HOV~~ lanes on SR 522 for use by transit and business access only to encourage transit usage and improvements, and to preserve its use

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for transit over the long term. Support high capacity transit service, preferably light rail, on or along SR 522, along with a light rail station in Kenmore.

Policy T-4.1.5: Encourage development and maintenance of passenger ferry or other water-based transportation services on Lake Washington to connect Kenmore to other regional destinations.

OBJECTIVE T4.2: Work with local King County and regional transit agencies to site, size, provide appropriate locations and design encourage maximum usage of park-and-ride facilities that reflect the land use vision for the areas in which they are located.

Policy T-4.2.1: Design structured parking facilities as integrated elements of mixed use developments with ground floor uses that support TOD retail to encourage transit-oriented development, improve transit access to support the downtown plan, and improve and encourage non-motorized travel to and from high capacity transit areas park-and-ride lots.

Policy T-4.2.2: Explore the potential for joint use of park-and-ride lots with the public and private sectors for commercial and residential use.

OBJECTIVE T-4.3: Create an accessible sidewalk and pedestrian trail network linking neighborhoods, the Downtown, and key community destinations consistent with that laid out in the *Pedestrian Priority Network*.

Policy T-4.3.1: Focus early sidewalk improvements on the *Pedestrian Priority Network*. Prioritize The first priority should be completing the sidewalk investments consistent with the *Pedestrian Facilities Plan*, which rank projects based system on *Urban Avenues* safety, community connections, network connectivity, proximity to schools, connections to opportunities, and potential population served.

Policy T-4.3.2: Prioritize implementation of the Americans with Disabilities Act (ADA) Transition Plan Prioritize future pedestrian facility improvements that increase pedestrian safety, link to key destinations, promote multi-modal trips, improve conditions for the elderly and persons with disabilities, maintain safe condition of existing sidewalks, and meet other priorities for pedestrians in Kenmore.

Policy T-4.3.3: Require development to provide additional sidewalks along both sides of streets or on one side of the roadway or pay a in return for contribution to a sidewalk fund to complete missing links, increase pedestrian safety, and provide linkages to key destinations in accordance with the *Pedestrian Priority Network.*

Policy T-4.3.4: Based upon the City's sidewalk inventory, denote some neighborhoods Design and construct accessible pedestrian facilities the streets within them

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~~as "sidewalk-free", considering the criteria laid out~~ in accordance with the *Pedestrian Priority Network*, *ADA Transition Plan*, and street classification ~~Also establish a mitigation fee~~ system. ~~applicable to new development in "sidewalk-free" areas to complete critical sidewalk links along adjoining streets or desirable trails.~~

Policy T-4.3.5: As part of the *Pedestrian Priority Network*, provide crosswalks at key locations such as in the Downtown, on SR 522 near park-and-ride lots and transit stops, near schools, and at other locations with significant pedestrian volumes.

Policy T-4.3.6: Explore opportunities to utilize undeveloped rights of way to develop and maintain safe pedestrian connections.

Policy T-4.3.7: Consider future bond measures to fund pedestrian projects that expand the pedestrian network.

OBJECTIVE ~~T-~~4.4: Implement ~~Create~~ a comprehensive *Bicycle Priority Network* in Kenmore.

Policy T-4.4.1: Require roadway development ~~along the *Bicycle Priority Network*~~ to include bicycle facilities in accordance with the *Bicycle Priority Network*.

Policy T-4.4.2: Prioritize future bicycle facility improvements that increase safety for bicyclists, link to key destinations, promote multi-modal trips, complete gaps in the existing bicycle system, provide linkages to the Burke-Gilman Trail and other key off-road facilities, and meet other priorities for bicyclists in Kenmore.

Policy T-4.4.3: Encourage off-road non-motorized vehicle facilities on designated trails. Promote the on-going maintenance and use of the Burke-Gilman Trail.

o Policy T-4.4.4: Promote non-motorized vehicle trails in utility corridors or undeveloped rights of way ~~such as the Tolt Pipeline~~ where consistent with environmental constraints.

Policy T-4.4.5: Allow for a secondary pedestrian and bicycle loop around the downtown area with ~~waterfront~~ connections to the waterfront and high capacity transit areas.

Policy T-4.4.6: Accommodate bicycles and non-motorized vehicles in the design and management of the City's *Layered Network* in accordance with the *Bicycle Priority Network*.

OBJECTIVE ~~T-~~4.5: Implement programs and regulations that help reduce the use of SOVs. ~~single occupant vehicles (SOV).~~

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Policy T-4.5.1: Create and implement development standards that:

a. Encourage continuous, direct, convenient non-motorized linkages;

b. Provide sufficient illumination in parking lots and along travel routes to increase visibility and security for non-motorists;

c. Minimize front yard parking along commercial street fronts, particularly in the Downtown;

d. Establish ~~parking~~ standards that discourage excessive parking. ~~through shared parking, demand studies, and other incentives or requirements,~~ Provide options or to reduce underutilized parking lots and encourage alternate modes of travel;

d. Promote mixed-use development in the Downtown; and

e. Require minimum densities through floor area ratios, employment levels, and / or business retention and expansion activities in the Downtown and major commercial areas to support transit.

Policy T-4.5.2: Implement the City's CTR ~~Prepare a Commute Trip Reduction~~ Ordinance applicable to large employers in accordance with State laws.

Policy T-4.5.3: Support the goals of the PSRC's ~~Puget Sound Regional Council's~~ Regional TDM Action Plan ~~Strategy~~ to manage travel behavior and reduce vehicle trips.

GOAL ~~T-~~5. MAINTAIN THE AVAILABILITY OF SAFE AIR TRAVEL SERVICES IN KENMORE.

OBJECTIVE ~~T-~~5.1: Support the continued operation of the Air Harbor to provide private air transportation services to the region and community.

Policy T-5.1.1: Recognize the Kenmore Air Harbor as a business that is economically and historically significant to the community.

Policy T-5.1.2 Provide multimodal connections from Kenmore Air Harbor to downtown commercial areas.

OBJECTIVE ~~T~~5.2: Plan for appropriate uses and activities in the vicinity to minimize impacts to and from the Air Harbor.

Policy T-5.2.1: In consultation with the State and the Air Harbor operator, comply with State laws requiring plans and regulations that discourage the siting of incompatible uses adjacent to the Air Harbor.

Policy T-5.2.2: Ensure plans and regulations address the Air Harbor as an allowed use and, where appropriate, acknowledge compatibility issues including height hazards, safety, and noise that can affect the long-term viability of the Air

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Harbor. Consider WSDOT guidelines addressing airports and compatible land use as well as guidance from the PSRC ~~Puget Sound Regional Council~~ Airport Compatible Land Use Program. Allow compatible uses, buildings, or land or water activities in the vicinity that do not present safety problems to normal Air Harbor operations, or that would not be sensitive to noise from the Air Harbor operations.

OBJECTIVE ~~T-~~5.3: Work with the Air Harbor to ensure compliance with appropriate noise and safety standards.

Policy T-5.3.1: Work in partnership with the Air Harbor to address noise management and compliance with Federal, State and local noise ordinances. Consider a special overlay or property title process that identifies the noise-related impacts of the Air Harbor.

Policy T-5.3.2: Work in partnership with the Air Harbor to ensure safe operations in compliance with Federal and State aeronautic safety requirements.

GOAL ~~T-~~6. ***PROVIDE A TRANSPORTATION SYSTEM THAT FACILITATES FREIGHT MOBILITY AND ECONOMIC PROSPERITY.***

OBJECTIVE ~~T-~~6.1: Support the efficient movement of goods in Kenmore's commercial areas to support the local economy.

Policy T-6.1.1: Consider the needs for delivery and collection of goods at local businesses by truck and ensure future transportation improvements address the needs of large trucks in accordance with ~~on~~ the *Freight Priority Network*.

Policy T-6.1.2: Monitor commercial truck traffic to ensure use of appropriate corridors to support efficient movement of goods and safety of local streets. Utilize the WSDOT classification system to determine freight and goods movement routes.

OBJECTIVE ~~T-~~6.2: Accommodate local deliveries and other goods movement that are ~~is~~ necessary to serve Kenmore residents.

Policy T-6.2.1: Work with local industries and freight companies to understand their needs for adequately moving goods.

Policy T-6.2.2: Ensure roadway improvements do not unnecessarily impede delivery vans and other small freight trucks.

GOAL 7. PROMOTE TRANSPORTATION EQUITY THROUGH SERVICES AND INFRASTRUCTURE IMPROVEMENTS.

OBJECTIVE 7.1: Promote transportation improvements that provide equitable access and benefits for all Kenmore residents.

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Policy T-7.1.1: Support transportation improvements that provide broad access to jobs, healthcare, goods and services, and social opportunities.

Policy T-7.1.2: Perform periodic review and monitoring of socio-demographic, economic, and geographic population trends to identify transportation facilities and services needed for all Kenmore residents.

Policy T-7.1.3: Ensure transportation improvements do not impose external impacts on historically marginalized or underserved communities, such as increased air pollution, infrastructure costs, or crash risk.

Policy T-7.1: Prioritize implementation of the ADA Transition Plan

OBJECTIVE 7.2: Provide a transportation network that promotes inclusive and affordable services to all Kenmore residents, regardless of mode choice.

Policy T-7.2.1: Promote projects that expand bicycle and pedestrian facilities and access to transit for historically marginalized or underserved communities.

Policy T-7.2.2: Promote inclusive transportation modes and accessible community development that provide basic mobility to historically marginalized or underserved communities.

Policy T-7.2.3: Incorporate environmental justice criteria into the transportation improvement program review process to identify disproportionate effects on historically marginalized or underserved communities.

OBJECTIVE 7.3: Promote collaborative planning processes through authentic, active partnerships with historically underrepresented community groups.

Policy T-7.3.1: Work with historically marginalized or underserved communities and local organizations to identify transportation facilities improvements.

Policy T-7.3.2: Recognize and support individuals or groups who have historically been underrepresented in transportation planning and/or infrastructure development, such as people of color, indigenous and immigrant populations, to identify and correct structural or system inequities in the transportation network to promote social justice.

GOAL 8. SUPPORT TRANSPORTATION INVESTMENTS THAT MINIMIZE, MITIGATE, AND RESPOND TO THE EFFECTS OF CLIMATE CHANGE.

OBJECTIVE 8.1: Balance transportation demands with environmentally sustainable growth strategies consistent with the City's CAP to minimize long-term climate impacts.

Policy T-8.1.1: Prioritize dense, mixed-use, and transit-oriented development to reduce SOV travel and GHG emissions.

OBJECTIVE 8.2: Reduce VMT by promoting alternative transportation modes and access to high capacity transit.

Policy T-8.2.1: Implement TDM programs and strategies that facilitate transit use.

Policy T-8.2.2: Prioritize infrastructure improvements that include new bicycle and pedestrian connections through project selection.

Policy T-8.2.3: Provide amenities that support bicycle and pedestrian users, such as bike lockers, bike racks, and wayfinding signage near the downtown area.

Policy T-8.2.4: Provide educational and encouragement programming that improves public awareness of Kenmore's bicycle and pedestrian networks.

FUTURE TRANSPORTATION SYSTEM ~~VISION~~

Kenmore envisions a future transportation system that serves all users and modes of travel by offering a safe and robust network of walkways, bicycle facilities, intersections, and roadways that connect neighborhoods and provide access to transit. This section ~~chapter~~ describes Kenmore's vision for its future transportation network and the infrastructure improvements that will get the City there.

As identified in this element ~~plan~~, most of the improvements are focused on the development of a 'layered' transportation network, which focuses less on providing vehicular capacity and more on accommodating all modes of travel. While some of the roadway improvements are needed to meet the City's vehicular ~~level of service (~~LOS~~)~~ standard, most of the future improvements focus on providing safer and more complete facilities for walking, bicycling, and riding transit in order to improve access and mobility for all road users.

Introduction to the Layered Network

It can be a challenge for a single roadway to meet the demands and expectations of all modes at any given time. ~~This is also generally~~ Accommodating all users and modes could result in wide or large roadways that are expensive to develop and maintain and do not necessarily reflect the neighborhood character. Alternately, trying to minimize roadway widths and infrastructure costs can result in a ~~user or a planning perspective~~ lack of facilities and thus less safe conditions for users.

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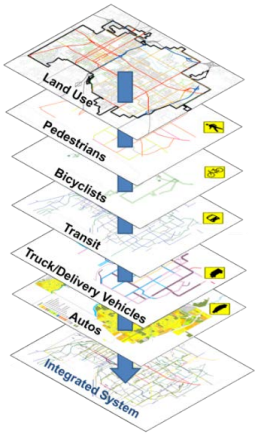
In response to this challenge, the City of Kenmore has adopted a layered network approach that focuses on how the City's transportation network can function as a system to meet the needs of all users. In such a system, individual travel modes are prioritized on different facilities throughout the overall network. This approach promotes a balanced transportation system to serve diverse user needs including sidewalk and bicycle investments, improved access to transit, and roadway improvements for vehicles. **Figure T-16** ~~**Figure 13**~~ illustrates the concept of a layered network.

The City implements ~~will implement~~ this layered network through a system of roadway typologies that define each street's user priorities and associated infrastructure needs.

Figure T-12: Layered Network Concept



Roadway Typologies

The following street typologies dictate the form and intended functions of roadways in Kenmore. While some roadways are intended to serve regional travel and vehicle circulation, other facilities provide safe options for a more multimodal user base. A description of each roadway type follows and detailed fact sheets are available in **Appendix D-3**.

The roadway types are as follows and are summarized in **Figure T-17**:~~**Figure 14**:~~

- State Highway/Major Arterial ~~Boulevard~~ – Most conducive for crosstown trips and focus on transit, freight, and auto mobility.
- Minor Arterial ~~Urban Avenue~~ – Signals the entry into a higher-density commercial or residential zone. Emphasizes multimodal interactions and travel experience.
- Collector ~~Neighborhood Connection~~ – Provides a connection between local streets and arterials for a safe ~~and enjoyable~~ travel experience for bicycles and pedestrians.
- Local Street – Prioritizes local access (driveways, on-street parking) and pedestrian travel. Bicycles share the roadway.

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~~**MODAL NETWORKS**~~

Modal Networks

As the roadway descriptions specify, each type focuses on and prioritizes a different balance of users, both in terms of trip purpose and travel mode. ~~Determining how the entire transportation network fits together in Kenmore requires identifying desirable streets for each mode, combining them to locate overlaps, and then assigning priority to certain modes. The following sections review the priority networks for each mode and establish their level of service standards.~~
The transportation network in Kenmore was developed by identifying desirable streets for each mode, combining them to locate overlaps, and then assigning priority to certain modes. The following sections review the priority networks for each mode and establish their LOS standards.

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Figure T-13:City's Street ~~Layered~~ Network

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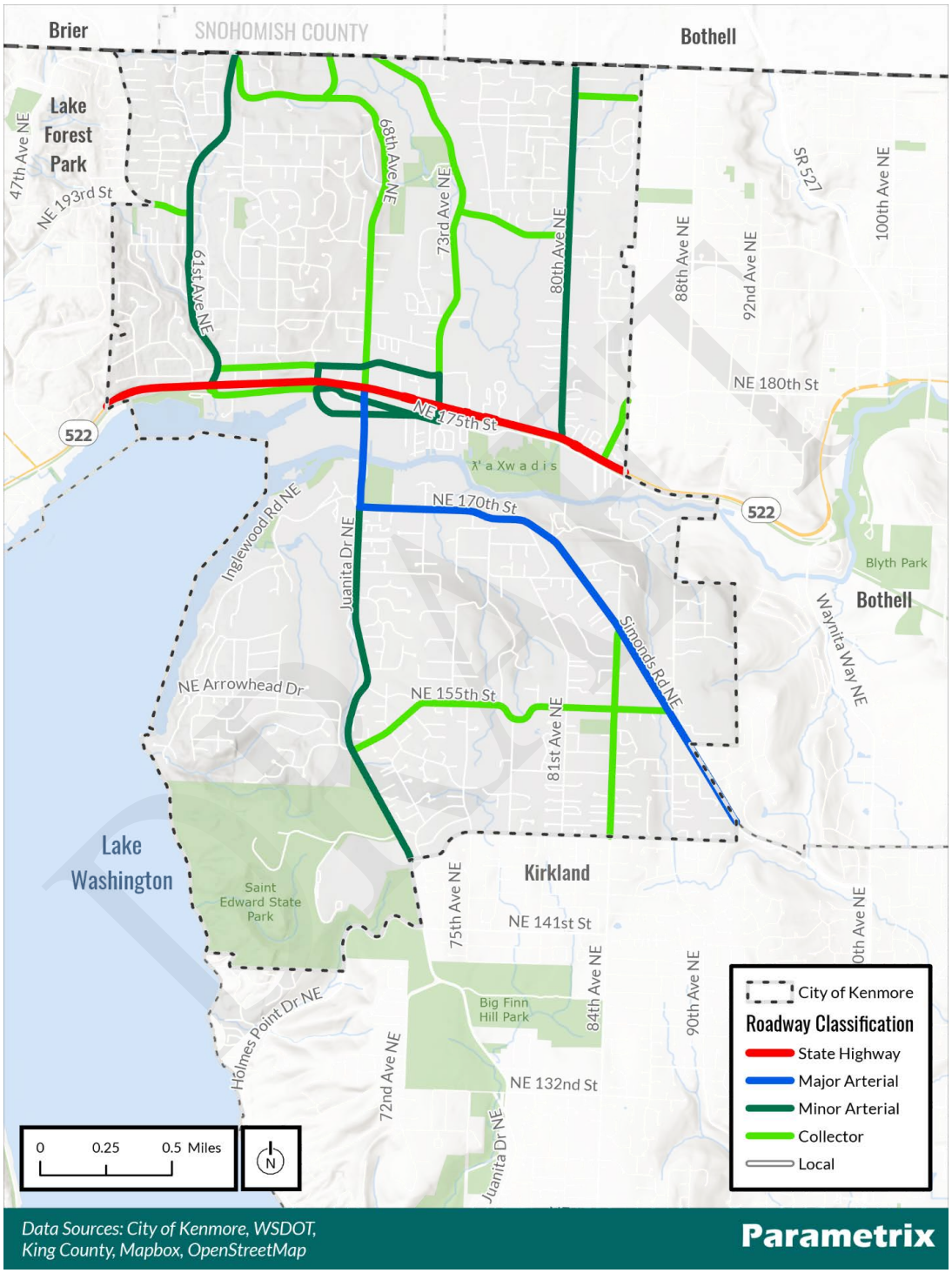

4. Comprehensive Plan Update: Transportation Element (continued)

Walking

While Kenmore's local streets generally tend not to need fully separate sidewalks or paths due to their low traffic volumes and slow speeds, the City's state routes, arterials, collectors ~~boulevards, urban avenues~~, and some local streets ~~neighborhood connections~~ do warrant pedestrian infrastructure. ~~Dense areas with commercial land uses and streets that serve schools are particularly important for safe walking, as they support more pedestrians and may have a larger portion of vulnerable users than other streets. **Figure 15**~~ **Figure T-18** highlights the Pedestrian Priority Network, indicating ~~including examples of walking facilities that Kenmore should include on these streets, as well as~~ whether pedestrian infrastructure should be provided on both sides or one side of the street. The Pedestrian Facilities Plan identifies prioritized sidewalk projects throughout the city based on extending the existing sidewalk network, connections to the existing sidewalk network, and creating sidewalk on both sides of arterial and collector roads.

Building on the Pedestrian Priority Network above, **Table ~~3~~T-7** establishes the LOS ~~level of service~~ standard for pedestrian facilities around the City. The best LOS ~~level of service~~ for walking, indicated as ~~in~~ the green standard ~~row~~, would provide walkways with buffers ~~exactly~~ as shown in the Pedestrian Priority Network. The yellow LOS standard ~~level of service~~, which meets the basic needs for safe walking around the City, requires sidewalks or paved shoulders protected by raised curbs on one side of all the streets called out in the Pedestrian Priority Network. Incomplete or missing pedestrian facilities would fall into the red category and not satisfy the City's LOS for walking. The pedestrian LOS standard does not pertain to local streets, as low-volume roadways may be adequate for pedestrians without separated facilities based on their characteristics and should be evaluated on a case-by-case basis.

In addition to the presence of pedestrian facilities along a corridor, the City also emphasizes the importance of safe pedestrian crossings. Particularly downtown and within ½ mile of schools, the City is looking to provide enhanced crossings at regular intervals

Table ~~3~~T-7: Pedestrian LOS – Sidewalk Requirements

LOS	Within Pedestrian Priority Network*
🟢	Pedestrian facility** on both sides of the street with a buffer as ~~where~~ indicated in Pedestrian Priority Network~~, with a buffer~~
🟡	Pedestrian facility** provided on one side of the street with or without buffer as indicated in Pedestrian Priority Network
🔴	No pedestrian facility

* The pedestrian LOS standard does not pertain to local streets outside downtown

** Pedestrian facility includes sidewalks and shoulders protected by a raised curb.

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Figure T-14: Pedestrian Priority Network – Future Vision

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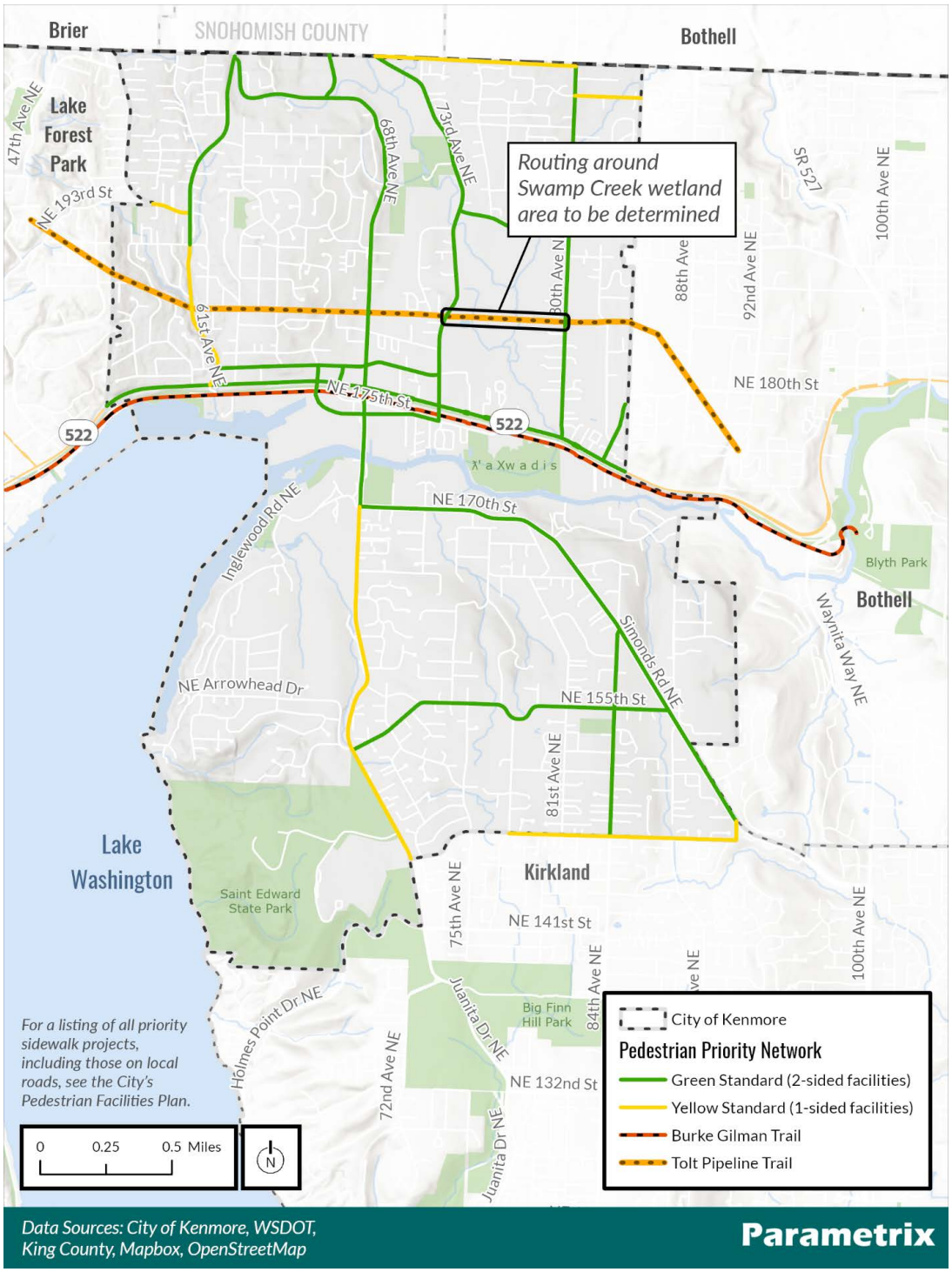

4. Comprehensive Plan Update: Transportation Element (continued)

Bicycling

Kenmore already sees significant levels of bicycling along the Burke-Gilman Trail and Juanita Drive, which serve as major commuter and recreational corridors. Connecting to these routes from other areas of the City can be difficult ~~challenging~~, however, due to challenging topography and limited through streets in some neighborhoods. ~~the lack of bicycle infrastructure~~ Key mobility corridors for bicyclists include ~~such as~~ 68th Avenue / Juanita Drive / Simonds Road which have buffered ~~would be best served with separated~~ bicycle facilities~~, while Class II bike lanes and shared lane markings would suffice on other streets.~~

Similar to Pedestrian LOS, the City of Kenmore can strive for the green LOS ~~level of service~~ for bicycling by installing the bicycle facilities depicted in the Bicycle Priority Network or a facility that offers more separation from vehicle traffic. At a minimum, the City plans to provide the yellow LOS by installing some sort of bicycle infrastructure on the streets identified in the Bicycle Priority Network (see **Figure T-19**) ~~**Figure 16**). At a minimum, these~~. These facilities would be signed bike routes. Incomplete or missing bicycle facilities would fall into the red standard and not meet the City's LOS for bicycling. The LOS ~~level of service~~ standards for bicycle facilities are described in **Table 4 T-8** ~~below~~**.**

***Table 4 T-8.*: Bicycle LOS – Facility Requirements**

LOS	Within Bicycle Priority Network
🟢	Provides minimum treatment* recommendation, as shown within Bicycle Priority Network
🟡	Provides a lower-level facility* than recommended in the Bicycle Priority Network
🔴	No bicycle facility ~~Facility~~

* Bicycle facilities – lowest-level to highest-level of treatment: shared; bike lanes; buffered bike facility; separated trail.

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Figure T-~~16~~15: Bicycle Priority ~~Property~~ Network ~~Green Standard~~ – Future Vision

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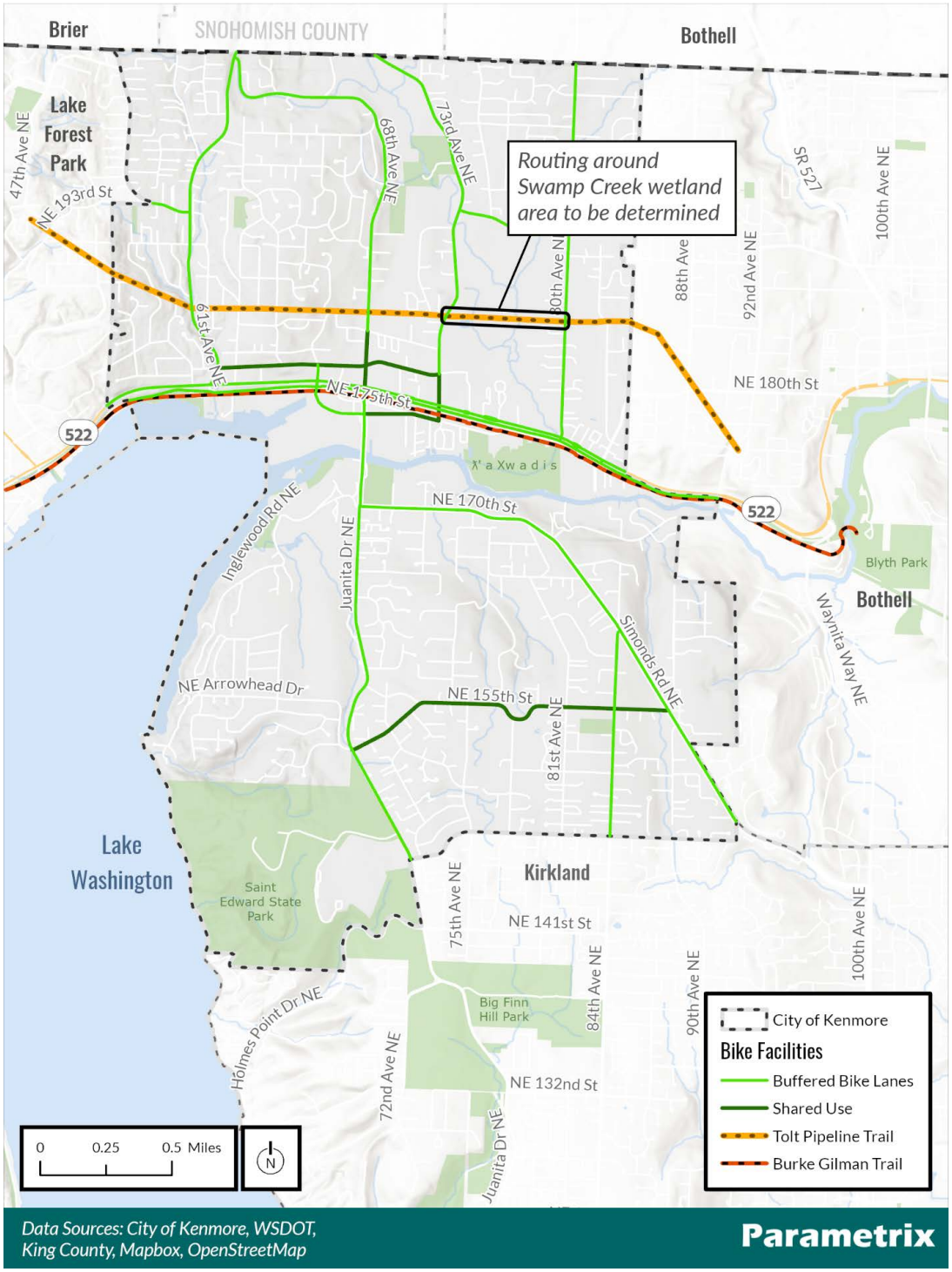

4. Comprehensive Plan Update: Transportation Element (continued)

Transit

Transit operations are out of the City's direct control, but Kenmore can still aim to create corridors that are welcoming to transit. The Transit Priority Network identifies the corridors that the City should focus their efforts on and is shown in **Figure T-20**.~~**Figure 17.**~~ The City can improve the ~~boost~~ transit user's comfort and safety ~~use~~ by providing ~~offering~~:

- Street lighting
- Right of way for bus ~~Bus~~ shelters and benches or requiring installation of transit facilities as a condition of private development
- Safe routes for accessing transit stops

Kenmore's transit LOS is defined based on the amenities, access, and service frequencies discussed above. The City can achieve ~~reach~~ the green LOS standard by providing a high level of the transit supportive amenities at major stops, installing sidewalks and marked crosswalks at all stops, and ~~attracting~~ encouraging and permitting housing and employment densities that support frequent, all day transit service, including Sound Transit's planned SR 522 BRT service. The yellow standard, which the City ~~will adopt~~ has adopted as its minimum target, includes some transit stop amenities, sidewalks and marked crosswalks at some stops, and all day service with headways of 30 minutes or less during the peak hour and 60 minutes or less during midday. Kenmore's measurement of transit LOS is summarized in ~~the~~ **Table T-9**.~~5 below.~~

Table ~~5~~ T-9: Transit Priority Corridor Level of Service

LOS	Transit Stop Amenities	Pedestrian Access	Frequency of Service
	High level	Sidewalks and marked crosswalks serving stops	All day service. Peak service 15 minutes or less, midday 30 minutes or less
	Some amenities	Sidewalks and marked crosswalks serving some stops	All day service. Peak services 30 minutes or less, midday service 60 minutes or less
	Few ~~Little~~ or no amenities	General lack of sidewalks and marked crosswalks	Low level of service

While the City itself does not operate transit, ~~these~~ providing amenities and transit supportive uses and densities can encourage residents and employees to use transit and therefore ~~gain~~ justify additional service hours from ~~King County~~ Metro and Sound Transit.

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Figure T-~~17~~20: Transit Priority Network

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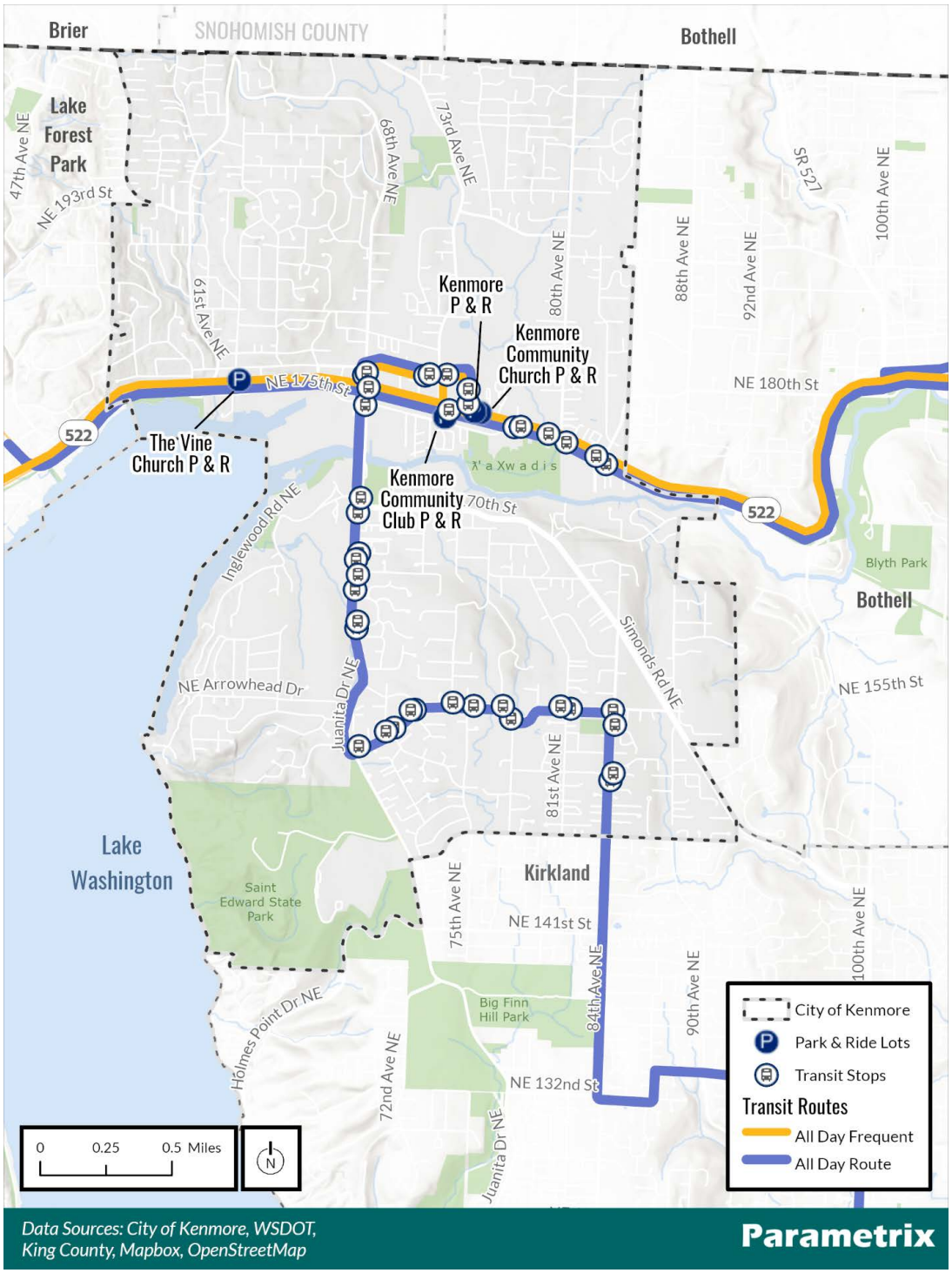


4. Comprehensive Plan Update: Transportation Element (continued)

Freight and Auto

Residents and workers in Kenmore use nearly every street in the roadway network at some point each day to access their homes, jobs, and other destinations. ~~Many~~ The highest volumes of ~~these streets are local streets, however, and~~ automobile traffic currently occur on arterial and collector roadways whereas local streets do not see significant traffic volumes throughout the day. Similarly, goods movement predominantly utilize arterial and collector roadways, with local streets used mostly for residential deliveries~~. delivery vehicles use some corridors frequently while other streets see only the occasional local delivery.~~

Figure T-17 identifies ~~**Figure 18** (which is the same as Figure 14, just reproduced here for readability) calls out~~ the classification of each of Kenmore's streets, in terms of whether it is a state route, arterial, collector ~~Boulevard, Urban Avenue, Neighborhood Connector,~~ or local road ~~Local Street~~. These classifications indicate the intended function of each street, specifically in terms of its intended function in facilitating vehicle and freight mobility as well as other models. These classifications (further described in **Appendix D-3**) ~~should~~ guide future investments in streetscape and LOS objectives.

The expected growth in Kenmore and across the region over the next 20 years will generate higher auto volumes on City roadways and increase delay at several intersections. **Figures T-21 and T-22** displays the forecast level of service performance at several intersections in Kenmore's street network in 2030 and 2044, respectively.

While delays are forecasted to increase at some intersections, with the exception of several along SR 522, all intersections in Kenmore are forecast to perform at or better than the adopted LOS standard described in Policy T-1.4.1.

As noted in Policy T-1.4.1, ~~Kenmore will maintain its current LOS standard, as presented below. However,~~ the City measures ~~will measure~~ LOS at the corridor level on SR 522 and 68th Avenue (south of SR 522) / Juanita Drive / Simonds Road rather than at the intersection level. ~~Though a single intersection~~ Although several individual intersections on these corridors ~~may~~ are forecast to experience longer delays than indicated by the standard, the ~~overall concern for residents~~ safety and ~~travelers on these roadways~~ comfort of pedestrians and bicyclists is prioritized at ~~to get through multiple~~ intersections throughout the city ~~in a reasonable amount of time~~. For this reason, average delay along the corridor is a more meaningful LOS ~~level of service~~ standard than the experience at a single intersection.

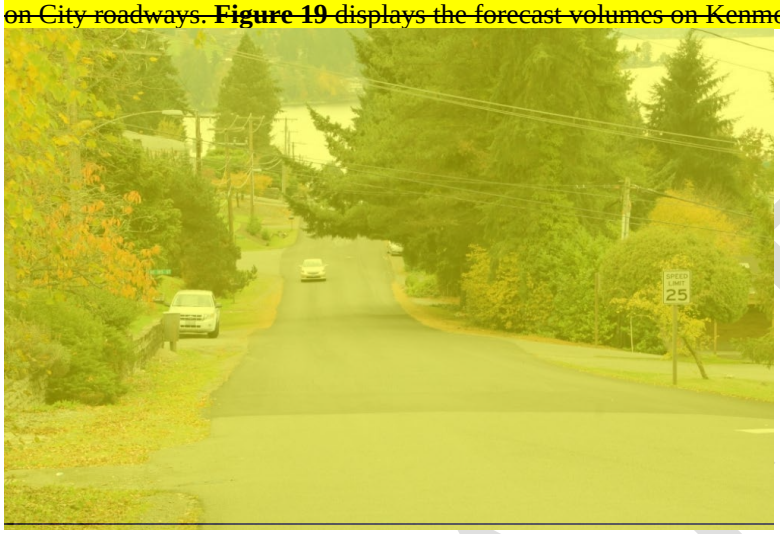
The forecasted level of service along SR 522 in Kenmore does not meet WSDOT's current LOS standard of D but it does meet the City's concurrency standards of LOS E for Major Arterials. As a Highway of Statewide Significance, SR 522 is not subject to City concurrency standards and the City is not responsible for the regional traffic impacts that reduce the performance of the highway. The City notes that WSDOT considers exceeding LOS D to be an operational deficiency and will work with WSDOT as it addresses LOS conditions along SR 522.

~~The City's level of service policy sets the following standards for its roadways:~~

- ~~Boulevards (Primary Arterials) – LOS E or better~~
- ~~Urban Avenues, Neighborhood Connections (Minor Arterials) – LOS D or better~~

- ~~Local Streets (Collectors) – LOS C or better~~

~~The expected growth in Kenmore and across the region by 2035 will generate higher auto volumes on City roadways. **Figure 19** displays the forecast volumes on Kenmore's street network.~~



~~**Figure T-18 City's Layered Network**~~

~~**Figure T-19 Future Traffic Volumes**~~

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Figure T-16: 2030 Forecasted Auto Level of Service and Volumes

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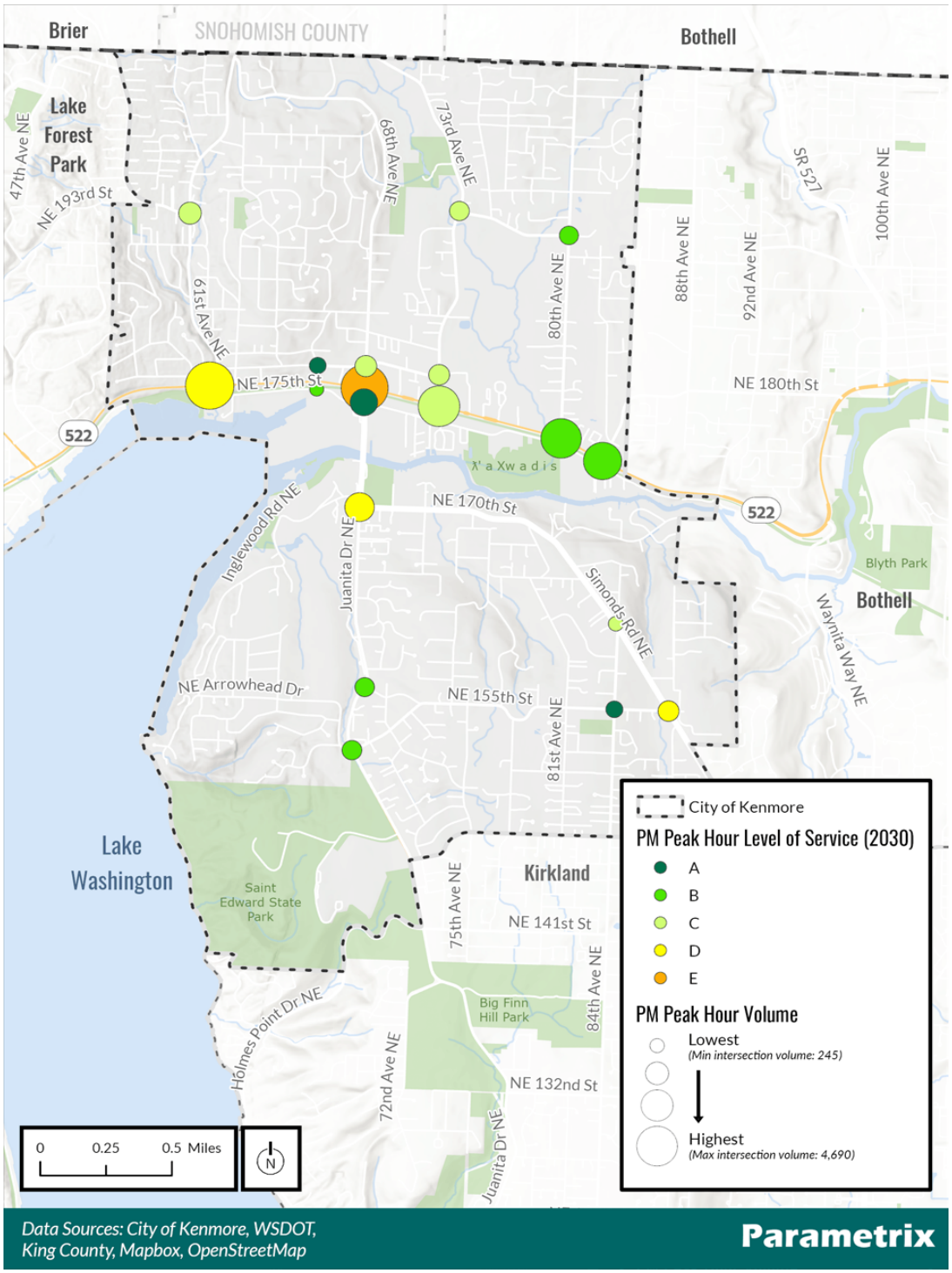

4. Comprehensive Plan Update: Transportation Element (continued)

Figure T-17: 2044 Forecasted Auto Level of Service and Volumes

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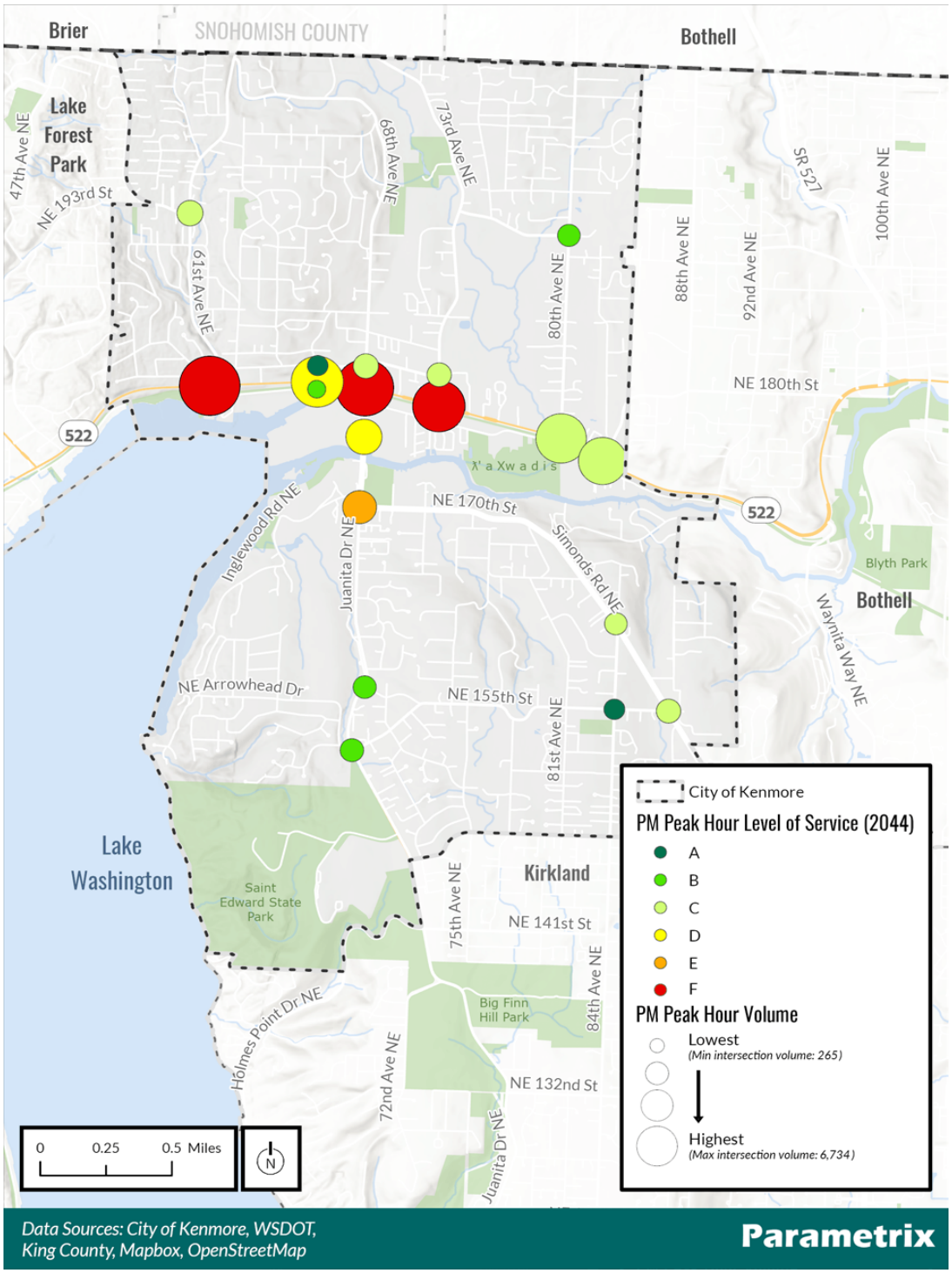


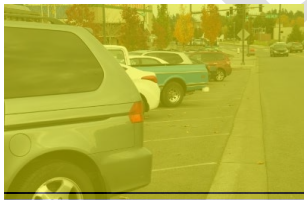
4. Comprehensive Plan Update: Transportation Element (continued)

Downtown Parking

The City's on-street parking supply is currently available on a first-come, first-served basis, ~~without~~ with time restrictions ~~or charges~~. Anticipated development in the Downtown quadrants may necessitate more active parking management in the future as demand for parking increases. The City should monitor parking use in downtown and consider the following actions, as appropriate, to manage demand:

- ~~Once on-street parking supply utilization exceeds 85 percent on downtown roadway segments during business hours, consider implementing time limits (2 or 4 hours) or parking charges to encourage parking space turnover.~~
- If parking spillover is perceived as an issue on nearby residential streets, consider establishing residential parking zones ~~(RPZs)~~ to maintain curb space for neighborhood residents.
- As downtown develops, review the City's parking code to ensure it is aligned with an urban setting.
- Consider encouraging more shared parking by developing a public parking facility that promotes a "park once" concept in the downtown.
- Consider installation of nonmotorized facilities to help balance demand.
- Develop structured parking standards to encourage the design of facilities that can adapt over time as parking demand changes.

There are 722 ~~693~~ designated park and ride spaces in Kenmore of which 603 spaces are provided in the Kenmore Park ~~park~~ and Ride at ~~ride lot off~~ 73rd Avenue NE. The ~~Ave N, and the~~ remainder of spaces in the City are distributed in two church parking lots and the Kenmore Community Club. The spaces are ~~largely used by commuters~~ reserved for transit users who then access ~~King County~~ Metro and Sound Transit bus service ~~on SR522~~. ~~On~~ During weekdays in 2019, total utilization at these facilities were ~~are~~ typically filled to 90 percent~~%~~ capacity, with the Kenmore Park and Ride being filled to 100 percent capacity. This results in overflow parking on adjoining streets and properties in the downtown area, thereby reducing the availability of downtown parking. ~~The City should consider~~ Planned expansion to park and ride capacity may not occur until 2034 and the City will need to continue working with ~~transit operators (King County~~ Metro and Sound Transit~~)~~ to identify opportunities to address park and ride demand for high capacity transit areas.



~~CHAPTER 5:~~ NEAR TERM AND LONG TERM CAPITAL PROJECTS

This ~~chapter presents the capital program~~ section identifies projects that ~~forms the basis~~ will support implementation of ~~this Transportation Element~~ the City's transportation vision. Collectively, this program adds up to over ~~$100~~ $118 million in transportation projects to be constructed over the next few decades. ~~For planning purposes, the~~ Projects are planned across two time frames. The Six Year (near term) list represents years 0 to 6 (~~2015-2020~~ 2024-2030) and is financially constrained to only those projects that could realistically receive funding over the next six years[1]. The Twenty Year (long term) list reaches out to the 20 year time horizon (through ~~2035~~ 2044) and includes unfunded projects that may stretch beyond this time period. Detailed cost estimates are provided in Appendix D-4. ~~Projects that are included on the City's near- and long-term lists as a result of an anticipated future deficiency are summarized in **Appendix D-3**.~~

~~The overall capital plans were developed to create a transportation system that realizes Kenmore's ultimate transportation vision:~~

- ~~**Goal 1:** Provide a **complete transportation network** serving local and regional circulation needs, safely accommodating all users.~~
- ~~**Goal 2: Coordinate with other regional entities** to develop and operate the transportation system.~~
- ~~**Goal 3:** Promote a transportation system that contributes to **fiscal and environmental sustainability**.~~
- ~~**Goal 4:** Encourage transportation options and strategies that **reduce the need for driving**.~~
- ~~**Goal 5: Maintain safe air travel services** in Kenmore.~~
- ~~**Goal 6:** Facilitate **freight mobility and economic prosperity**.~~

~~With these goals in mind, as well as completing the layered networks described in the previous chapter, the 6 and 20 year project lists were developed.~~ **Table 6 T-10** describes the Six and Twenty Year Project ~~List~~ Lists and **Figure T-23** displays the locations of these projects around the City. ~~None of these projects conflict with the goals listed above.~~

~~It is important to note that the Six-Year Project List reflects a rough order of priority. Based on direction received from the Planning Commission, this order seeks to maintain safety~~ These projects represent a balance of safety, maintenance, and operational improvements for all modes, with a focus on those that provide the most benefit to Kenmore residents and leverage outside funds to the greatest extent possible. ~~It is recognized that the availability of outside funds is not always predictable. As a result, the projects included in the Six- and Twenty-Year Project Lists could be advanced should funding become available.~~

~~Table 3: Six-Year Project List~~

[1] It should be noted that it is unlikely that all of the projects on the 6-year list would receive funding ~~(the projects total to over $50 million)~~. However, at this time, it is uncertain which ones will move forward in the near term and which will not. All of these projects are high priority projects that the City would move forward with if funds are available.

~~Projects~~	~~Benefit to Kenmore~~	~~Primary Benefit~~	~~Total Cost~~	~~Expected City Contribution~~	~~Goal Met~~
~~West Sammamish River Bridge~~	~~Safely accommodate all users by rebuilding aging bridge; maintain freight mobility/economic prosperity~~	~~Regional, local~~	~~$20M~~	~~$1.8M~~	~~1, 6~~
~~SR 522 improvements (61st – 65th)~~	~~Improve capacity for vehicle, transit, bicycle, and pedestrian safety~~	~~Regional~~	~~$9.8M~~	~~$3.8M~~	~~1, 2, 6~~
~~SR 522 improvements (Lake Forest Park – 61st)~~	~~Improve capacity for vehicle, transit, bicycle, and pedestrian safety~~	~~Regional~~	~~$9.0M~~	~~$550K~~	~~1, 2, 6~~
~~Sidewalk and crossing program~~	~~Improve pedestrian safety and accommodation for all users~~	~~Local~~	~~$900K~~	~~$900K~~	~~1, 4~~
~~Downtown parking feasibility study~~	~~Evaluate existing and future parking needs in downtown and identify options for addressing these needs~~	~~Regional, local~~	~~$75K~~	~~$38K~~	~~1, 2, 3, 4, 6~~
~~61st Ave sidewalk replacement (east side)~~	~~Improve pedestrian safety and accommodation for all users~~	~~Local~~	~~$2.1M~~	~~$2.1M~~	~~1, 4~~
~~Neighborhood transportation plans~~	~~Develop plans that address neighborhood specific mobility challenges, including safety and circulation of all modes.~~	~~Local~~	~~$1.5M~~	~~$1.5M~~	~~1, 2, 3, 4, 6~~
~~Arterial restriping to add bike lanes on 73rd Ave (south of 192nd), 80th Ave, and Simonds Rd~~	~~Improve bicycle and pedestrian safety along key city arterials within existing right-of-way~~	~~Local~~	~~$360K~~	~~$360K~~	~~1, 3, 4~~
~~Juanita Drive (NE 143rd St to NE 155th Pl)~~	~~Improve bicycle/pedestrian safety along Juanita Drive, connecting between Kirkland and 155th~~	~~Regional, local~~	~~$6.5M~~	~~$3.2M~~	~~1, 2, 4~~

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~~*Projects*~~	~~*Benefit to Kenmore*~~	~~*Primary Benefit*~~	~~*Total Cost*~~	~~*Expected City Contribution*~~	~~*Goal Met*~~
~~Feasibility study for grade-separated crossing of SR 522~~	~~Understand infrastructure constraints and opportunities for next project~~	~~Local~~	~~$250K~~	~~$250K~~	~~1, 2, 4~~
~~68th Ave northbound right turn pocket extension~~	~~Improve local/regional circulation by improving the efficacy of 68th/SR522 intersection in moving vehicles~~	~~Regional, local~~	~~$2.6M~~	~~$500K~~	~~1, 2, 3, 6~~
~~175th Swamp Creek Bridge~~	~~Safely accommodate all users by rebuilding aging bridge; maintain freight mobility~~	~~Local~~	~~$810K~~	~~$80K~~	~~1, 6~~
	~~**Total**~~		~~**$53,895,000**~~	~~**$15,078,000**~~	

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4. Comprehensive Plan Update: Transportation Element (continued)

~~Figure T-20 Six Year Project List~~

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The full ~~list~~ set of projects ~~that the City would like to complete during the 20-year planning horizon (including the 6 year projects) are shown in **Table 7** and **Figures 20-23.** While all of these projects~~ would help complete the layered network and realize the City's transportation vision~~, many are deemed to be longer-term~~. The Pedestrian Facilities Plan and ADA Transition Plan will inform the sequence of projects for the Sidewalk Program and ADA Transition Plan Program, respectively, undertaken in both the six and twenty year time horizons. No projects are identified to maintain LOS, as all streets are forecast to operate within the City's adopted LOS standards.

Projects included on the Six Year Project List are considered community priorities that the City would move forward in the near term should funds become available. These projects provide a starting point for the City in developing its financially constrained Six Year ~~Capital Improvement Plan~~ CIP, which is updated every two years, and the annually updated 6-year Transportation Improvement Plan, and ~~is~~ are developed based on more updated knowledge related to project feasibility and funding availability.

~~The longer-term list (7-20+ years)~~ The Twenty Year Project List also represents important projects, but these projects tend not to have identified funding ~~or are only necessary to address future growth, rather than existing deficiencies~~. While the scope of the 20-year project list exceeds revenues from exclusively city sources over the next few decades, it has been sized to fit within reasonable assumptions for grants and other outside funding sources.

~~Table 4: Twenty Year Project List (Includes Six Year Projects)~~

~~Projects~~	~~Benefit to Kenmore~~	~~Primary Benefit~~	~~Total Cost~~	~~Expected City Contribution~~	~~Goal Met~~
~~**Near-Term (0-6 year) Projects**~~					
~~West Sammamish River Bridge~~	~~Safely accommodate all users by rebuilding aging bridge; maintain freight mobility/economic prosperity~~	~~Regional, local~~	~~$20M~~	~~$1.8M~~	~~1, 6~~
~~SR 522 improvements (61st – 65th)~~	~~Improve capacity for vehicle, transit, bicycle, and pedestrian safety~~	~~Regional~~	~~$9.8M~~	~~$3.8M~~	~~1, 2, 6~~
~~SR 522 improvements (Lake Forest Park – 61st)~~	~~Improve capacity for vehicle, transit, bicycle, and pedestrian safety~~	~~Regional~~	~~$9.0M~~	~~$550K~~	~~1, 2, 6~~
~~Sidewalk and crossing program~~	~~Improve pedestrian safety and accommodation for all users~~	~~Local~~	~~$900K~~	~~$900K~~	~~1, 4~~

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~~Projects~~	~~Benefit to Kenmore~~	~~Primary Benefit~~	~~Total Cost~~	~~Expected City Contribution~~	~~Goal Met~~
~~Downtown parking feasibility study~~	~~Evaluate existing and future parking needs in downtown and identify options for addressing these needs~~	~~Regional, local~~	~~$75K~~	~~$38K~~	~~1, 2, 3, 4, 6~~
~~61st Ave sidewalk replacement (east side)~~	~~Improve pedestrian safety and accommodation for all users~~	~~Local~~	~~$2.1M~~	~~$2.1M~~	~~1, 4~~
~~Neighborhood transportation plans~~	~~Develop plans that address neighborhood specific mobility challenges, including safety and circulation of all modes.~~	~~Local~~	~~$1.5M~~	~~$1.5M~~	~~1, 2, 3, 4, 6~~
~~Arterial restriping to add bike lanes on 73rd Ave (south of 192nd), 80th Ave, and Simonds Rd~~	~~Improve bicycle and pedestrian safety along key city arterials within existing right-of-way~~	~~Local~~	~~$360K~~	~~$360K~~	~~1, 3, 4~~
~~Juanita Drive (NE 143rd St to NE 155th Pl)~~	~~Improve bicycle/pedestrian safety along Juanita Drive, connecting between Kirkland and 155th~~	~~Regional, local~~	~~$6.5M~~	~~$3.2M~~	~~1, 2, 4~~
~~Feasibility study for grade-separated crossing of SR 522~~	~~Understand infrastructure constraints and opportunities for next project~~	~~Local~~	~~$250K~~	~~$250K~~	~~1, 2, 4~~
~~68th Ave northbound right turn pocket extension~~	~~Improve local/regional circulation by improving the efficacy of 68th/SR522 intersection in moving vehicles~~	~~Regional, local~~	~~$2.6M~~	~~$500K~~	~~1, 2, 3, 6~~
~~175th Swamp Creek Bridge~~	~~Safely accommodate all users by rebuilding aging bridge; maintain freight mobility~~	~~Local~~	~~$810K~~	~~$80K~~	~~1, 6~~
	~~**Total**~~		~~**$53.9M**~~	~~**$15.1M**~~	

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~~**Longer Term (7-20 year) Projects**~~					
~~Yellow standard pedestrian facilities (see **Figure 20**)~~	~~Improve pedestrian facility coverage (at least on one side of the street) on non-local streets and near schools~~	~~Local~~	~~$18.9M~~	~~$18.9M~~	~~1, 4~~
~~Yellow standard bicycle facilities (see **Figure 21**)~~	~~Improve safety and comfort for people biking around the City. Better connects Burke Gilman Trail with neighborhoods.~~	~~Local~~	~~$18.8M~~	~~$15.0M~~	~~1, 2, 4~~
~~Improved pedestrian crossings~~	~~Improve safety of pedestrians crossing busy streets, as well as near schools and transit stops; improved access to transit~~	~~Local~~	~~$650K~~	~~$650K~~	~~1, 2, 3, 4~~
~~Grade separated SR 522 crossing~~	~~Improve local circulation, while relieving pressure on regional system; provide better options for walking/biking across SR 522~~	~~Regional, local~~	~~$17.1M~~	~~$3.4M~~	~~1, 2, 3, 4, 6~~
~~Intersection treatments at 67th Ave/181st St and 67th Ave/175th St~~	~~Intersection treatments necessary to accommodate increased volumes related to the grade separated crossing~~	~~Local~~	~~$6.0M~~	~~$1.2M~~	~~1, 2, 3, 4, 6~~
~~Intersection treatment at 73rd Ave/ 192nd St, 80th Ave/192nd St, and 84th Ave/Simonds Rd~~	~~Intersection treatment to improve safety and vehicle operations; would become necessary as traffic volumes grow~~	~~Regional, local~~	~~$3.8M~~	~~$1.9M~~	~~1, 4, 5~~
~~Lakepointe Drive west (SR 522 to 68th Ave), including new intersection at 68th Ave~~	~~Improve local circulation, while relieving pressure on the regional system; providing more appealing options for travel in southwest downtown quadrant~~	~~Local~~	~~$7.5M~~	~~$3.7M~~	~~1, 2, 3, 4, 6~~
~~175th signal removal~~	~~Remove signal and make right in/right out only to improve safety~~	~~Local~~	~~$20K~~	~~$20K~~	~~1, 2, 3, 4, 6~~
	~~**Total**~~		~~**$72.8M**~~	~~**$44.8M**~~	

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~~*Beyond 20 Year Vision*~~					
~~Lakepointe Drive east (68th Ave to SR 522)~~	~~This project would only be needed if the southeast quadrant fully develops~~	~~Local~~	~~$7.5M~~	~~$3.7M~~	~~1, 2, 3, 4, 6~~

~~**Figure T-21 Sidewalk Priority Network – Yellow Standard**~~

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~~Figure T-22 Bicycle Priority Network – Yellow Standard~~

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~~**Figure 23 – Draft Auto Project List**~~

The expected City contribution noted in Table T-10 includes anticipated grant funds. It is recognized that the availability of outside funds is not always predictable. As a result, the projects included in the Six and Twenty Year Project Lists could be advanced should funding become available.

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Table T-10. Six- and Twenty-Year Project List

Projects	Benefit to Kenmore	Primary Benefit	Total Cost	Expected City Contribution	Goal Met
		Near Term (0-6 year) Projects			
SR 522 West B (West boundary to 61st Ave NE)	Improve pedestrian and bicycle accessibility, improve safety	Regional, Local	$2,200,000	$200,000	1, 3, 4, 7, 8
NE 181st St South Side (61st Ave NE-63rd Ave NE) Sidewalk	Improve pedestrian safety and encourage walking	Local	$1,300,000	$200,000	1, 3, 4, 7, 8
61st Ave NE Sidewalk Replacement (NE 181st St-62nd Ave NE)	Improve pedestrian safety, add accommodation for bicycles, enhance stream environment	Local	$5,110,000	$247,000	1, 3, 4, 7, 8
80th Ave NE Sidewalks (SR 522-NE 185th St)	Improve pedestrian and bicycle accessibility, improve safety	Local	$2,470,000	$247,000	1, 3, 4, 7, 8
NE 192nd St Sidewalks (73rd Ave NE - 75th Ave NE)	Improve pedestrian accessibility, improve safety	Local	$800,000	$39,000	1, 3, 4, 7, 8
Arrowhead Drive Sidewalks (NE 151st St - 64th Ave NE)	Improve pedestrian accessibility, improve safety	Local	$2,220,000	$222,000	1, 3, 4, 7, 8
84th Ave NE Sidewalks (NE 150th St - NE 155th St)	Improve pedestrian and bicycle accessibility, improve safety	Local	$2,370,000	$237,000	1, 3, 4, 7, 8
Lower Swamp Creek Bridge Replacement	Safely accommodate all uses by replacing aging bridge, maintain public access to residents.	Local	$4,100,000	$50,000	2, 6, 8
Pavement Preservation Program	Maintain the city's investment in roads and the safety for users	Local	$5,360,000	$5,360,000	2, 6, 8
ADA Transition Plan Program	Improve pedestrian safety, access, and accommodation for all users	Local	$2,750,000	$2,750,000	1, 3, 4, 7, 8

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Projects	Benefit to Kenmore	Primary Benefit	Total Cost	Expected City Contribution	Goal Met
Pedestrian Facilities Plan Program (Sidewalk Program)	Improve pedestrian circulation, accessibility, safety, and encourage walking.	Local	$2,000,000	$1,000,000	1, 3, 4, 7, 8
	Total		**$30,680,000**	**$10,552,000**	
	Longer Term (7-20 year) Projects				
Pedestrian Facilities Plan Program (Sidewalk Program)	Improve pedestrian circulation, accessibility, safety, and encourage walking.	Local	$31,000,000	$19,000,000	1, 3, 4, 7, 8
ADA Transition Plan Program	Improve pedestrian safety, access, and accommodation for all users	Local	$8,750,000	$8,750,000	1, 3, 4, 7, 8
Pavement Preservation Program	Maintain the city's investment in roads and the safety for users	Local	$12,000,000	$12,000,000	2, 6, 8
Lakepointe Development Mitigation	Intersection, pedestrian, bicycle, and access improvements to accommodate increased volumes related to the Lakepointe development. Improvements include: • Construction of a new road (Lakepointe Drive) from 65th Avenue/SR522 to 68th Avenue NE • Extending Lakepointe Drive east of 68th Avenue NE • Construction of the new Lakepointe Drive/68th Avenue intersection, including a new traffic signal • Elimination of the signal at 175th Street/68th Avenue • Installation of a signalized full-access intersection at 65th Avenue/SR 522	Local	To be determined	$0	1, 2, 3, 4, 7, 8
61st Ave NE/NE 193rd St Intersection	Intersection treatment to improve safety and vehicle operations	Local	$2,200,000	$220,000	1, 2, 4, 6, 7

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Projects	Benefit to Kenmore	Primary Benefit	Total Cost	Expected City Contribution	Goal Met
73rd Ave NE/NE 192nd St Intersection	Intersection treatment to improve safety and vehicle operations	Local	$3,700,000	$740,000	1, 2, 4, 6, 7
Nonmotorized crossing of SR 522	Improved nonmotorized access across SR 522 in the vicinity of 67th Avenue NE	Local	$17,160,000	$3,430,000	1, 2, 4, 6, 7
NE 181st Street/SR 522 East Connection	Improved local access between future developments near the Kenmore Park & Ride, SR 522, and downtown Kenmore	Local	$14,000,000	$2,800,000	1, 2, 4, 7
	Total		$88,810,000	$46,940,000	

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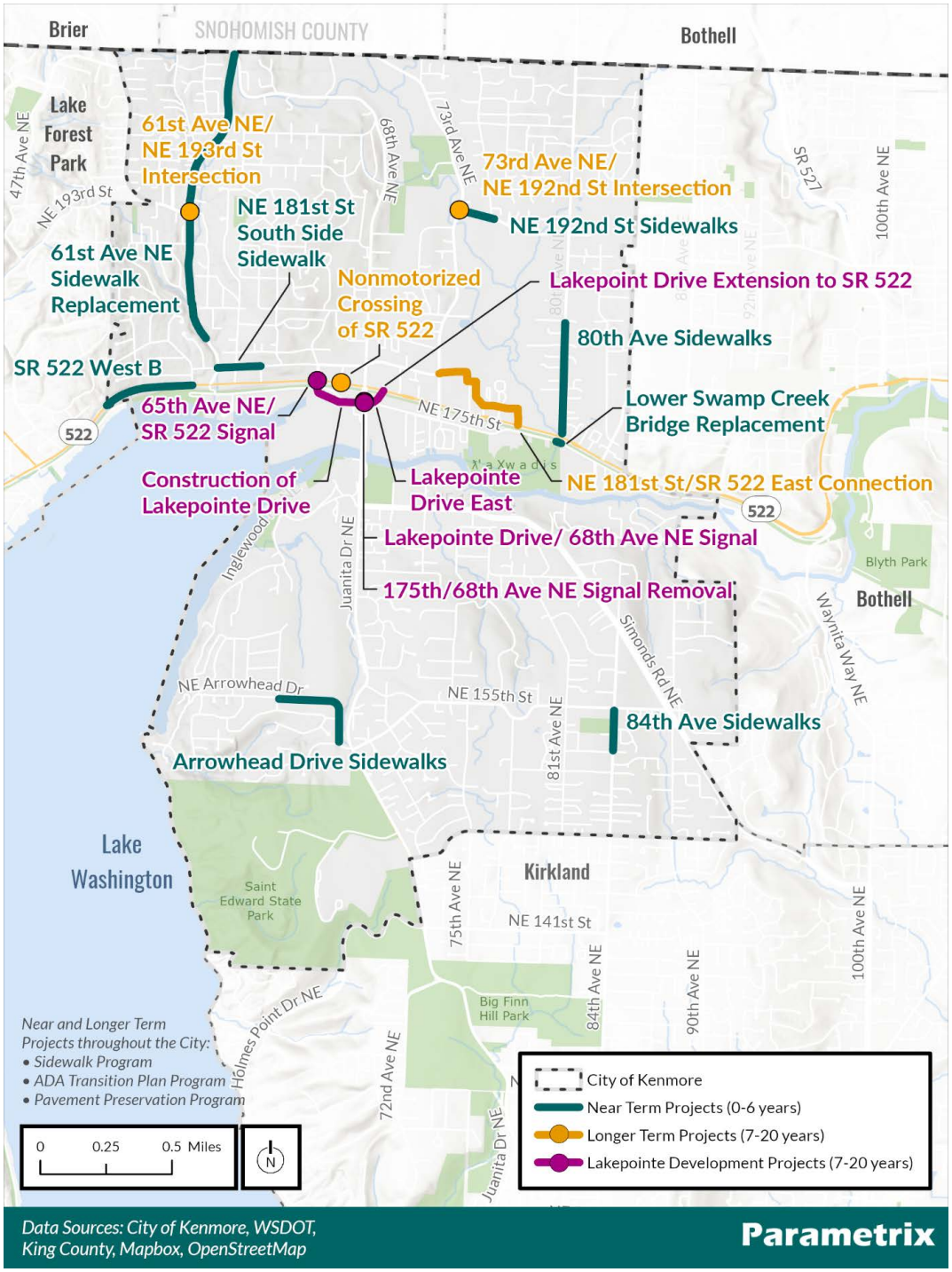
Figure T-18: Six- and Twenty-Year Transportation Improvement Projects



4. Comprehensive Plan Update: Transportation Element (continued)

Non-City Projects

State Facilities

There are projects outside of Kenmore's purview that will also affect travel in and around the City. WSDOT oversees planning and operations of SR 522, a Highway of Statewide Significance and Kenmore's major east-west corridor. The City coordinates with WSDOT and provides input on potential roadway projects on SR 522, but the State ultimately has control of this corridor.

Another State-controlled project affecting travel in Kenmore is the tolling of the SR 520 Bridge across Lake Washington. Future increases in this toll, or potential tolling of I-90 ~~(which has also been discussed),~~ may cause additional drivers to divert along Lake Washington, adding volume to Kenmore's already busy 68th Avenue / Juanita Drive and SR 522 corridors. The City will continue to monitor congestion changes along these corridors and work with the State to identify potential solutions.

Downtown Development South of SR 522

The southern two downtown quadrants between SR 522 and the Sammamish River (including the Lakepointe properties, Glacier/Cal Portland properties and properties within the Plywood Supply Special Study Area) have long been envisioned as sites for future master planned urban mixed-use development. These properties are subject to additional development regulations called P-Suffix regulations. P-Suffix regulations are property specific and include requirements for transportation infrastructure improvements that would need to be in place to accommodate full development.

Transportation infrastructure improvements described within the P-Suffix regulations include:

- Construction of a new road (Lakepointe Drive) from 65th Avenue/SR522 to 68th Avenue NE
- Extending Lakepointe Drive east of 68th Avenue NE
- Construction of the new Lakepointe Drive/68th Avenue intersection, including a new traffic signal.
- Elimination of the signal at 175th Street/68th Avenue.
- Installation of a signalized full-access intersection at 65th Avenue/SR 522.
- Construction of a pedestrian overcrossing of SR 522.

~~This Transportation Element does not assume that all of these properties will fully buildout within the 20-year horizon. Thus, many of the projects described above are not assumed within the 20-year horizon of this plan. Recognizing that the properties could eventually fully develop, the above projects are reflected in this plan as longer-term projects.~~

The approved Master Plan for the southern two downtown quadrants was originally approved in 1998 and did not account for many of the existing and planned transportation investments that currently and will influence travel to, from, and within Kenmore. For example, Sound Transit's Stride BRT service was not a consideration when assessing the impacts of these developments. Additional traffic modelling would be required in accordance with future planned development for these sites. Modifications to the transportation infrastructure improvements described within the

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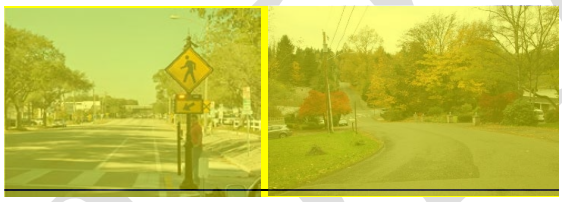
P-Suffix regulations and/or new projects or additional improvements, including revised SR522 connection points, may be necessary.

The City assumes that the Lakepointe property will redevelop within the next 20 years, accompanied by construction of the required transportation improvements. All of the required improvements are expected to be fully funded by the developer(s) of the Lakepointe properties, with the exception of the SR 522 pedestrian crossing. The City anticipates contributing to the cost of this improvement, which may include securing grant funding. Should the redevelopment not be fully realized in the 20-year horizon, the associated transportation improvements would not be implemented in that time frame.



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~~**CHAPTER 6: IMPLEMENTING THE TRANSPORTATION ELEMENT**~~

IMPLEMENTATION STRATEGIES

~~The recommended projects and programs of the Transportation Element were developed by travel mode, as described in previous chapters.~~ The Transportation policies would require new, continuing, or increased commitments of City resources to implement projects and programs, create educational or incentive programs, or coordinate with adjacent jurisdictions. Implementing the Transportation Element will require close coordination among the City departments, citizens, businesses, and other agencies within the region.

In order to guide the City's implementation of the ~~plan~~ transportation element, ~~priority~~ project priorities should be assigned to assist in assembling an updated six-year ~~Capital Improvement Program (~~CIP~~)~~, working toward the ~~2035~~ 2044 planning horizon. This ~~chapter~~ section summarizes the recommended future projects and documents the criteria used to prioritize ~~projects~~ them.

The Transportation Element is a living document and serves as the blueprint for transportation in Kenmore over the next several years. Several implementation steps should be initiated over the next couple of years to determine if changes are needed, or to reaffirm a particular strategy.

Overview of Costs and Revenues

A key GMA planning requirement is the concept of fiscal restraint in transportation planning. A fiscally constrained Transportation Element must first allow for operation and maintenance of existing facilities, and then capital improvements. To introduce fiscal constraint into the Transportation Element, an inventory of revenues and costs was undertaken to identify funds that are likely to be available for capital construction and operations.

The proposed Transportation Element for the City of Kenmore contains a variety of projects that will likely cost the city ~~between $67 and $117~~ approximately $118.5 million over 20 years. **Table ~~8~~ T-11** summarizes the costs of the major types of transportation improvements. The Transportation Element focuses on capital projects that will complete the layered network plan. The ~~plan~~ Transportation Element also includes ongoing pavement maintenance to ensure that the roadway network is kept in good condition.

Table ~~8~~ T-11. Costs of Kenmore Transportation Element (20~~+~~ years)

		Estimated Costs			
Project Needs	***Description***	***2024-2030***	***2030-2044***	***Total ~~Cost~~***	***Expected City Cost***
Auto/Truck Priority Projects	Bridges, traffic signals, intersection channelization, SR 522 improvements	$6,300,000	$19,900,000	~~$40-50M~~ $26,200,000	~~$5-10M~~$3,810,000

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		Estimated Costs			
Pedestrian Projects	Sidewalks, crossings, ADA Improvements	$19,020,000	$39,750,000	~~$20-30M~~$58,770,000	~~$20-30M~~$32,692,000
~~Bicycle Projects~~	~~Bike boulevards, bike lanes, crossings~~			~~$15-20M~~	~~$12-17M~~
Multimodal Projects	~~Multimodal corridors,~~ SR 522 crossing~~s~~	$0	$17,160,000	~~$40-50M~~ $17,160,000	~~$10-20M~~$3,430,000
Pavement Maintenance	Overlay and pavement repair	$5,360,000	$12,000,000	~~$20-40M~~$17,360,000	~~$20-40M~~$17,360,000
	Total			**$~~135-190M~~ 119,490,000**	**$~~67-117M~~ 57,492,000**

*Costs denoted in millions~~;~~ 2022 dollars used (no escalation)

~~It is worthwhile to note that the City of Kenmore has spent around $5 million annually~~ Revenues for transportation capital and operations include those from outside sources and grants, general city funds, real estate excise taxes, impact fees, photo enforcement fees, and gas tax receipts. If the city were able to maintain this level of revenue, the City could afford ~~around~~ between $80-100 million in transportation projects over the next 20 years. Other potential revenue sources include:

- Proceeds from General Obligation Bonds
- Creation of LIDs
- Reciprocal impact fees with adjacent jurisdictions
- Business license fee per employee

Table T-12 identifies the anticipated funding sources for transportation projects in the City through 2044.

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Table T-12. Costs of Kenmore Anticipated Transportation Funding Sources (20 years)

	Estimated Funding Level		
Funding Sources	***2024-2030***	***2030-2044***	***Total***
Local (City), including Transportation Impact Fees	$10,552,000	$46,940,000	$57,492,000
Other Agencies/Jurisdictions (State and Local)	$0	$0	$0
Grants (State and Federal)	$20,128,000	$41,870,000	$61,998,000
New Taxes and Fees	$0	$0	$0
Total	**$30,680,000**	**$88,810,000**	**$119,490,000**

The comparison of revenues to costs indicates that the city will need to carefully prioritize its projects, since not all of the transportation needs are likely to be affordable with existing revenue sources during the 20-year period. If this occurs, the City has several options:

- Increase the amount of revenue from existing sources, including impact fees, real estate excise taxes, transportation benefit district, or increased general fund revenues.
- Adopt new sources of revenue ~~(see text box on following page).~~
- Lower the LOS ~~level of service~~ standard, and therefore reduce the need for some transportation improvements.

~~*WHAT ARE POTENTIAL NEW REVENUE SOURCES?*~~

- ~~Proceeds from General Obligation Bonds~~
- ~~Creation of Local Improvement Districts~~
- ~~Reciprocal impact fees with adjacent jurisdictions~~
- ~~Business license fee per employee~~

The city can explore the feasibility and likely revenue amounts from these or other sources as the Transportation Element ~~plan~~ is implemented over the next several years. A summary of potential project funding sources is included in Appendix D-5.

~~Note that the city could also weigh changing the land use element to reduce the amount of development planned (and thus reduce the need for additional public facilities). However, in a community such as Kenmore that is largely built out, land use changes would not likely result in reduced facility needs.~~

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Setting Priorities

Project prioritization is needed to help identify when best to fund and implement the projects since funding is limited. Criteria were established to help prioritize the projects and implementation. These unweighted criteria include: ~~not listed in any priority order, are identified in the text box below.~~

Criteria for Project Prioritization

(1) Meets City's transportation goals

~~(2) **Goal 1:** Provide a complete transportation network serving local and regional circulation needs, safely accommodating all users.~~

~~(3) **Goal 2:** Coordinate with other regional entities to develop and operate the transportation system.~~

~~(4) **Goal 3:** Promote a transportation system that contributes to fiscal and environmental sustainability.~~

~~(5) **Goal 4:** Encourage transportation options and strategies that reduce the need for driving.~~

~~(6) **Goal 5:** Maintain safe air travel services in Kenmore.~~

~~(7) **Goal 6:** Facilitate freight mobility and economic prosperity.~~

(2) Maintains/improves safety of traveling in Kenmore

(3) Provides improved mobility and accessibility within ~~tangible benefits to~~ Kenmore ~~residents~~

(4) Leverages non-city (federal, state, private) funds freeing up city revenues for additional projects

(5) Responds to capacity needs using strategies identified in the Comprehensive Plan.

Using these criteria, the identified ~~recommended~~ projects will need to be evaluated and ranked based on how well each could meet the criteria. Since one of the criteria relates to funding availability, priorities may shift over time as fund sources change.

High priority projects for Kenmore are those that meet multiple criteria in terms of effectiveness, benefit to the community, and ability to be implemented. These attributes will allow the City to take advantage of a variety of public and private funding sources to complete key projects.

~~MONITORING AND EVALUATION~~

~~The Transportation Element is a long range plan that enables the City to plan for its current and future transportation needs. Nonetheless, the transportation network is dynamic, constantly changing due to circumstances beyond the scope and influence of this plan. Hence, regular updates are necessary to ensure the plan remains current and relevant. The Transportation Element includes the following actions to monitor and evaluate the progress of implementing the plan.~~

~~Bi-Annual Mobility Report Card~~

~~A bi-annual mobility report card will be developed to document progress towards plan implementation and to monitor the transportation system performance. The City will use this information to inform the public regarding the City's actions, and results, related to the Transportation Element. The report card will also provide a basis for future updates of the Transportation Element.~~

~~The report card is expected to report on the following topics:~~

- ~~Land Use and Transportation Trends – These data will describe general land use and transportation trends within Kenmore. Information will include:~~
- ~~Current population and employment levels and growth rates,~~
- ~~Summary of yearly development activity, and~~
- ~~Summary of growth in traffic volumes, transit service and other trends~~
- ~~Transportation Performance – These data will focus on documenting the current performance of the transportation system, by mode. Information will include:~~
- ~~Transit route ridership (from KC Metro and Sound Transit)~~
- ~~Park-and-ride lot utilization~~
- ~~On-street parking utilization in downtown and nearby park-and-ride locations~~
- ~~Traffic volumes~~
- ~~Collisions~~
- ~~Traffic level of service (auto/truck priority corridors)~~
- ~~Pedestrian and bicycle volumes~~
- ~~Pavement Maintenance Ratings~~
- ~~Project Implementation Status – These data will summarize the city's progress towards implementing the priority network improvements recommended in the Transportation Element. Information is expected to include:~~
- ~~Auto/truck facilities constructed~~
- ~~Pedestrian facilities constructed~~
- ~~Bicycle facilities constructed~~
- ~~Miles of Pavement overlays~~

~~The report card will provide the necessary information to help the city adjust transportation priorities and to facilitate updates to the Transportation Element every few years.~~

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ATTACHMENT 3

~~TABLE CF-C~~
~~TRANSPORTATION CAPITAL IMPROVEMENTS~~
~~CITY OF KENMORE~~
~~2022-2035 AND BEYOND FISCALLY UNCONSTRAINED LIST~~

~~PROJECT DETAIL~~	~~TOTAL DOLLAR AMOUNT~~
~~West Sammamish River Bridge~~	~~41,495,000~~
~~SR-522 Improvements (Lake Forest Park-61st)~~	~~9,000,000~~
~~Sidewalk and Crossing Program~~	~~900,000~~
~~Downtown Parking Feasibility Study~~	~~75,000~~
~~61st Ave. Sidewalk Replacement (East Side)~~	~~3,500,000~~
~~61st Ave. Sidewalk Replacement (West Side)~~	~~1,500,000~~
~~Arterial Restriping to add Bike Lanes on 73rd Ave. (south of 192nd), 80th Ave. and Simonds Road~~	~~360,000~~
~~Juanita Drive (NE 143rd St. to NE 170th St.)~~	~~16,845,000~~
~~Feasibility Study for Grade-Separated Crossing of SR 522~~	~~500,000~~
~~68th Ave. Northbound Right Turn Pocket Extension~~	~~1,600,000~~
~~175th Lower Swamp Creek Bridge~~	~~3,000,000~~
~~Yellow Standard Pedestrian Facilities~~	~~18,900,000~~
~~Yellow Standard Bicycle Facilities~~	~~18,800,000~~
~~Improved Pedestrian Crossings~~	~~650,000~~
~~Grade Separated SR522 Crossing~~	~~17,100,000~~
~~Intersection Treatments at 67th Ave./181st St. and 67th Ave./175th St.~~	~~6,000,000~~
~~Intersection Treatments at 73rd Ave./192nd St., 80th Ave./192nd St., and 84th Ave./Simonds Rd.~~	~~3,800,000~~
~~Lakepointe Drive West (SR522 to 68th Ave.), including new intersection at 68th Ave.~~	~~7,500,000~~
~~175th Signal Removal~~	~~20,000~~
~~Lake Pointe Dr. East (68th Ave. to SR 522)~~	~~7,500,000~~
~~**TOTAL**~~	~~$159,045,000~~

TABLE CF-C
TRANSPORTATION CAPITAL IMPROVEMENTS
CITY OF KENMORE

2024-2044

Projects	Total Cost (2022 $)
SR 522 West B (West boundary to 61st Ave NE)	$2,200,000
NE 181st St South Side (61st Ave NE-63rd Ave NE) Sidewalk	$1,300,000
61st Ave NE Sidewalk Replacement (NE 181st St-62nd Ave NE)	$5,110,000
80th Ave NE Sidewalks (SR 522-NE 185th St)	$2,470,000
NE 192nd St Sidewalks (73rd Ave NE - 75th Ave NE)	$800,000
Arrowhead Drive Sidewalks (NE 151st St - 64th Ave NE)	$2,220,000
84th Ave NE Sidewalks (NE 150th St - NE 155th St)	$2,370,000
Lower Swamp Creek Bridge Replacement	$4,100,000
Pavement Preservation Program	$17,360,000
ADA Transition Plan Program	$11,500,000
Pedestrian Facilities Plan Program (Sidewalk Program)	$33,000,000
Lakepointe Development Mitigation	To be determined/Developer Funded
61st Ave NE/NE 193rd St Intersection	$2,200,000
73rd Ave NE/NE 192nd St Intersection	$3,700,000
Nonmotorized crossing of SR 522	$17,160,000
NE 181st Street/SR 522 East Connection	$14,000,000
Total	$119,490,000

ATTACHMENT 4

APPENDIX D - 1: TRAFFIC MODELING ASSUMPTIONS AND LEVEL OF SERVICE REPORTS

This appendix describes the traffic modeling assumptions used to forecast future traffic operations in the City of Kenmore and describes the level of service (LOS) calculations at 19 intersections for year 2022 Existing conditions, 2030 year No Action conditions, year 2044 No Action conditions, and year 2044 With Improvements conditions.

Traffic Modeling Assumptions

Data Collection

Turning Movement Counts

Table 1 summarizes the 19 intersections in the City were evaluated for LOS operations, including where PM peak period turning movement counts (TMCs) were available and intersections where counts were needed. TMCs were collected in 15-minute increments and included heavy vehicle percentage and pedestrian and bicycle volumes. The City provided TMC data for the remaining two locations.

Table 1: Study Intersections – Proposed Data Collection for PM Peak Period

#	Intersection	Collected 1/25/22	PM Peak Period to be collected	Data provided by City
1	NE 193rd St / 61st Ave NE	x	PM 16:00 to 18:00	
2	SR 522 / 61st Ave NE	x	PM 16:00 to 18:00	
3	NE 181st St / 65th Ave NE	x	PM 16:00 to 18:00	
4	NE 175th St / 65th Ave NE	x	PM 15:00 to 17:00	
5	NE 181st ST / 68th Ave NE	x	PM 15:45 to 17:45	
6	SR 522 / 68th Ave NE	x	PM 16:00 to 18:00	
7	NE 175th St / 68th Ave NE	x	PM 15:00 to 17:00	
8	NE 170th St / 68th Ave NE	-	-	Gridsmart
9	NE 155th Pl / Juanita Drive NE	x	PM 16:45 to 18:45	
10	NE 153rd Pl / Juanita Drive NE	x	PM 17:00 to 19:00	
11	NE 192nd St / 73rd Ave NE	x	PM 15:00 to 17:00	
12	NE 181st St / 73rd Ave NE	x	PM 16:00 to 18:00	
13	SR 522 / 73rd Ave NE	x	PM 16:00 to 18:00	
14	NE 192nd St / 80th Ave NE	x	PM 15:45 to 17:45	
15	SR 522 / 80th Ave NE	x	PM 16:00 to 18:00	
16	SR 522 /83rd PL NE	x	PM 16:00 to 18:00	
17	Simonds Road NE / 84th Ave NE	x	PM 15:30 to 17:30	
18	NE 155th St / 84th Ave NE	x	PM 16:00 to 18:00	
19	NE 155th St / Simonds Road NE	-	-	Gridsmart

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Average Daily Traffic

Average daily traffic (ADT) volumes were provided by the City and the Washington State Department of Transportation (WSDOT). ADT volumes from WSDOT were acquired from https://www.wsdot.wa.gov/data/tools/geoportal/?config=traffic Table 2 illustrates locations and sources of ADT data.

Table 2: Average Daily Traffic Counts – Data Location and Source

#	Roadways	Data Source	Location of Counts
1	SR 522	WSDOT Geoportal	west of 68th Avenue
2	SR 522	WSDOT Geoportal	east of 68th Avenue
3	68th Ave NE	City	175th St & 68th Avenue
4	68th Ave NE	City	68th Av btw 181st St and 182nd St 11/12/2021
5	Juanita Drive	City	Juanita Dr btw 166th Ct and 170th St (Cont. Count)
6	NE 170th	City	170th St btw Juanita Dr and 70th Av (Cont. Count)
7	61st Ave NE	City	61st Av n/o 190th St, 61st Av n/o 193rd St, both 6/7/2021
8	80th Ave NE	City	80th Av n/o 192nd St 8/16/2021
9	Simonds Rd NE	City	155th St & Simonds Rd
10	73rd Ave NE	City	73rd Av n/o 185th St 3/15/2021

Historical Count Data

The City also provided historic TMCs collected in 2013. This data was used to help validate the existing conditions EMME model. This data was also used to make possible adjustments to future travel patterns. It was noted that current construction projects, including the West Sammamish River Bridge project and the Juanita Drive NE Sidewalk and Bicycle Improvement projects, have heavily influenced route choice. The City is expecting route choices and travel patterns to change once construction on these projects in complete.

Pedestrian and Bicycle Volumes

Pedestrian and bicycle volumes at additional locations not collected with the TMCs was provided by the City. Pedestrian and bicycle data from WSDOT's Bicycle and Pedestrian Count Portal https://wsdot.wa.gov/data/tools/bikepedcounts/ was evaluated to confirm the data was relevant and useful.

Crash Data

Citywide crash data was provided by the City for the years 2016 to 2020. They City also provided all the available data for 2021.

Traffic Operations Analysis

Traffic operations analysis for this project included PM peak hour conditions for the following years:

- Existing Conditions (2022)
- Year 2030
- Year 2044

Intersections were analyzed based on WSDOT's analysis policies and Synchro protocols (August 2018).

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Synchro 11 software was used to analyze the operation of signalized and stop-controlled intersections.

Existing Conditions

Existing conditions traffic volumes were baselined using the following approach:

- **Pandemic adjustments**: Given the change in travel patterns and traffic volumes since the beginning of the COVID pandemic in March 2020, turning movement counts taken after March 2020 were adjusted as needed. Data collected as part of this study was compared to counts taken prior to March 2020 to gauge changes in traffic growth and potential changes in mode. If current counts were significantly lower than pre-March 2020 conditions, volumes were adjusted to pre-pandemic conditions using data from nearby WSDOT permanent traffic recorders (PTR) and other historic traffic data available from the City.
  As future traffic volumes were built from forecasting from baseline conditions, the goal was to model an existing 2022 baseline condition that best reflects overall trends from the past several years. Overestimating volumes would lead to future forecasts that may be too high, potentially leading to infrastructure that is overbuilt for future conditions. Conversely, underestimating baseline conditions could lead to future forecasts that may be too low, leading to infrastructure that would be potentially underbuilt for future conditions.
- **Seasonal adjustments:** Existing volumes were seasonally adjusted based on information from WSDOT and the City.
- **Signal timing** - Existing signal timing plans for signalized intersections were used to model existing conditions. Existing signal timing cards were provided by the City.
- **Geometrics** – The roadway network and geometrics for the 2022 Existing Condition reflected current conditions.

Future Conditions

The goal of modeling future conditions was to identify demands placed on the existing transportation infrastructure and services by expected growth in traffic. For the 2030 Future Baseline conditions, the existing Synchro model was updated to reflect forecasted growth. Projects needed to maintain minimum LOS standards under the 2030 conditions were identified and analyzed in Synchro. To model 2044 conditions, the 2030 Build Synchro models were updated to reflect forecasted growth as described in the Land Use Element and Appendix D-2. Projects needed to maintain minimum LOS standards under the 2044 condition were identified and analyzed in Synchro. Cycle lengths, offsets and splits were optimized for all future Synchro models.

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Level of Service Reports

The 2044 With Improvements conditions include channelization and signal timing changes at 7 intersections. The 2022 volumes represent counts collected in January 2022. It was assumed that construction on Juanita Drive during January 2022 influenced route choices between Juanita Drive and Simonds Road. Post-construction, it is expected that travel patterns along Juanita Drive and Simonds Road would return to pre-construction conditions. 2030 traffic forecasts and analysis was adjusted to reflect such changes.

For the 2030 scenario and for both 2044 future scenarios, volumes represent traffic forecasts developed using the Kenmore City Model and the traffic growth assumptions described in Appendix D-2. For the 2044 No Action LOS calculations assume the P-suffix transportation projects defined as part of the Lakepoint Mixed Use Master Plan The 2044 With Improvements LOS calculations assume the improvements recommended as a part of this plan are in place.

As noted in the Transportation Element, the City measures LOS at the corridor level on SR 522 and 68th

Avenue / Juanita Drive / Simonds Road rather than at the intersection level. Though a single intersection on these corridors may experience longer delays than indicated by the standard, the overall concern for residents and travelers on these roadways is to get through multiple intersections in a reasonable amount of time. For this reason, average delay along the corridor is a more meaningful level of service standard than the experience at a single intersection. Table 3 summarizes these average delay calculations for existing and forecasted conditions.

Table 3. Corridor LOS Values (weighted averages)

Corridor	2022 Existing	2030 No Action	2044 No Action	2044 with improvements
SR 522[1]	D / 35.5	D / 53.9	E / 72.8	E / 64.1
68th Ave Corridor[2]	D / 46	D / 54.2	F / 84.5	E / 72.7

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[1] Intersections: 61st Ave NE, 68th Ave NE, 73rd Ave NE, 80th Ave NE, 83rd Ave NE
[2] Intersections: NE 181st St, SR 522, NE 175th St, NE 170th St

ATTACHMENT 5

APPENDIX D - 2: LAND USE MAPS

Figures 1 through 10 depict employment and housing land uses by traffic analysis zone (TAZ) around Kenmore. The 2018 maps represent the base year for the travel model, which was reviewed for consistency with the city's data on employment and housing. The 2044 maps show the forecasted future levels of jobs and housing based on the amount of growth assigned by the Puget Sound Regional Council (PSRC) local target representation data set that was reviewed by the City and adjusted within City limits based on more detailed information about known development and growth targets in specific parcels. The growth maps display where employment and housing growth is expected to occur around Kenmore. This land use growth informs the City on where to expect increases in travel volumes and translates into future traffic levels through the travel demand forecasting process.

	Housing Units	Employment
2018	9,429	~~3,797~~ 4,012
2044	12,499	7,212
Growth	33%	90%

Travel Demand Forecasting
The PSRC regional Activity Based Travel Demand model will be used for existing baseline and future travel demand forecasting.

Validation
The underlying input assumptions of the existing conditions were reviewed and updated to reflect appropriate level of detail for the City. The existing traffic analysis zones (TAZs) in the PSRC model were scaled to match the City's data on existing employment and housing. The existing conditions model was validated against available count data. To improve the model's performance, the following adjustments were made:

- Updated the quantity and location of housing units and employment estimates within the model area by zone.
- Calculated households for use in the model by assuming a 5 percent housing unit vacancy rate after discussing the conversion with PSRC staff.
- Adjusted PM peak hour vehicle trip generation rates by comparing with Institute of Traffic Engineers (ITE) most recent trip generation rates, local traffic studies, or vehicle driveway counts.
- Calibrated the roadway network parameters (speeds, capacities, and functional class) to better reflect the routes that people use throughout the model area.
- Adjusted the number of the trips that enter or exit the model area based on observed vehicle counts.

Future land use was developed using a variety of sources including city staff input, growth assigned by the PSRC Land Use Vision data set, and previous land use forecasts from the 2014 Transportation Element Update. Future land was allocated through the following process:

- Using the 2050 PSRC Land Use Vision representation data, provided by regional model TAZs, the land use for the Kenmore model was scaled to match City-approved growth targets for housing units and employment.
- Housing units and employment data was disaggregated to the Kenmore TAZ system using land use intensity ratios created for the 2014 Transportation Element update and discussions with City staff.
- The 2050 land use by Kenmore TAZ produced in the previous step was reviewed by city staff and the project team during an in-person working session. Based on specific knowledge of future

developments and zoning allowances as well as review of aerial imagery, housing unit and employment growth was reallocated between Kenmore TAZs.

- Any specific housing unit and/or employment growth for a Kenmore TAZ not established during the working session was assumed to have the same amount of growth as the 2030 land use forecast.
- Housing units were converted to households for use in the PSRC model using a 5 percent vacancy rate that was arrived at in coordination with PSRC staff.

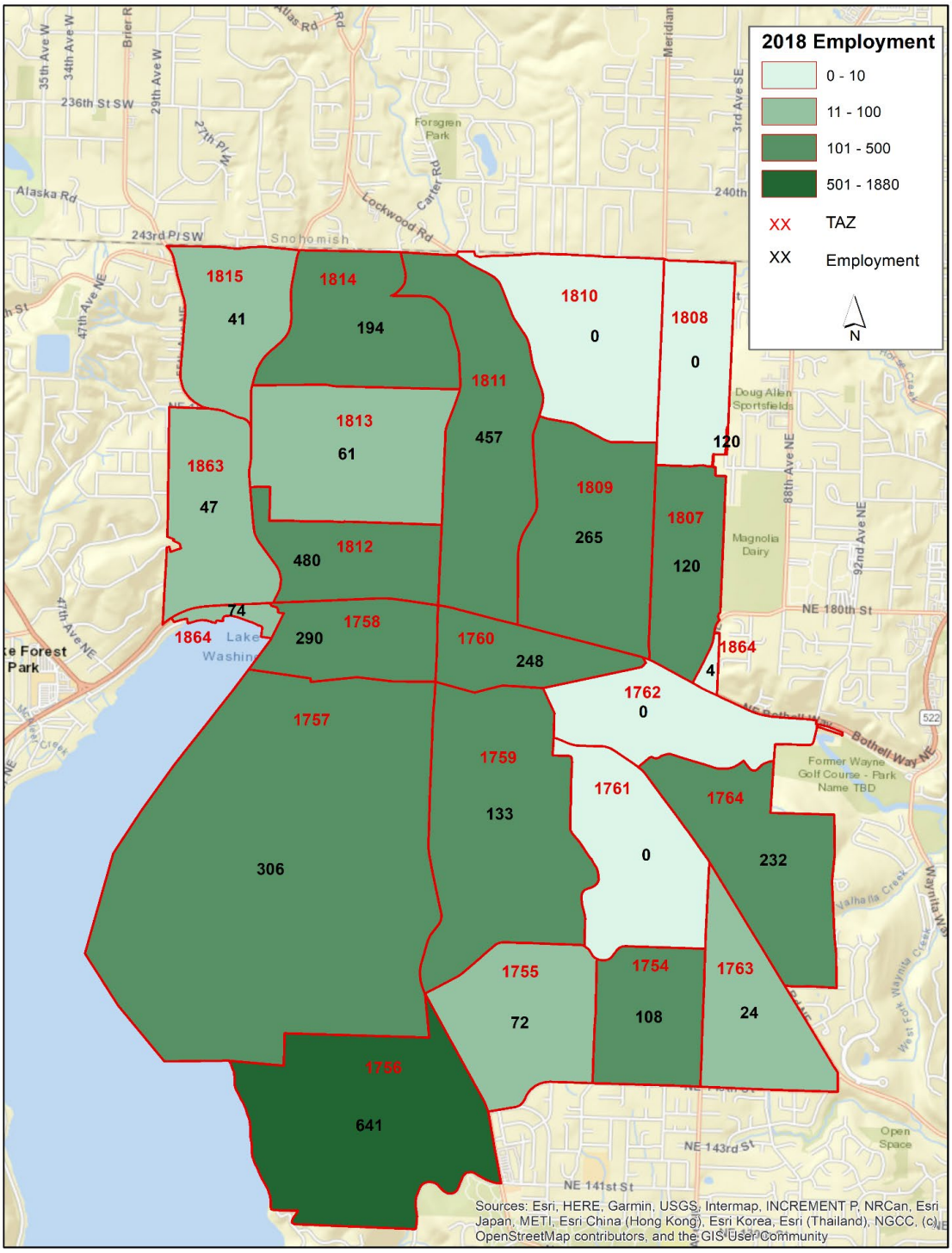
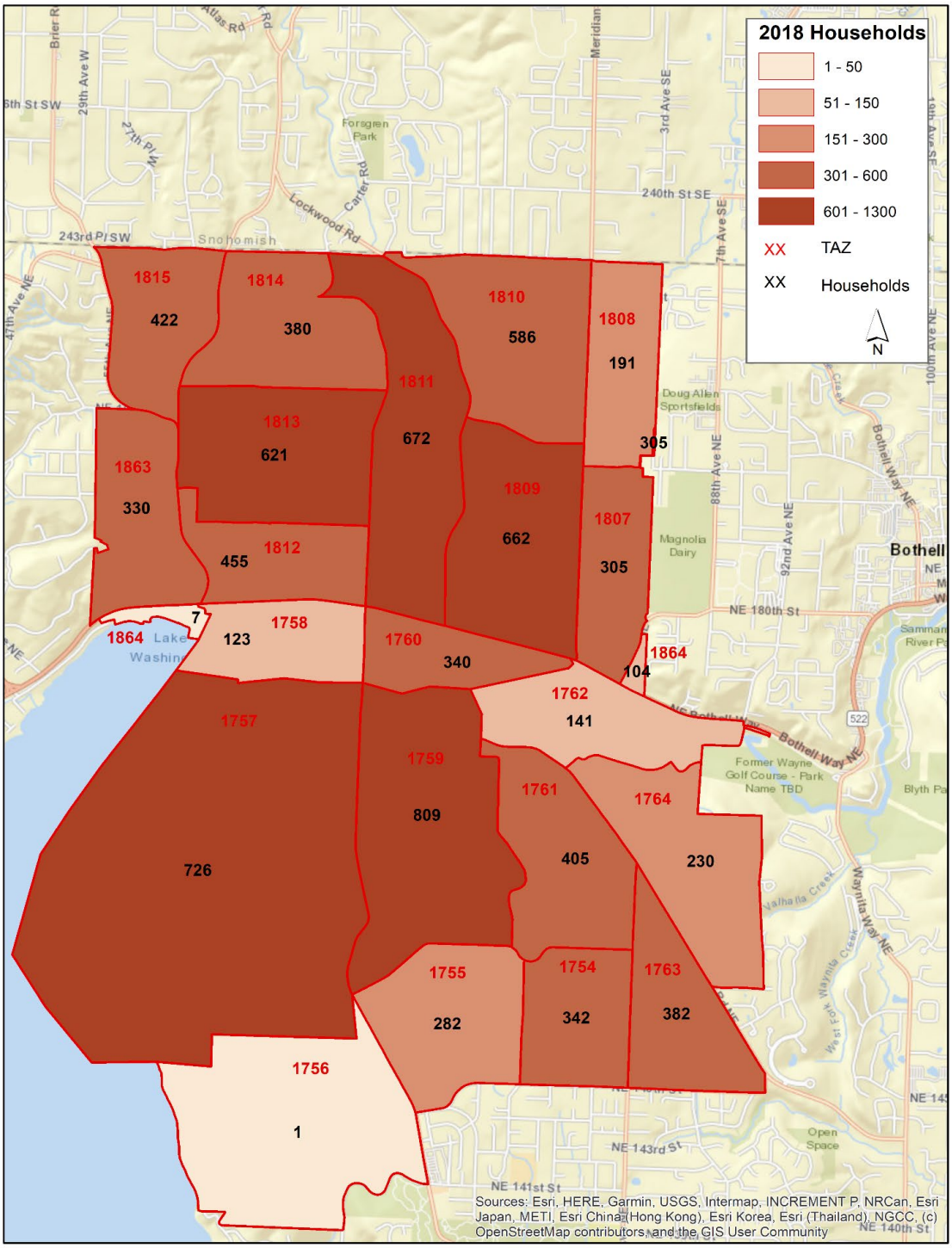


Figure 1. 2018 Employment in Kenmore by TAZ



This map reflects PSRC model input values for households that were arrived at through assuming a 5% vacancy rate of housing units.

Figure 2. 2018 Households in Kenmore by TAZ

4. Comprehensive Plan Update: Transportation Element (continued)

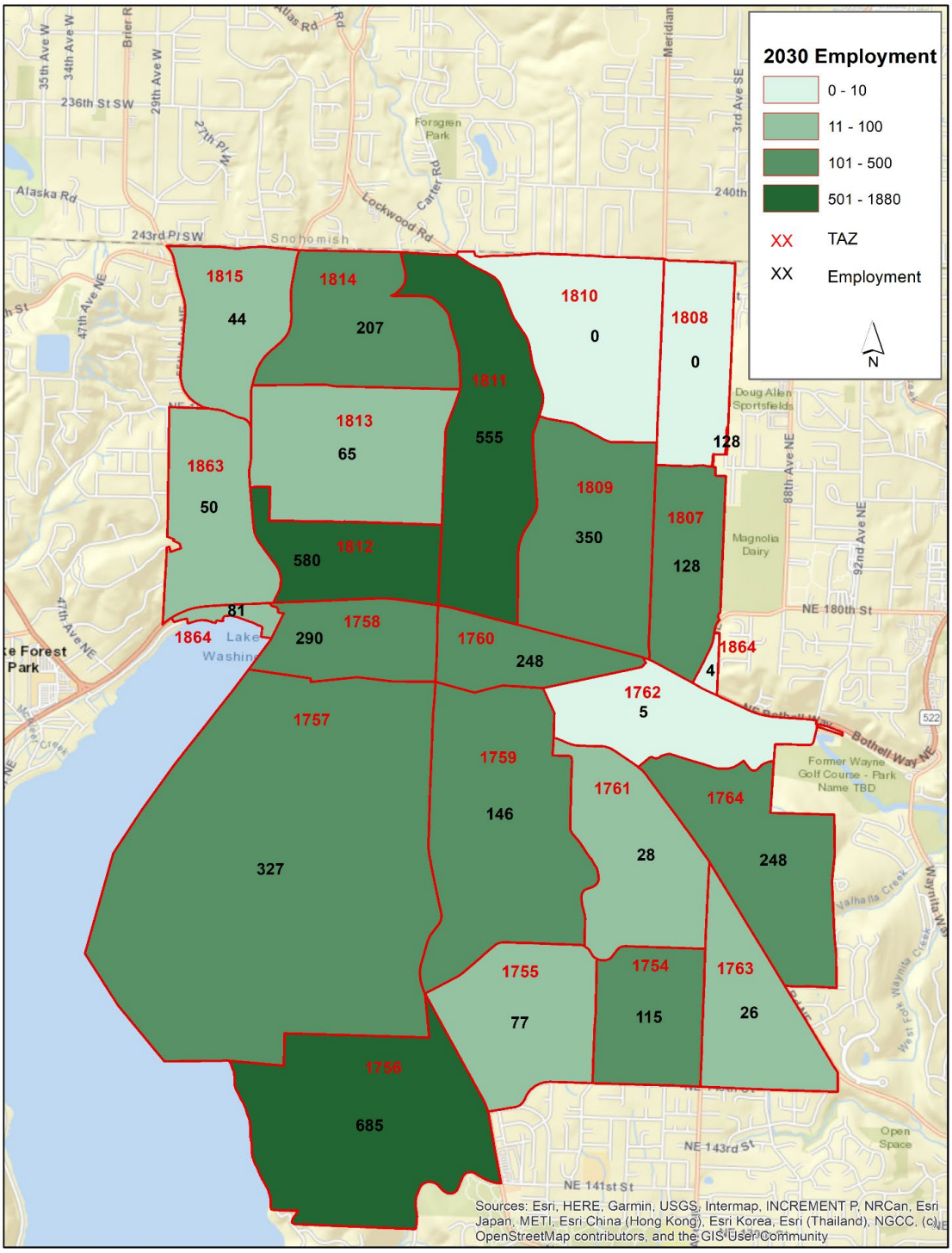
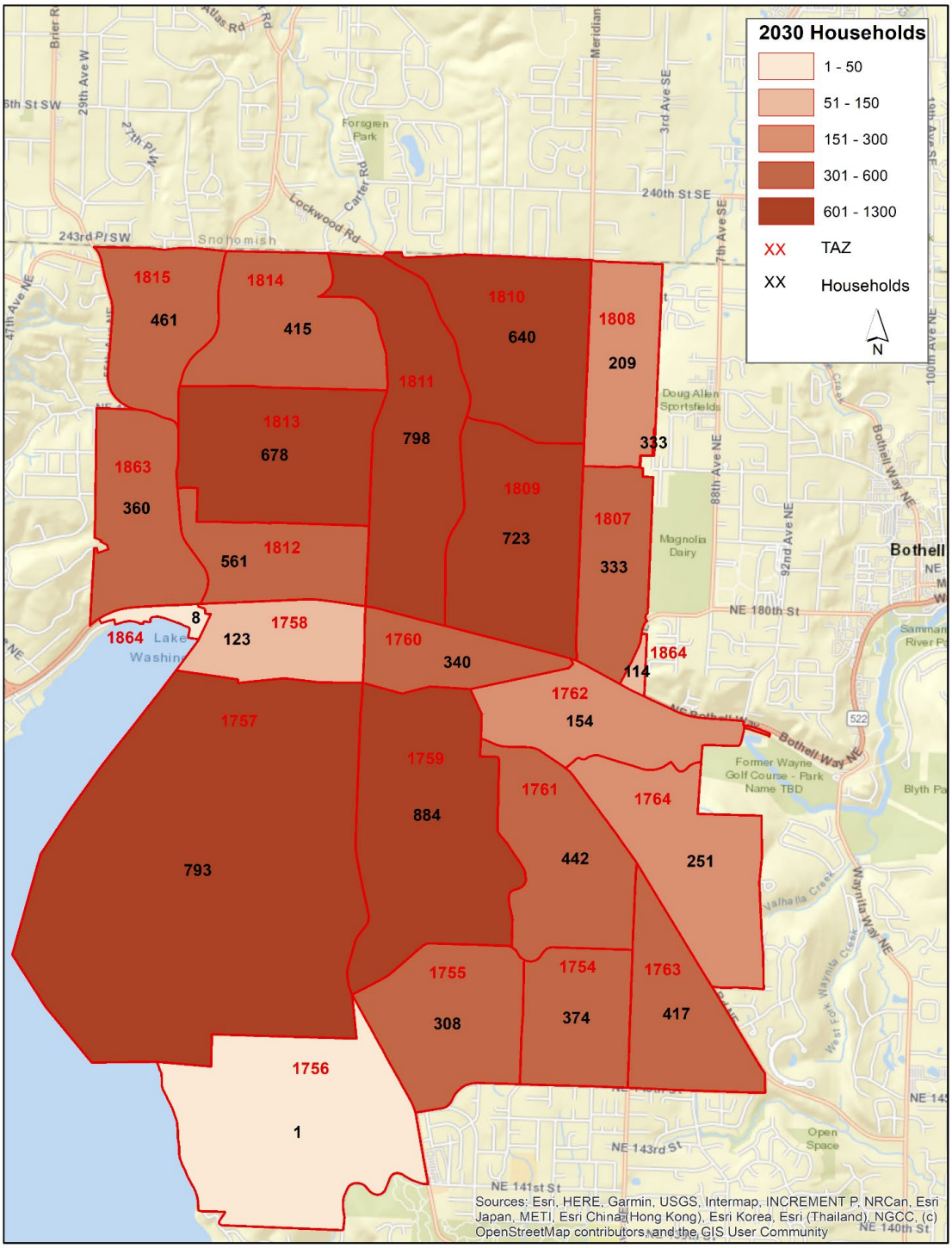


Figure 3. 2030 Employment in Kenmore by TAZ

4. Comprehensive Plan Update: Transportation Element (continued)



This map reflects PSRC model input values for households that were arrived at through assuming a 5% vacancy rate of housing units.

Figure 4. 2030 Households in Kenmore by TAZ

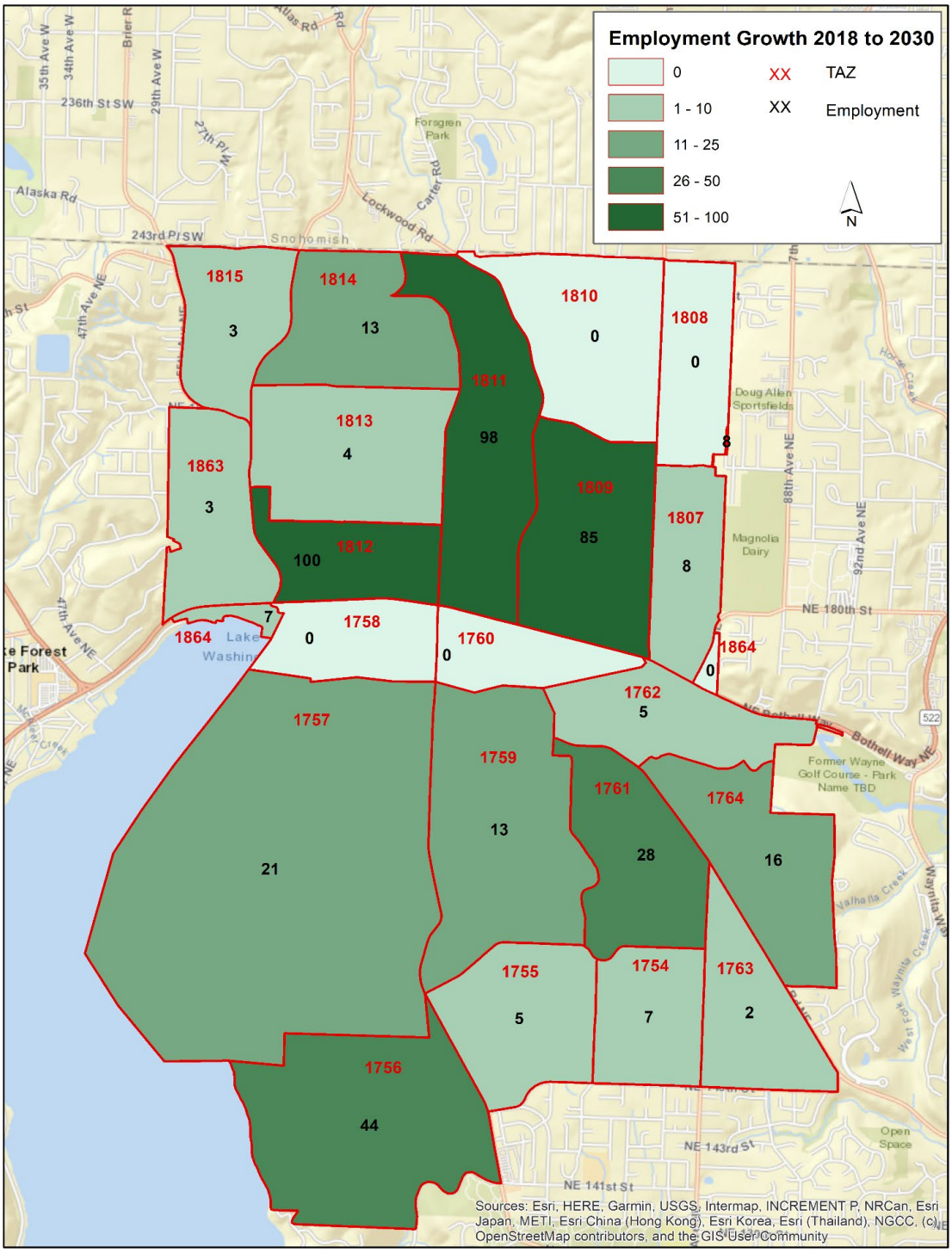


Figure 5. 2018-2030 Employment Change in Kenmore by TAZ

4. Comprehensive Plan Update: Transportation Element (continued)

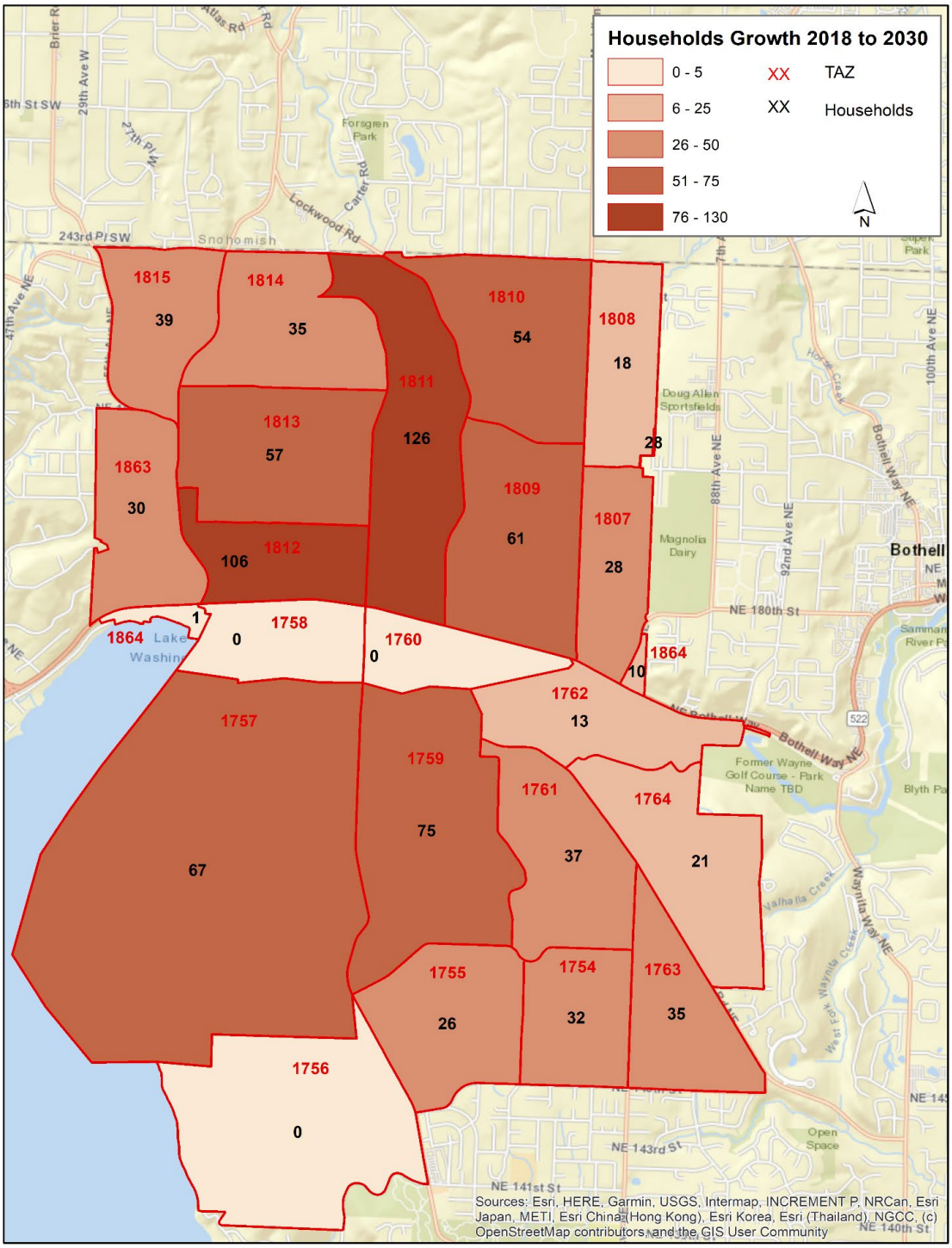


Figure 6. 2018-2030 Households Change in Kenmore by TAZ

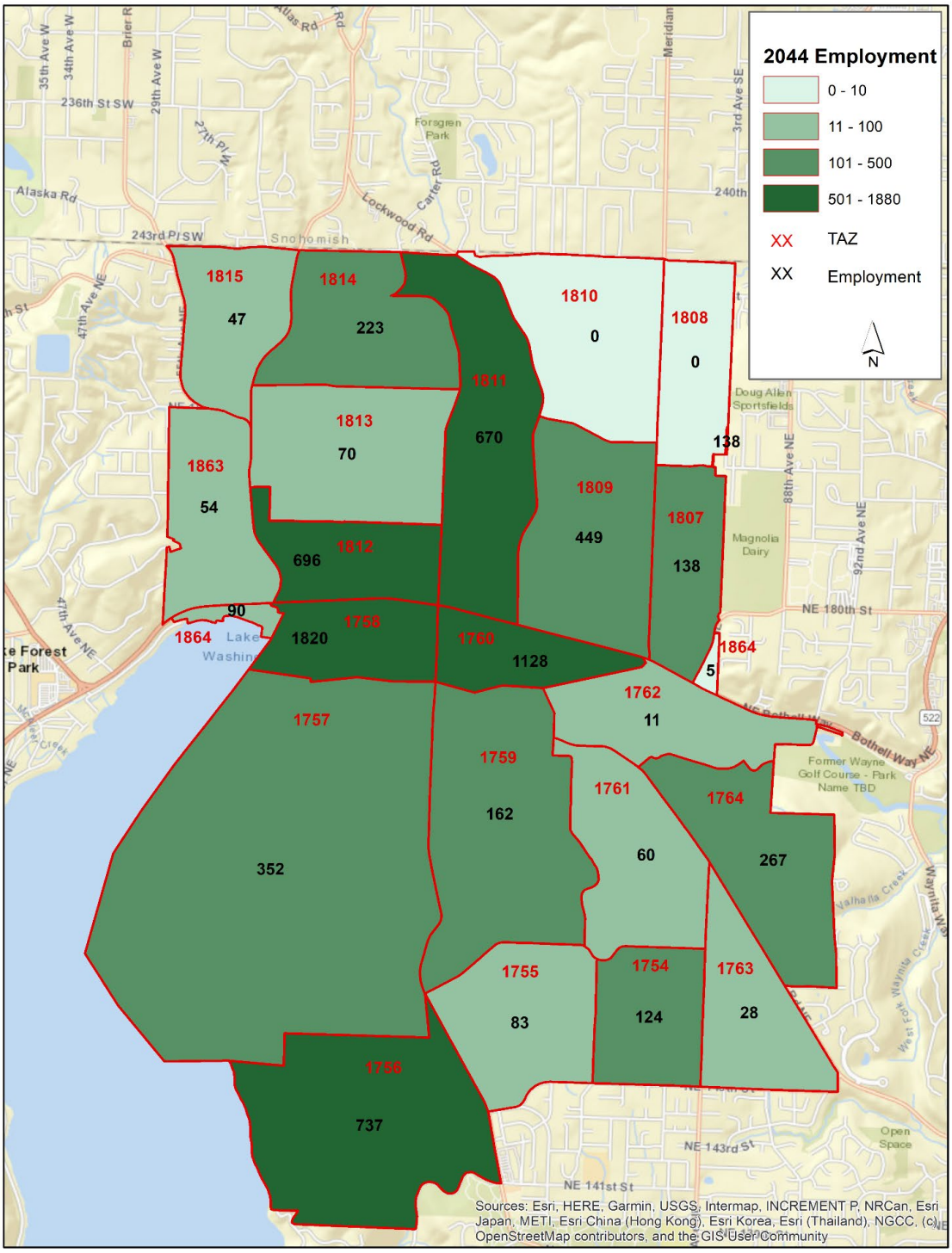
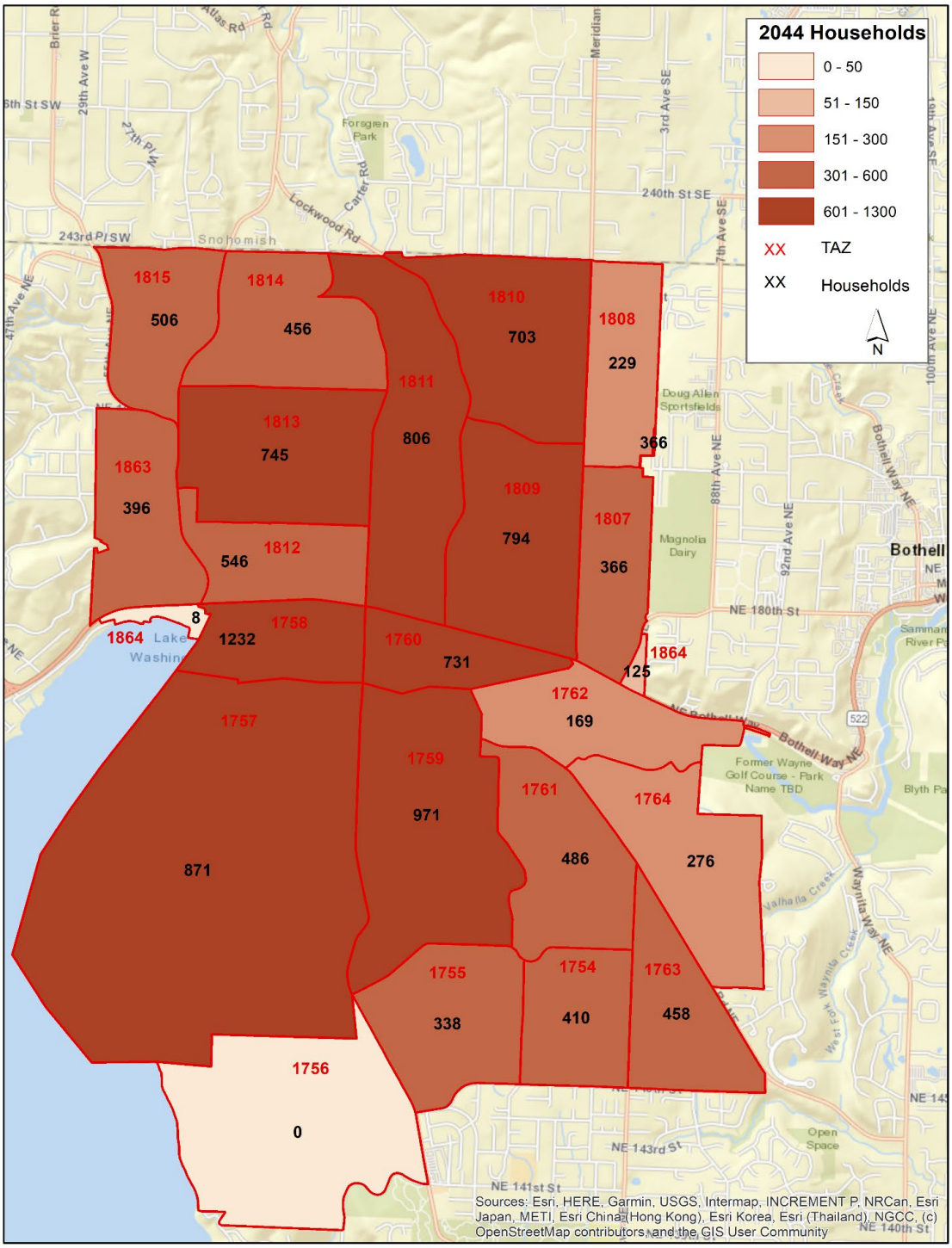


Figure 7. 2044 Employment in Kenmore by TAZ

4. Comprehensive Plan Update: Transportation Element (continued)



This map reflects PSRC model input values for households that were arrived at through assuming a 5% vacancy rate of housing units.

Figure 8. 2044 Households in Kenmore by TAZ

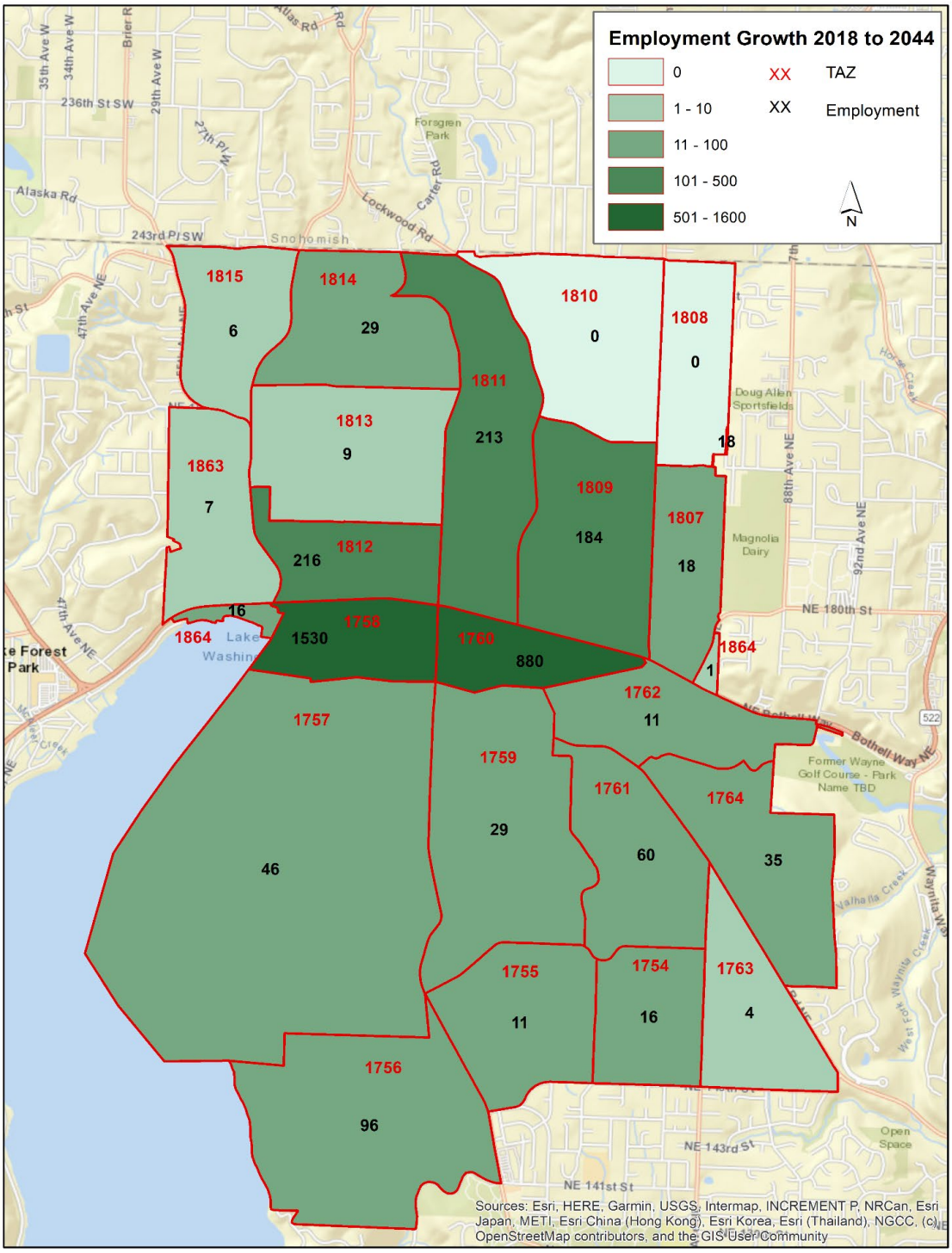


Figure 9. 2018-2044 Employment Change in Kenmore by TAZ

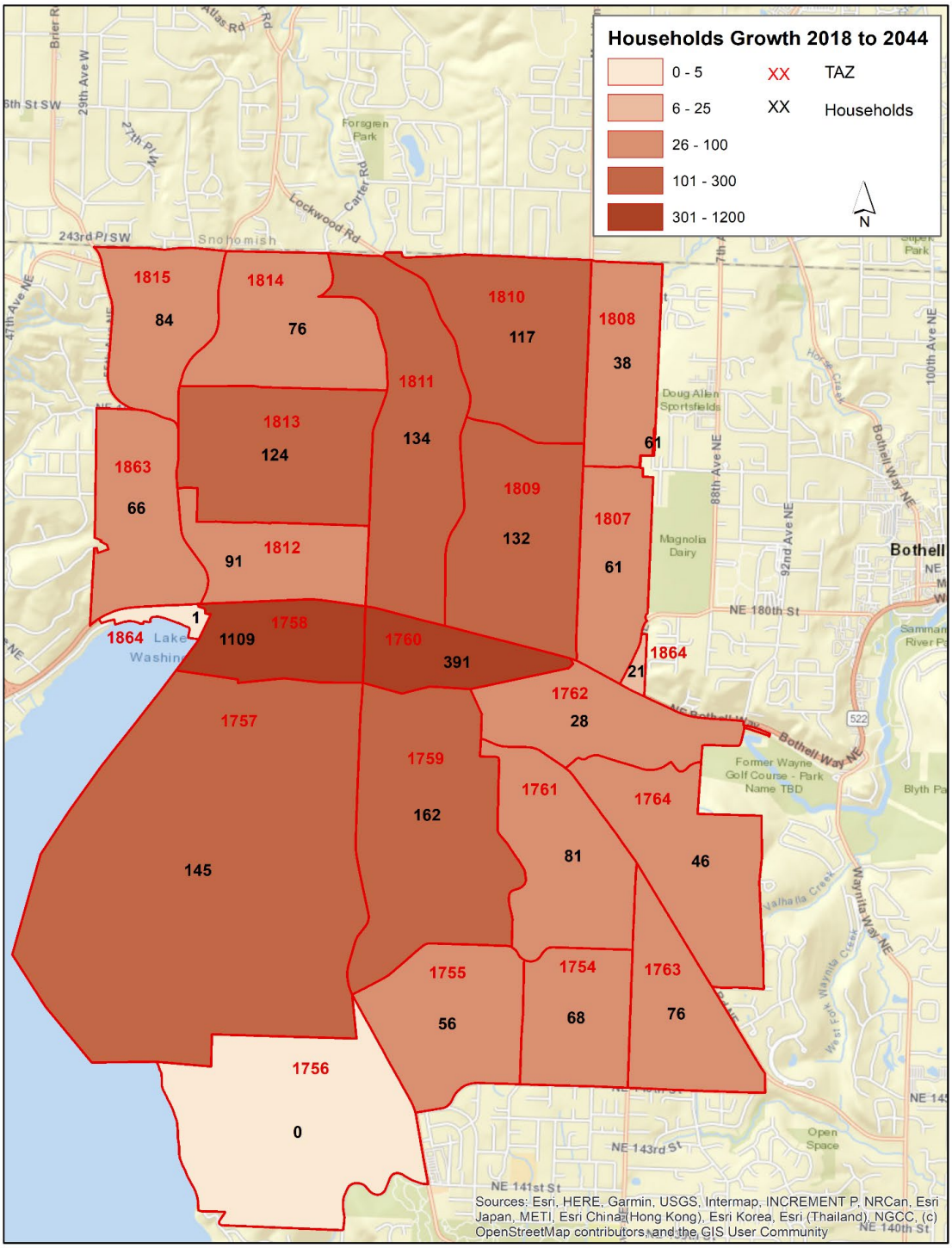


Figure 10. 2018-2044 Households Change in Kenmore by TAZ

ATTACHMENT 6

APPENDIX D - 3: ROADWAY FACT SHEETS

The following street typology fact sheets specify the form and intended functions of roadways in Kenmore. Each fact sheet provides the travel purposes, features, example locations and conceptual cross-sections for the given roadway type. The City of Kenmore's Road Standards provide supplemental detail associated with cross-sections for specific roadways.

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STATE HIGHWAYS AND MAJOR ARTERIALS

Major arterials, most conducive for cross-town trips and through traffic, are roadways that serve all transportation modes and vehicle types. The focus is to provide an efficient travel experience for vehicles, which includes trucks, transit, and emergency services, while accommodating pedestrian and bicyclist movement through effective modal separation. The Washington State Department of Transportation classifies SR 522 as a principal arterial.

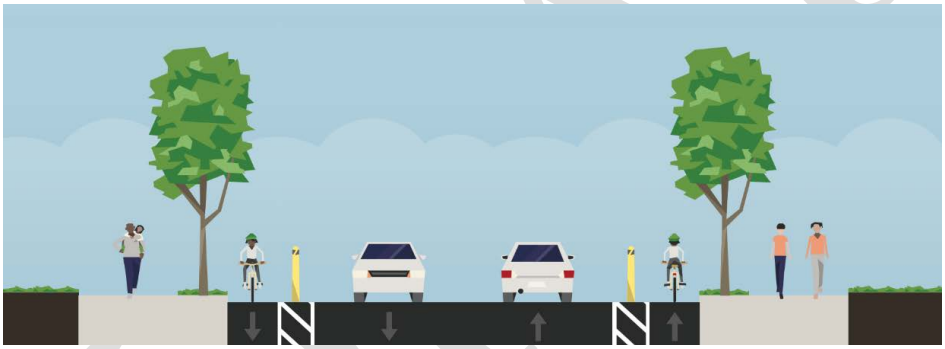
Features:

- Priority users - vehicles, bicycles, pedestrians, and transit
- Serves all trip types but accommodates cross-town trips best of all street typologies. Also serves the highest volume of trips within the City. Direct access by adjacent land uses more limited.
- Turn lanes provided at key intersections to facilitate through traffic. Pedestrian crossings are be provided at intersections and considered for mid-block crossings when appropriate.
- Where space is available, add bicycle facilities, or landscape buffers for additional multimodal opportunities.

Example Locations:

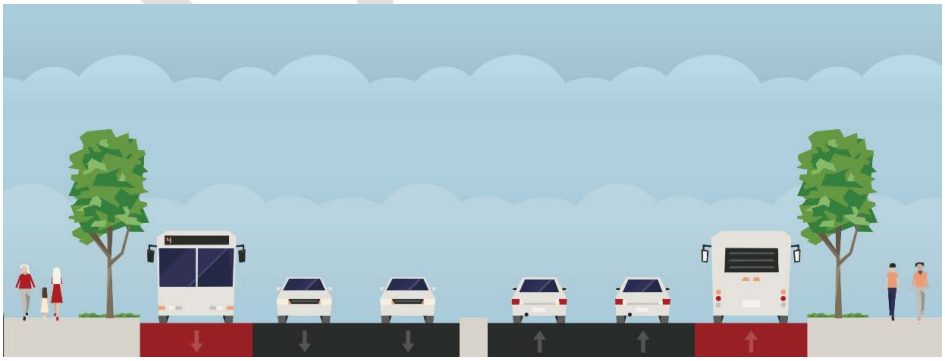
- SR 522
- Simonds Road NE
- 68th Avenue NE (SR 522 to NE 170th Street)

Figure 1: Major Arterial Conceptual Cross Section 1



Source: Streetmix

Figure 2: State Highway Conceptual Cross Section 1



Source: Streetmix

MINOR ARTERIALS

Minor arterials serve all modes and trip types but are focused on signaling the entry into a higher-density commercial or residential zone. Minor arterials accommodate larger vehicles but provide a lower speed alternative to major arterials or State Highways, encouraging multimodal transportation options.

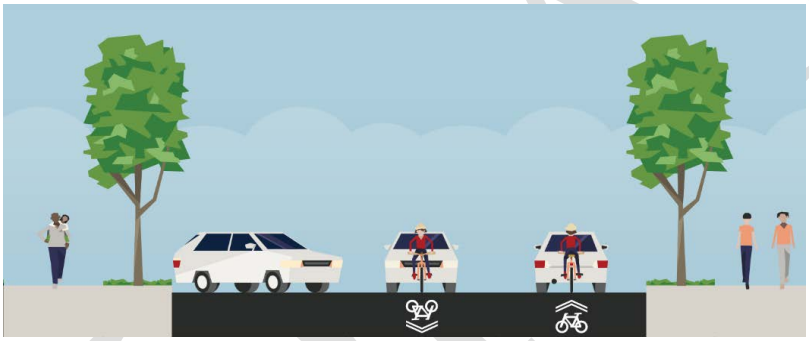
Features:

- Priority users: pedestrians, bicycles, vehicles
- Serves as a major travel route for local, inter-neighborhood, and through trips.
- Generally provide more direct access to adjacent land uses than major arterials or State Highways.
- Nonmotorized treatments include high visibility crosswalks, landscape buffers, and curb extensions.
- Travel lanes may be shared between bicycles and vehicles due to slower speeds.

Example Locations:

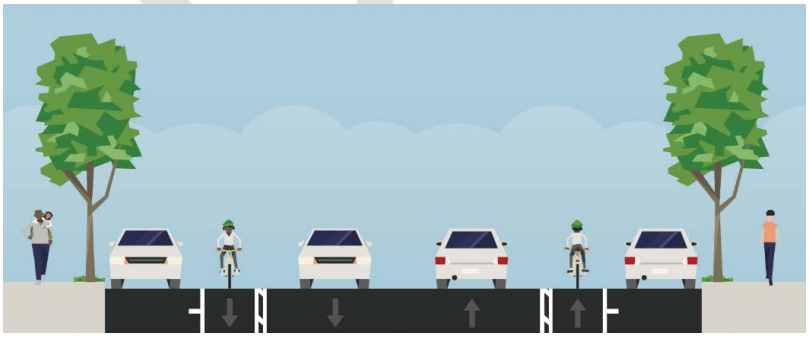
- 61st Avenue NE (north of SR 522)
- 80th Avenue NE
- NE 175th Street
- NE 181st Street (65th Avenue NE to 73rd Avenue NE)
- Juanita Drive NE

Figure 3: Minor Arterial Conceptual Cross Section 1



Source: Streetmix

Figure 4: Minor Arterial Conceptual Cross Section 2



Source: Streetmix

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COLLECTORS

Collector streets are focused on providing a safe and enjoyable travel experience for bicycles and pedestrians, and school children. Collector streets have narrow travel lanes, bike facilities, and sidewalks. These streets feature high-visibility, mid-block pedestrian crossings.

Features:

- Priority users: school children, non-motorized modes
- Serves as a major travel route for school trips, bicycle and pedestrian travel
- Consolidates local road trips and connects to arterials
- Nonmotorized treatments include, mid-block crossings, high visibility or raised crosswalks, and curb extensions.

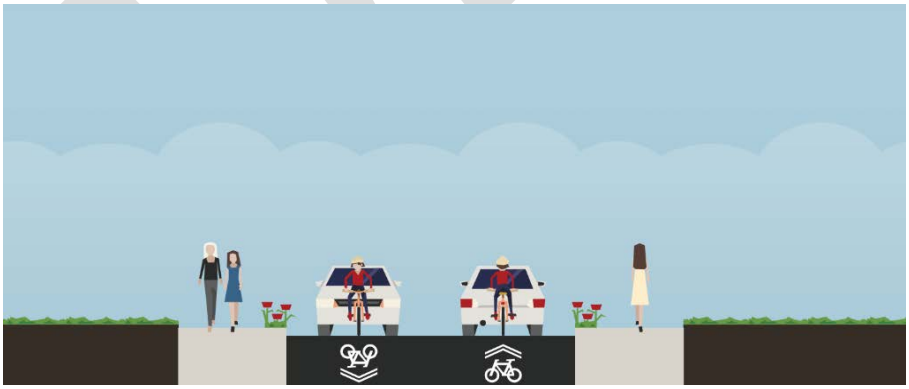
Example Locations:

- 68th Avenue NE (north of SR 522)
- 73rd Avenue NE
- 84th Avenue NE
- NE 153rd Place/NE 155th Street
- NE 181st Street (61st Avenue NE to 65th Avenue NE)

Figure 5: Collector Conceptual Cross Section 1

Source: Streetmix

Figure 6: Collector Conceptual Cross Section 2



Source: Streetmix

LOCAL STREET

Local streets are walkable, low-speed facilities that serve abutting property (mostly single-family residential homes). Because of the low travel speeds, bicycles and vehicles share the right-of-way. Goods movement on these streets is restricted to local deliveries only.

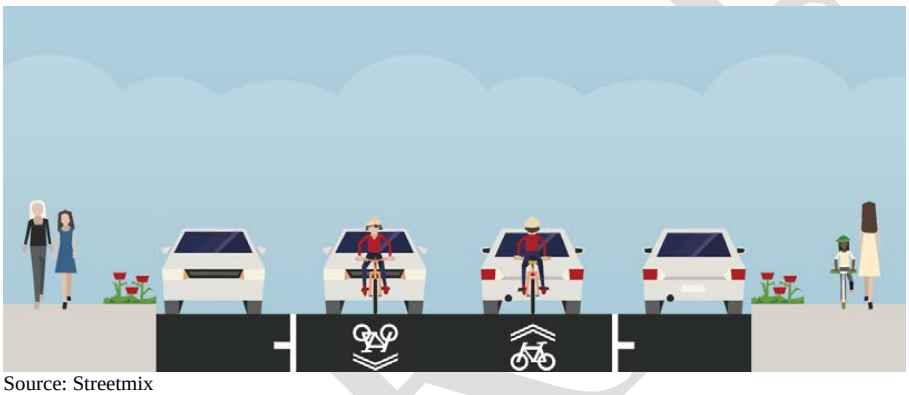
Features:

- Priority users - local traffic, pedestrians, and bicycles
- Serves as a direct connection to most local residences but does not encourage through traffic.
- Serves the lowest volume trips in the City
- Can serve as quiet streets that are welcoming to cyclists with no additional improvement.

Example Locations:

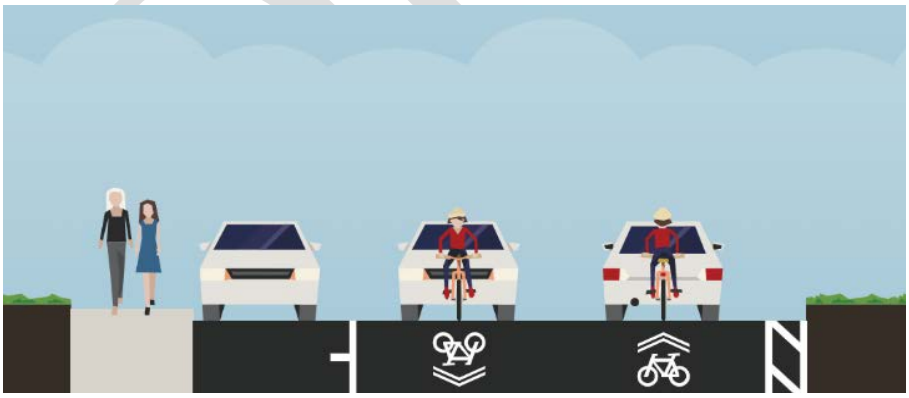
- 81st Avenue NE
- NE 154th Street
- NE 185th Street
- NE 198th Street

Figure 7: Local Conceptual Cross Section 1



Source: Streetmix

Figure 8: Local Conceptual Cross Section 2



Source: Streetmix

ATTACHMENT 7

Appendix D-4

Conceptual Design and Cost Estimates

Site specific project costs for programs can be found in:

- ADA Transition Plan
- Pedestrian Facilities Plan

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SR522 West B

CITY OF KENMORE

Date Prepared January 26, 2023 | Construction Days: 120

Engineer's Estimate -- Planning Level | Construction year 2026

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 97,226.10	$ 97,226.10
2	Project Temporary Traffic Control	1	LS	$ 85,904.00	$ 85,904.00
3	Removal of Structure and Obstruction	1	LS	$ 14,337.00	$ 14,337.00
4	Clearing and Grubbing	1	LS	$ 29,500.00	$ 29,500.00
5	Permanent Signing	1	LS	$ 2,360.00	$ 2,360.00
6	Construction Surveying	1	LS	$ 44,545.00	$ 44,545.00
7	Landscaping/Landscape Restoration	1	LS	$ 44,545.00	$ 44,545.00
8	Sawcutting	220	LF	$ 5.90	$ 1,298.00
9	Backfill for walls	2,000.0	CY	$ 46.02	$ 92,040.00
10	Handrailing	390	LF	$ 236.00	$ 92,040.00
11	HMA	180	Ton	$ 236.00	$ 42,480.00
12	Crushed Surfacing Top Course	200.0	Ton	$ 70.80	$ 14,160.00
13	Soldier Pile Wall	1,485.0	SF	$ 236.00	$ 350,460.00
14	Cement Conc. Sidewalk	210.0	SY	$ 59.00	$ 12,390.00
15	Cement Conc. Curb and Gutter	220.0	LF	$ 53.10	$ 11,682.00
16	Wetland Mitigation	1.0	LS	$ 35,400.00	$ 35,400.00
17	Shoring	-	CY	$ 47.20	$ -
18	Roadway Excavation incl haul	140	CY	$ 118.00	$ 16,520.00
19	Ped Lighting Pole	7	EA	$ 11,800.00	$ 82,600.00
	SubTotal Cost				$ 1,069,487.10
	Contingency			30%	$ 320,846.13
	Total Construction Cost with				$ 1,390,333.23

		% of Const. Cost	
Design	Consultant	30%	$ 417,099.97
Predesign			$ -
ROW		3%	$ 41,710.00
City Staff		10%	$ 139,033.32
Const. Management	Consultant	15%	$ 208,549.98
Construction Management (consultant)			$ -

Total Project Cost **$ 2,196,726.50**

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NE 181st Sidewalks (61st-63rd Southside)

Date Prepared	November 8, 2022	Construction Days:	80
Engineer's Estimate --	Planning Level	Construction year	2025

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 50,691	$ 50,691
2	Project Temporary Traffic Control	1	LS	$ 137,280	$ 137,280
3	Removal of Structure and Obstruction	1	LS	$ 5,000	$ 5,000
4	Clearing and Grubbing	1	LS	$ 1,180	$ 1,180
5	Permanent Signing	1	LS	$ 3,250	$ 3,250
6	Construction Surveying	1	LS	$ 50,000	$ 50,000
7	Landscaping	1	LS	$ 46,374	$ 46,374
8	Remove Asphalt Pavement	345	SY	$ 24	$ 8,142
9	Pedestrian Hand Railing	75	LF	$ 177	$ 13,346
10	Cement Conc. Driveway Entrance Type 1	64	SY	$ 83	$ 5,286
11	Paint Line	725	LF	$ 2	$ 1,283
12	Storm Drainage Pipe 12" Diam	590	EA	$ 59	$ 34,810
13	HMA Cl. xx PG. xx-xx	120	Ton	$ 177	$ 21,240
14	Catch Basin Inserts	7	EA	$ 89	$ 620
15	Catch Basin Type 2, 48" Diam	1	EA	$ 4,720	$ 4,720
16	Cement Conc. Sidewalk	840	SY	$ 71	$ 59,472
17	Sawcutting	660	LF	$ 6	$ 3,894
18	Cement Conc. Curb Ramp Type x	4	EA	$ 2,360	$ 9,440
19	Crushed Surfacing Top Course	50	Ton	$ 59	$ 2,950
20	Cement Conc. Traffic Curb and Gutter	660	LF	$ 47	$ 31,152
21	Structure Excavation Class B Incl. Haul	370	CY	$ 47	$ 17,464
22	Shoring or Extra Excavation Class B	2470	SF	$ 4	$ 8,744
23	Gravel Backfill for Wall	172	Ton	$ 59	$ 10,148
24	Testing Storm Sewer Pipe	590	LF	$ 12	$ 6,962
25	Connection to Existing Storm Sewer	2	EA	$ 1,180	$ 2,360
26	Erosion/Water Pollution Control	1	LS	$ 15,000	$ 15,000
27	Gravity Block Wall	195	SF	$ 59	$ 11,505
28	Cem. Conc. Sidewalk w/ Thickened Edge	114	LF	$ 118	$ 13,452
29	Catch Basin Type 1	4	EA	$ 1,652	$ 6,608
30	Soldier Pile Wall (61st-62nd)	720	SF	$ 142	$ 101,952
	SubTotal Cost				$ 684,324
	Contingency			40%	$ 273,730
	Total Construction Cost with Contingency				$ 958,054
	Design	Consultant		20%	$ 191,611
	ROW/Permitting	Consultant		5%	$ 47,903
	City Staff			12%	$ 114,967
	Const. Management	Consultant		20%	$ 191,611
	Total Project Cost				**$ 1,504,145**

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61st Ave NE Sidewalk Replacement Project
(181st-62nd Ave)

Date Prepared October 20, 2022 | Construction Days: $ 200

Engineer's Estimate -- Planning Level | Construction year 2026

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 219,690	$ 219,690
2	Project Temporary Traffic Control	1	LS	$ 136,170	$ 136,170
3	Removal of Structure and Obstruction	1	LS	$ 18,900	$ 18,900
4	Clearing and Grubbing	1	LS	$ 105,000	$ 105,000
5	Permanent Signing (+RRFB and feedback)	1	LS	$ 118,650	$ 118,650
6	Construction Surveying	1	LS	$ 124,034	$ 124,034
7	Sawcutting	3064	LF	$ 7	$ 22,796
8	SPCC	1	LS	$ 2,000	$ 2,000
9	Sidewalk	3,123.0	SY	$ 99	$ 309,802
10	Curb and Gutter	2413.8	LF	$ 50	$ 119,724
11	Remove Curb and Gutter	2,946	LF	$ 9	$ 25,571
12	Remove Sidewalk	3,268.0	SY	$ 15	$ 48,628
13	Lighting	1.0	EA	$ 15,000	$ 15,000
14	Inlet protection	35.0	EA	$ 99	$ 3,472
15	Curb Ramp	15.0	EA	$ 4,960	$ 74,400
16	Driveway Approach	1,093.0	SY	$ 149	$ 162,638
17	Landscape Restoration/Stream Mitigation	1.0	LS	$ 1,163,280	$ 1,163,280
18	Crushed Surfacing Top Course	566	Ton	$ 50	$ 28,074
19	Storm Sewer Pipe 12"	495	LF	$ 174	$ 85,932
20	Catch Basin Type 1	7	EA	$ 3,100	$ 21,700
21	Adjust Catch Basin	5	EA	$ 496	$ 2,480
22	fencing	1700	LF	$ 68	$ 115,940
23	Crosswalk	768	SF	$ 5	$ 3,840
24	Remove Asphalt	2560	SY	$ 15	$ 38,093
	SubTotal Cost				$ 2,965,814
	Contingency			40%	$ 1,186,325
	Total Construction Cost with Contingency				$ 4,152,139
	Total Design	Consultant		10.0%	$ 415,214
	ROW Easements/Acquisition				$ 50,000
	City Staff			5.0%	$ 207,607
	Const. Management	Consultant		13.0%	$ 539,778
	Total Project Cost				**$ 5,364,738**

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Lower Swamp Creek Bridge Replacement

Date Prepared	October 20, 2022	Construction Days:	$ 60
Engineer's Estimate --	Planning Level	Construction year	2027

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 112,611	$ 112,611
2	Project Temporary Traffic Control	1	LS	$ 39,810	$ 39,810
3	Removal of Structure and Obstruction	1	LS	$ 10,000	$ 10,000
4	Clearing and Grubbing	1	LS	$ 16,100	$ 16,100
5	Permit Mitigation Work	1	LS	$ 210,000	$ 210,000
6	Construction Surveying	1	LS	$ 73,892	$ 73,892
7	Deck Area	1540	SF	$ 444	$ 683,760
8	Removal of Existing Bridge	1	LS	$ 29,600	$ 29,600
9	Temporary Bridge	1.0	LS	$ 142,080	$ 142,080
10	Road Approaches	1	LS	$ 202,393	$ 202,393
	SubTotal Cost				$ 1,520,245
	Design Contingency			40%	$ 608,098
	Total Construction Cost with Contingency				$ 2,128,344
	Total Design	Consultant		20.0%	$ 425,669
	Predesign	Consultant		2.5%	$ 53,209
	ROW Acquisition			2%	$ 42,567
	City Staff			12.0%	$ 255,401
	Const. Management	Consultant		8.0%	$ 170,267
	Total Project Cost				**$ 3,075,456**

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61st Ave NE/NE 193rd St Intersection

Date Prepared October 20, 2022 Construction Days: $ 40

Engineer's Estimate -- Planning Level

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 86,184	$ 86,184
2	Project Temporary Traffic Control	1	LS	$ 65,290	$ 65,290
3	Removal of Structure and Obstruction	1	LS	$ 3,500	$ 3,500
4	Clearing and Grubbing	1	LS	$ 14,000	$ 14,000
5	Permanent Signing	1	LS	$ 5,600	$ 5,600
6	Construction Surveying	1	LS	$ 47,624	$ 47,624
7	Sawcutting	3870	LF	$ 8	$ 32,508
8	SPCC	1	LS	$ 1,500	$ 1,500
9	Roadway Excavation Incl. Haul	680.0	CY	$ 42	$ 28,560
10	Erosion and Sediment Control	1.0	FA	$ 10,000	$ 10,000
11	Curb and Gutter	20	LF	$ 56	$ 1,120
12	Cement Concrete Sidewalk	930	SY	$ 119	$ 110,670
13	Remove Cement Concrete Pavement	660.0	SY	$ 28	$ 18,480
14	HMA Cl. xx PG. xx-xx	930.0	Ton	$ 210	$ 195,300
15	Inlet protection	6.0	EA	$ 112	$ 672
16	Curb Ramp	6.0	EA	$ 5,600	$ 33,600
17	Driveway Approach	70.0	SY	$ 140	$ 9,800
18	Landscape Restoration	1.0	LS	$ 78,000	$ 78,000
19	Crushed Surfacing Top Course	1000	Ton	$ 56	$ 56,000
20	High-Density Polyethylene (HDPE) Storm Sewer Pipe 12" Diam	850	LF	$ 112	$ 95,200
21	Catch Basin Type 1	6	EA	$ 3,500	$ 21,000
22	Catch Basin Type 2	2	EA	$ 5,600	$ 11,200
23	Truck Apron	210	SY	$ 42	$ 8,820
24	Vertical Curb and Gutter	1500	LF	$ 42	$ 63,000
25	Mountable Traffic Curb	1500	LF	$ 35	$ 52,500
26	Illumination	1	LS	$ 70,000	$ 70,000
27	Crosswalk	370	SF	$ 8	$ 3,108
28	Pavement Markings	1330	LF	$ 14	$ 18,620
29	Planing Bituminous Pavement	3090	SY	$ 7	$ 21,630
	SubTotal Cost				$ 1,163,487
	Design Contingency			40%	$ 465,395
	Total Construction Cost with Contingency				$ 1,628,881
	Design	Consultant		15.0%	$ 244,332
	ROW Acquisition				$ 25,000
	City Staff			10.0%	$ 162,888
	Const. Management	Consultant		10.0%	$ 162,888
	Total Project Cost				**$ 2,223,990**

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NE 192nd ST (73rd Av-75th Av) Sidewalks

Date Prepared	October 20, 2022	Construction Days:	60
Engineer's Estimate --	Planning Level	Construction year	2025

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 30,550	$ 30,550
2	Project Temporary Traffic Control	1	LS	$ 88,920	$ 88,920
3	Removal of Structure and Obstruction	1	LS	$ 11,730	$ 11,730
4	Clearing and Grubbing	1	LS	$ 2,000	$ 2,000
5	Permanent Signing	1	LS	$ 11,000	$ 11,000
6	Construction Surveying	1	LS	$ 10,070	$ 10,070
7	sawcutting	840	LF	$ 5	$ 4,200
8	SPCC / SWPPP	1	LS	$ 2,000	$ 2,000
9	roadway excavation	48	CY	$ 75	$ 3,600
10	structure excavation incl haul	11	CY	$ 52	$ 572
11	Private Property Restoration	1	LS	$ 5,000	$ 5,000
12	CSBC	143	TON	$ 50	$ 7,150
13	HMA	97	TON	$ 180	$ 17,460
14	curb and gutter	380	LF	$ 46	$ 17,480
15	driveway approach	75	SY	$ 115	$ 8,625
16	sidewalk transition	1	EA	$ 2,300	$ 2,300
17	sidewalk	360	SY	$ 69	$ 24,840
18	connection to existing sewer/structure	2	EA	$ 920	$ 1,840
19	12 In pipe	330	LF	$ 69	$ 22,770
20	CB Type 1	3	EA	$ 2,875	$ 8,625
21	TESC	1	EST	$ 5,750	$ 5,750
22	AC thickened edge curb	400	LF	$ 15	$ 6,000
23	Seeding and Fertilizing	192	SY	$ 6	$ 1,152
24	Curb Ramp	2	EA	$ 2,875	$ 5,750
25	PSIPE	1	LS	$ 31,575	$ 31,575
26	Adjust Catch Basin	3	EA	$ 690	$ 2,070
27	Relocate Fire Hydrant	1	EA	$ 3,000	$ 3,000
	Subtotal				$ 336,029
	Contingency			40%	$ 134,412
	Construction Contract				$ 470,441
	Design	Consultant		30%	$ 141,132
	City Staff			20%	$ 94,088
	Const. Management	Consultant		20%	$ 94,088
	Total Project Cost				**$ 799,749**

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Arrowhead Dr Sidewalks

Date Prepared October 21, 2022 | Construction Days: 90

Engineer's Estimate -- Planning Level | Construction year 2026

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 101,368	$ 101,368
2	Project Temporary Traffic Control	1	LS	$ 142,740	$ 142,740
3	Removal of Structure and Obstruction	1	LS	$ 12,538	$ 12,538
4	Clearing and Grubbing	1	LS	$ 10,000	$ 10,000
5	Permanent Signing	1	LS	$ 6,655	$ 6,655
6	Construction Surveying	1	LS	$ 12,100	$ 12,100
7	sawcutting	2500	LF	$ 5	$ 12,100
8	spcc	1	LS	$ 1,210	$ 1,210
9	roadway excavation	650	CY	$ 91	$ 58,988
10	structure excavation	100	CY	$ 42	$ 4,235
11	block wall	200	SF	$ 61	$ 12,100
12	Private Property Restoration	1	LS	$ 98,736	$ 98,736
13	gravel backfill for wall	50	CY	$ 73	$ 3,630
14	4 In pipe	50	LF	$ 30	$ 1,513
15	CSBC	230	TON	$ 54	$ 12,524
16	HMA	240	TON	$ 212	$ 50,820
17	curb and gutter	2100	LF	$ 48	$ 101,640
18	driveway approach	360	SY	$ 97	$ 34,848
19	sidewalk transition	3	EA	$ 1,815	$ 5,445
20	sidewalk	770	SY	$ 85	$ 65,219
21	connection to existing sewer/structure	18	EA	$ 605	$ 10,890
22	12 In pipe	500	LF	$ 61	$ 30,250
23	CB Type 1	18	EA	$ 3,025	$ 54,450
24	TESC	1	LS	$ 24,200	$ 24,200
25	SWPPP	1	LS	$ 6,050	$ 6,050
26	Striping	1	LS	$ 6,050	$ 6,050
27	seeding and fertilizing	650	SY	$ 6	$ 3,933
28	Curb Ramp	5	EA	$ 3,630	$ 18,150
29	Cement Conc. Sidewalk with Integral Curb	738	LF	$ 36	$ 26,789
30	School Zone Flashers	3	EA	$ 18,150	$ 54,450
31	PSIPE	1	LS	$ 43,318	$ 43,318
32	RRFB	1	LS	$ 24,200	$ 24,200
33	Traffic Calming	1	LS	$ 50,000	$ 50,000
34	Adjust Catch Basin	15	EA	$ 605	$ 9,075
35	CB Type 2	1	EA	$ 4,840	$ 4,840
	Subtotal				$ 1,115,053
	Contingency			40%	$ 446,021
	Construction Contract				$ 1,561,074
	Design	Consultant		18%	$ 280,993
	City Staff			10%	$ 156,107
	Right of Way			3%	$ 46,832
	Const. Management	Consultant		15%	$ 234,161
	Total Project Cost				**$ 2,279,167**

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84th Ave NE (NE 150th St-NE 155th St)
Sidewalk and Bike Lanes

CITY OF KENMORE

Date Prepared May 5, 2022 | Construction Days: 90

Engineer's Estimate -- Planning Level | Construction year 2026

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 109,222.08	$ 109,222.08
2	Project Temporary Traffic Control	1	LS	$ 120,380.00	$ 120,380.00
3	Removal of Structure and Obstruction	1	LS	$ 8,336.90	$ 8,336.90
4	Clearing and Grubbing	1	LS	$ 17,100.00	$ 17,100.00
5	Permanent Signing	1	LS	$ 3,250.00	$ 3,250.00
6	Construction Surveying	1	LS	$ 71,995.00	$ 71,995.00
7	Sawcutting	1600	LF	$ 5.00	$ 8,000.00
8	Cement Conc. Driveway Entrance Type 1	275	SY	$ 90.75	$ 24,956.25
9	Cement Conc. Curb Ramp Type x	3.0	EA	$ 3,025.00	$ 9,075.00
10	Paint Line	4963	LF	$ 1.82	$ 9,007.85
11	Plastic Crosswalk Line	107	SF	$ 6.05	$ 647.35
12	Gravel Backfill ____	1,930.0	ton	$ 54.45	$ 105,088.50
13	HMA Cl. xx PG. xx-xx	132.0	Ton	$ 211.75	$ 27,951.00
14	Catch Basin Inserts	21.0	EA	$ 121.00	$ 2,541.00
15	Raised Pavement Marker Type 1	3.0	Hund	$ 847.00	$ 2,541.00
16	Pedestrian Lighting	3.0	EA	$ 6,050.00	$ 18,150.00
17	Cement Conc. Sidewalk	1,055.0	SY	$ 90.75	$ 95,741.25
18	Cement Conc. Curb Ramp Perpendicular	13	ea	$ 4,114.00	$ 53,482.00
19	Cement Conc. Traffic Curb and Gutter	1580	LF	$ 48.40	$ 76,472.00
20	psiPE	1	LS	$ 71,995.00	$ 71,995.00
21	Plastic Bicycle Lane Symbol	10	EA	$ 605.00	$ 6,050.00
22	Catch Basin Type 1	6.0	EA	$ 3,025.00	$ 18,150.00
23	Storm Sewer Pipe 12" In. Diam	755.0	LF	$ 78.65	$ 59,380.75
24	Plastic Green Bike Crossing	160	SF	$ 24.20	$ 3,872.00
25	RRFB	1	LS	$ 24,200.00	$ 24,200.00
26	Plastic Green Pavement marking	1500	SF	$ 24.20	$ 36,300.00
27	Gravity Block Wall	2490	SF	$ 60.50	$ 150,645.00
28	Connection to Drainage Structure	5	EA	$ 605.00	$ 3,025.00
29	Private Driveway Restoration	11	EA	$ 5,808.00	$ 63,888.00
	SubTotal Cost				$ 1,201,442.93
	Contingency			40%	$ 480,577.17
	Total Construction Cost				$ 1,682,020.10
	Design	Consultant		13%	$ 218,662.61
	City Staff			10%	$ 168,202.01
	Right of Way			3%	$ 50,460.60
	Const. Management	Consultant		15%	$ 252,303.02
	Total Project Cost				**$ 2,371,648.34**

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80th Ave NE (SR522-NE 185th St)
Sidewalk and Bike Lanes

CITY OF KENMORE

Date Prepared May 5, 2022 | Construction Days: 90

Engineer's Estimate -- Planning Level | Construction year 2026

Item No.	Description	Bid Quantity	Unit	Unit Rate	Total
1	Mobilization	1	LS	$ 99,273.25	$ 99,273.25
2	Project Temporary Traffic Control	1	LS	$ 69,420.00	$ 69,420.00
3	Removal of Structure and Obstruction	1	LS	$ 7,586.70	$ 7,586.70
4	Clearing and Grubbing	1	LS	$ 14,840.00	$ 14,840.00
5	Permanent Signing	1	LS	$ 5,000.00	$ 5,000.00
6	Construction Surveying	1	LS	$ 109,347.70	$ 109,347.70
7	Sawcutting	1773	LF	$ 5.00	$ 8,865.00
8	Cement Conc. Driveway Entrance Type 1	325	SY	$ 121.00	$ 39,325.00
9	Cement Conc. Curb Ramp Type x	2.0	EA	$ 605.00	$ 1,210.00
10	Paint Line	9640	LF	$ 1.82	$ 17,496.60
11	Plastic Crosswalk Line	56	SF	$ 6.05	$ 338.80
12	Gravel Backfill ____	1,140.0	ton	$ 54.45	$ 62,073.00
13	HMA Cl. xx PG. xx-xx	150.0	Ton	$ 242.00	$ 36,300.00
14	Catch Basin Inserts	50.0	EA	$ 211.75	$ 10,587.50
15	Raised Pavement Marker Type 1	14.0	Hund	$ 847.00	$ 11,858.00
16	Pedestrian Lighting	3.0	EA	$ 6,050.00	$ 18,150.00
17	Cement Conc. Sidewalk	1,182.0	SY	$ 84.70	$ 100,115.40
18	Cement Conc. Curb Ramp Perpendicular	20	ea	$ 3,630.00	$ 72,600.00
19	Cement Conc. Traffic Curb and Gutter	1773	LF	$ 42.35	$ 75,086.55
20	psiPE	1	LS	$ 109,347.70	$ 109,347.70
21	Plastic Bicycle Lane Symbol	15	EA	$ 484.00	$ 7,260.00
22	Catch Basin Type 1	5.0	EA	$ 3,025.00	$ 15,125.00
23	Schedule __ Storm Sewer Pipe 12" In. Diam	1,095.0	LF	$ 78.65	$ 86,121.75
24	Plastic Green Bike Crossing/Bike Box	1095	SF	$ 24.20	$ 26,499.00
25	RRFB	3	LS	$ 24,200.00	$ 72,600.00
26	Plastic Green Pavement marking	3750	SF	$ 3.03	$ 11,343.75
27	Connection to Drainage Structure	7	EA	$ 605.00	$ 4,235.00
	SubTotal Cost				$ 1,092,005.70
	Contingency			40%	$ 436,802.28
	Construction Cost				$ 1,528,807.97
	Total Design	Consultant		25%	$ 382,201.99
	ROW Acquisition				$ 100,000.00
	City Staff			12%	$ 183,456.96
	Const. Management	Consultant		18%	$ 275,185.44
	Total Project Cost				**$ 2,469,652.36**

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BASIS OF ESTIMATE

Project Name	**73rd Ave NE & NE 192nd St Intersection Improvements**
Project Number	554-3744-004
Date Prepared	12/20/2022
Prepared by	Jenna Anderson, PE, and Edward Wang, EIT
Estimate Classification	Unclassified
Estimate Purpose	Long-term Planning for Transportation Element
Estimate ID (Version)	
Project Manager	McIntire, Alicia

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Note that the accuracy of the associated cost estimate is dependent upon the various underlying assumptions, inclusions, and exclusions described herein. Actual project costs may differ and can be significantly affected by factors such as changes in the external environment, the manner in which the project is executed and controlled, and other factors that may impact the estimate basis or otherwise affect the project. Estimate accuracy ranges are only assessments based upon the cost estimating methods and data employed in preparing the estimate and are not a guarantee of actual project costs.

BASIS OF ESTIMATE

Project Name: ***73rd Ave NE & NE 192nd St Intersection Improvements***

Project Number: ***554-3744-004*** Date: 12/20/2022

1.0 Purpose

This project is located at the intersection of 73rd Avenue NE and NE 192nd Street in Kenmore. The project will replace the existing stop-controlled T intersection with a single-lane roundabout to improve safety and traffic flow for motorists, pedestrians, and cyclists.

This cost estimate is based on the attached conceptual design and is intended to provide planning guidance for the City.

2.0 Project Scope Definition

This project will include surveys, design, permitting, and construction of the roundabout and bicycle/pedestrian facilities as well as the removal of existing roadway facilities. The project scope includes the removal of existing stormwater facilities but does not include franchise utility relocations.

The scope includes realignment of existing driveway accesses as required.

Surveys will entail a review of existing data as well as collection of field data as necessary to complete design.

Design will entail advancing the conceptual design to a detailed final design, with reviews occurring at intermediate plan completion percentages.

3.0 Design Basis

The cross section for 73rd Avenue NE is in accordance with the City of Kenmore Engineering Department's *73rd Ave NE (181st St to 205th St) Cross Section* (Figure B-4) in the 2021 ROAD Standards document. The cross section for NE 192nd Street is in accordance with the City of Kenmore Engineering Department's *NE 192nd St Cross Section* (Figure B-8) specified in the 2021 ROAD Standards document. Both sections consist of a 6-foot sidewalk, 4-foot amenity strip, 6-inch curb, 5-foot bike lane, 2-foot bike lane buffer, and 10-foot travel lane on each side of the roadway.

The roundabout design adheres to the WSDOT Design Manual M 22-01, Chapter 1320 Roundabouts. The roundabout uses a 100-foot inscribed circle diameter (ICD) and provides a 17-foot wide circulating lane to allow 40-foot bus turning movements without use of a truck apron. A 10-foot wide truck apron is anticipated to accommodate larger truck movements. A 10-foot wide bicycle and pedestrian pathway is provided around the roundabout, with ramps to and from the bicycle lane on all approaches.

Six existing driveways entrances within the project area are reconstructed to meet the new roadway alignment.

The conceptual roundabout design ties into the existing roadway section as shown in Attachment A.

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4.0 Cost Basis

The unit costs are sourced from projects within the Puget Sound region that have been bid out between January 2021 and November 2022.

Escalation cost is assumed to be 4.4% per year from the current year, 2022, to the forecasted construction year of 2044.

The engineering design fees were increased to account for the complexities of roundabout design, assumed outreach to affected homeowners, and coordination with adjacent existing utilities, including the King County Brightwater lift station.

5.0 Allowances

The survey costs are calculated based on the length of the project, using an assumed hourly rate and productivity rate based on other projects estimated in 2021 and 2022. The estimate includes both field time and office time.

The estimated scope of proposed signage accounts for the following:

- W2-6 (circular intersection) and W16-17P (roundabout) signs, facing each approach
- R1-2 (yield) sign, facing each approach
- R6-1R (one way) and R6-4A (roundabout directional) signs, facing each approach
- W11-2 (pedestrian) and W16-7P (downward diagonal arrow right) signs, facing each roadway direction at each crosswalk
- D3-302 (roundabout street name) sign, at each roundabout exit

The proposed illumination system consists of six luminaires, two on each approach to the roundabout. This allows for a luminaire spacing of less than 200 feet on all approaches.

6.0 Exclusions

The scope of this estimate does not include franchise utility relocations, such as the King County Brightwater lift station. Franchise utilities within City right-of-way are to be relocated at the utility company's expense per city franchise agreements.

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7.0 Assumptions

The estimate makes the following construction assumptions:

- All crushed surfacing used beneath sidewalks and the roadway, as well as for trench backfill for the storm sewers, is assumed to be crushed surfacing base course (CSBC).
- Stormwater flow control and treatment are assumed to not be triggered by the project due to the amount of existing pollution generating impervious surface area.
- The existing retaining wall along the west side of 73rd Ave NE will be protected and maintained for continued use. The sidewalk will widen on the inside edge.

8.0 Risks (Threats and Opportunities)

This estimate was prepared without the use of detailed survey information, so utility locations, detailed topography, and other potential obstructions have not been precisely identified. There is potential for unforeseen survey details to add additional cost.

A King County Brightwater sewer lift station is located within the proposed roundabout footprint and may affect the design due to the difficulty of relocating or adjusting the lift station. Early coordination with King County will be critical when this project advances.

9.0 Contingency

The project includes a 30% allowance for indeterminates (AFI) based on the level of design applied to the subtotal of construction costs and a 30% project contingency applied to construction and non-construction costs. The AFI and contingency are intended to cover uncertainties and unforeseeable elements of cost within the defined project scope.

The 30% AFI was chosen in coordination with City of Kenmore staff due to the uncertainty of existing site conditions and the long-term nature of this estimate.

10.0 Attachments

Attachment A: Kenmore 73rd/192nd Draft Conceptual Layout (October 20, 2022)

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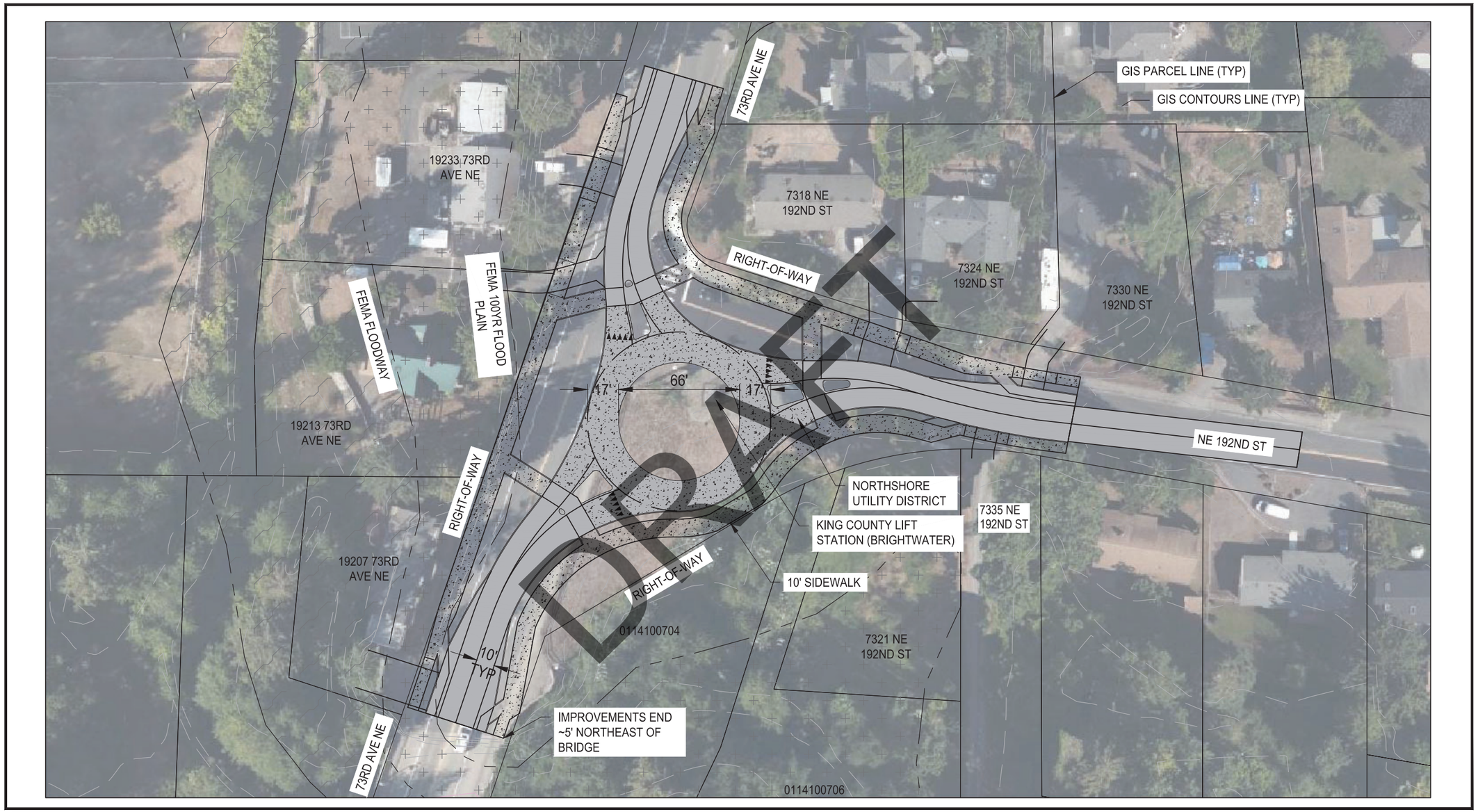
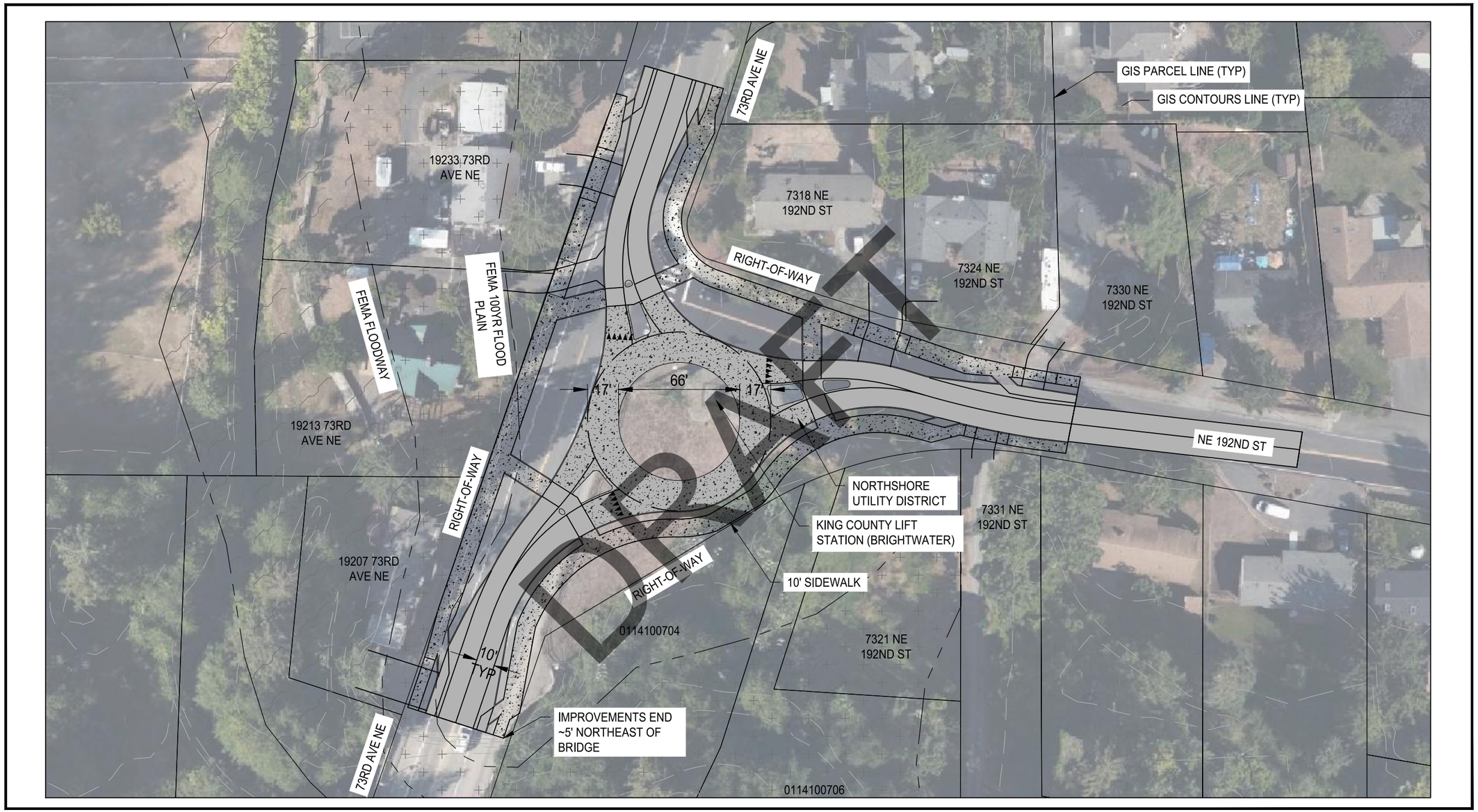


Parametrix DATE: October 20, 2022 FILE: ROUNDABOUTLAYOUT

0 N 50
1 INCH = 50 FT.

Kenmore 73rd/192nd Draft Conceptual Layout



Parametrix DATE: October 20, 2022 FILE: ROUNDABOUTLAYOUT

0 N 50
1 INCH = 50 FT.

Kenmore 73rd/192nd Draft Conceptual Layout

73rd Ave NE & NE 192nd St Intersection Improvements
CITY OF KENMORE

ENGINEER'S ESTIMATE - PLANNING LEVEL
AACE International Unclassified Estimate

PREPARED BY: Jenna Anderson, PE and Edward Wang, EIT DATE: 12/15/2022
CHECKED BY: Cindy Clark, PE DATE: 12/19/2022

NO.	ITEM	QUANT.	UNIT	UNIT COST	AMOUNT
1	ROADWAY SURVEY	1	LS	$ 15,000	$ 15,000
2	CLEARING AND GRUBBING	0.4	ACRE	$ 25,000	$ 10,000
3	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS	$ 5,000	$ 5,000
4	REMOVAL OF STORM PIPE	1000	LF	$ 12	$ 12,000
5	REMOVAL OF DRAINAGE STRUCTURE	7	EACH	$ 600	$ 5,000
6	REMOVAL OF CEMENT CONC. SIDEWALKS	620	SY	$ 30	$ 19,000
7	REMOVAL OF ASPHALT CONC. PAVEMENT	2700	SY	$ 57	$ 154,000
8	REMOVAL OF CEMENT CONC. CURB	1000	LF	$ 15	$ 15,000
9	ROADWAY EXCAVATION INCL. HAUL	1000	CY	$ 40	$ 40,000
10	CATCH BASIN TYPE 1	12	EACH	$ 2,500	$ 30,000
11	STORM SEWER PIPE, 12 IN. DIAM.	1300	LF	$ 55	$ 72,000
12	CRUSHED SURFACING BASE COURSE	1000	TON	$ 50	$ 50,000
13	CRUSHED SURFACING TOP COURSE	0	TON	$ -	$ -
14	HMA CL 1/2 IN. PG 58H-22	700	TON	$ 160	$ 112,000
15	TEXTURED CONCRETE FOR TRUCK APRON	200	SY	$ 200	$ 40,000
16	CEMENT CONC. TRAFFIC CURB AND GUTTER	1200	LF	$ 50	$ 60,000
17	ROUNDABOUT TRUCK APRON CURB	210	LF	$ 45	$ 10,000
18	CEMENT CONC. TRAFFIC CURB	400	LF	$ 45	$ 18,000
19	CEMENT CONC. SIDEWALK	1300	SY	$ 100	$ 130,000
20	CEMENT CONC. CURB RAMP	15	EACH	$ 4,000	$ 60,000
21	PAVEMENT MARKINGS	1400	LF	$ 10	$ 14,000
22	DRIVEWAY ENTRANCE	300	SY	$ 100	$ 30,000
23	PERMANENT SIGNING	1	LS	$ 9,000	$ 9,000
24	RECTANGULAR RAPID FLASHING BEACON SYSTEM	0	EACH	$ -	$ -
25	ILLUMINATION SYSTEM, COMPLETE	1	LS	$ 120,000	$ 120,000
26	TRAFFIC SIGNAL SYSTEMS MODIFICATIONS	0	LS	$ -	$ -
27	GRAVEL BACKFILL FOR PIPE ZONE	300	CY	$ 50	$ 15,000
28	SELECT BORROW INCL. HAUL	1200	CY	$ 90	$ 108,000
29	EMBANKMENT COMPACTION	1200	CY	$ 20	$ 24,000
30	STREET TREE	28	EACH	$ 500	$ 14,000
31	SEEDING AND FERTILIZING	1200	SY	$ 36	$ 44,000
	Subtotal				$ 1,235,000
	Erosion Controls and Water Pollution Prevention	*5%*			$ 61,750
	Temporary Traffic Controls	*12%*			$ 155,610
	Mobilization	*10%*			$ 145,236
	Allowance for Indeterminates	*30%*			$ 479,279
	CONSTRUCTION SUBTOTAL (ROUNDED)				**$2,080,000**
	Engineering Design Fees	*15%*			$ 312,000
	Construction Administration Fees ($50000 per month)	5 MOS		$ 50,000	$ 250,000
	Right of Way Cost				$ 13,000
	City of Kenmore Staff Labor	*8%*			$ 166,400
	NON-CONSTRUCTION SUBTOTAL				**$741,400**
	Project Contingency	*30%*			$ 846,420
	YEAR 2022 PROJECT TOTAL (ROUNDED)				$ 3,700,000
	Year 2044 Escalation	*4.4%*			$ 6,270,000
	YEAR 2044 PROJECT TOTAL (ROUNDED)				$ 9,970,000

ESCALATION FORECAST ASSUMPTION

CURRENT DATE 11/1/2022
FORECAST DATE 12/31/2044

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BASIS OF ESTIMATE

Project Name	**SR 522 Crossing**
Project Number	554-3744-004
Date Prepared	12/20/2022
Prepared by	Jenna Anderson, PE, and Edward Wang
Estimate Classification	Unclassified
Estimate Purpose	Long-term Planning for Transportation Element
Estimate ID (Version)	
Project Manager	McIntire, Alicia

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Note that the accuracy of the associated cost estimate is dependent upon the various underlying assumptions, inclusions, and exclusions described herein. Actual project costs may differ and can be significantly affected by factors such as changes in the external environment, the manner in which the project is executed and controlled, and other factors that may impact the estimate basis or otherwise affect the project. Estimate accuracy ranges are only assessments based upon the cost estimating methods and data employed in preparing the estimate and are not a guarantee of actual project costs.

BASIS OF ESTIMATE

Project Name: ***SR 522 Crossing***

Project Number: ***554-3744-004*** Date: 12/20/2022

1.0 Purpose

This project provides a protected bicycle and pedestrian crossing of SR 522 (NE Bothell Way) between 65th Avenue NE and 68th Avenue NE, with a preferred location at 67th Avenue NE. The crossing limits extend from the existing NE 181st Street to NE 175th Street. This project will improve connectivity between Downtown Kenmore and the future Lakepointe development and improve bicycle and pedestrian safety.

This cost estimate is based on the attached conceptual design of the preferred alternative and is intended to provide planning guidance for the City.

2.0 Project Scope Definition

This project includes survey, design, right-of-way acquisition, permitting, removal of structures, and construction of a pedestrian/bicycle facility with connections to the Burke-Gilman Trail and existing infrastructure. The project scope does not include utility relocations.

Surveys will entail a review of existing data as well as the collection of field data as necessary to complete design.

Design will entail advancing the conceptual design to a detailed final design, with reviews occurring at intermediate plan completion percentages.

3.0 Design Basis

The City requested four alternatives to be evaluated during the conceptual design development:

1. Vehicle/Pedestrian/Bicycle Tunnel
2. Pedestrian/Bicycle-Only Tunnel
3. Pedestrian/Bicycle Bridge
4. At-Grade Pedestrian/Bicycle Crossing

1. Vehicle/Pedestrian/Bicycle Tunnel

The vehicle tunnel option faces multiple issues, making this option infeasible. Due to the short distance from SR 522 to the adjacent streets, NE 181st Street and NE 175th Street, extreme grades (15%) and vertical curvature are required to tie into these streets at their existing elevations while providing sufficient clearance beneath SR 522. Additionally, the parcel at 6532 NE Bothell Way is currently being developed as an affordable housing development and is proposed to be accessed from 67th Avenue NE; a vehicle tunnel would not allow for driveway access. Finally, there are numerous utility conflicts further detailed for the pedestrian and bicycle tunnel option below.

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2. Pedestrian/Bicycle-Only Tunnel

The conceptual pedestrian and bicycle tunnel option is aligned with the east side of 67th Avenue NE, between NE 181st Street and NE 175th Street. The tunnel would require closure of the existing bank (6701 NE 181st Street) and restaurant (6702 NE Bothell Way) driveway accesses on the east side of 67th Avenue NE. A vertical clearance of 10 feet within the tunnel is assumed above the trail ground surface.

The following potential utility conflicts have been identified along the alignment:

- Northshore Utility District 8-inch sewer line crossing 67th Avenue NE near the boundary between the restaurant and bank properties. The approximate depth of this sewer is 12 feet.
- Northshore Utility District 8-inch water main running along 67th Avenue NE at an unknown depth. Some portions of this pipe may need to be relocated to the west.
- City stormwater system along the east side of 67th Avenue NE will need to be relocated.
- A joint utility trench along the north side of SR 522, at an unknown depth, may require relocation. The trench is known to contain the following utilities:
    - Northshore Utility District 10-foot water main with a 16-inch casing
    - Puget Sound Energy gas line
    - Verizon conduit
    - City storm drain pipe with approximately 3 feet of cover
- A joint utility trench on the south side of SR 522, located approximately 15 feet north of the southern edge of the roadway. The depth of the trench is approximately 6.5 feet and relocation is anticipated. This trench is known to contain the following:
    - Puget Sound Energy conduit
    - Comcast conduit
- King County 60-inch diameter sewer line approximately aligned with the northern edge of the Burke-Gilman trail. The top of this pipe is approximately 15 feet under the Burke-Gilman trail. Relocation of the sewer would be necessary since it is anticipated to conflict with the potential tunnel foundation.

Another challenge associated with the pedestrian/bicycle tunnel option is a below-grade switchback on the north side of SR 522 to meet ADA grade requirements and anticipated clearance needs.

The pedestrian/bicycle tunnel option is technically feasible with the aforementioned driveway closures and utility relocations. However, the pedestrian/bicycle tunnel option was considered infeasible due to the difficulty of relocating the King County 60-inch diameter sewer line and the complexity of maintaining ADA accessibility.

3. Pedestrian/Bicycle Bridge

The conceptual pedestrian and bicycle bridge is also aligned with the east side of 67th Avenue NE. This requires closure of the bank driveway. It may be feasible to provide driveway access to the existing restaurant parcel with a reduced vertical clearance of approximately 8 feet. However, as the design progresses, the City should consider risk and liability in determining whether vehicle access should be maintained at this location. After crossing SR 522, the bridge ramps down in a large arc within a portion

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of the auto lot property south of SR 522 and intersects with the Burke-Gilman Trail. A separate trail connection provides access to NE 175th Street.

4. At-Grade Pedestrian/Bicycle Crossing

An at-grade pedestrian and bicycle crossing, assumed to be located at 65th Avenue NE, is feasible but would impact traffic operations on SR 522. The at-grade crossing option provides a lower level of service for crossing users and vehicles when compared with the grade-separated options. However, the at-grade crossing would be less expensive than the grade separated options.

The City requested the most expensive and feasible option to be used for the 20-year project preferred alternative. Therefore, the pedestrian and bicycle bridge option was advanced for this conceptual cost estimate.

4.0 Cost Basis

Unit costs are sourced from WSDOT unit bid analysis in the Northwest region and other projects from within the Puget Sound region that have been bid out between January 2021 and November 2022.

Escalation cost is assumed to be 4.4% per year from the current year, 2022, to the forecasted construction year of 2044.

5.0 Allowances

Survey costs are calculated based on the length of the project, using an assumed hourly rate and productivity rate based on other projects estimated in 2021 and 2022. The estimate includes both field time and office time.

Property acquisition includes a portion of the auto lot parcel, as shown on the design plan. This purchase is estimated based on square footage and does not consider loss of business revenue or other impacts. The existing restaurant at 6702 NE Bothell Way is approximately 3 to 4 feet from the proposed bridge structure. Given the conceptual level of design and to be conservative, it is assumed that property acquisition will be necessary to avoid conflicts with the new bridge. However, this assumption should be verified or alternatives to the proposed bridge design should be evaluated to alter the assumption of property acquisition.

It is unknown if closing the bank driveway will create a detriment to the functionality of the parcel. As such, to be conservative, the cost of closing the bank driveway is included and assumed at 5% of the total value of the property. Finally, a 10-foot wide temporary construction easement on non-acquired parcels is included, with an assumed cost of 5% of the purchase value of the square footage used.

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Removal of structures includes the removal of fencing and other structures in the acquired portion of the auto lot parcel, as well as demolition and removal of the restaurant building.

Signage costs encompass crosswalk signage on NE 175th Street, directional signs and stop signs at all trail junctions, and warning signs for the bridge curves. The proposed illumination system consists of pedestrian luminaires spaced 150 feet apart along the full length of the bridge.

The estimate includes the trail connection from the Burke-Gilman trail to NE 175th Street as well as the crosswalk across NE 175th Street, including curb ramps and pavement markings.

6.0 Exclusions

The scope of this estimate does not include any improvements to the Burke-Gilman Trail or NE 175th Street beyond the intersections and crosswalk. Also, the scope does not include utility relocations. Franchised utilities within City right-of-way are to be relocated at the utility company's expense.

7.0 Assumptions

The bridge is assumed to provide 18 feet of clearance above SR 522, slightly more than the required 17.5 feet prescribed by WSDOT Design Manual 720.03(5)(b).

The proposed trail is a total of 16 feet wide, consisting of a 12-foot wide trail with 2 feet of clearance on both sides, in accordance with the desirable shared-use path width in WSDOT Design Manual Section 1515.02(2)(a). The bridge railing and structure is assumed to occupy an additional 1 foot on each side, for a total bridge cross section width of 18 feet.

Stormwater runoff is assumed to be routed to existing storm sewers on adjacent roadways. It is assumed that these storm sewers have the capacity to handle the runoff from the bridge and that additional detention infrastructure is not required.

The trail is supported on a retaining wall for the first 110 feet at the north landing of the bridge and the last 125 feet at the south landing. The bridge approach spans are assumed to have a 4-foot thick superstructure consisting of a concrete deck supported on steel girders. The main span crossing SR 522 and the Burke-Gilman Trail is supported by a prefabricated steel truss.

A higher construction administration fee of $60,000 per month was assumed due to the additional complexities of working on and around a high-volume state highway.

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8.0 Risks (Threats and Opportunities)

This estimate was prepared without the use of detailed survey information, so utility locations, detailed topography, and other potential obstructions have not been precisely identified. There is potential for unforeseen survey details to add additional cost.

A geotechnical assessment was not performed as part of this estimate, and shaft foundation depths are assumed comparable to other Puget Sound-area nonmotorized bridge projects. Actual ground and soil conditions may necessitate deeper foundations, which would increase project cost.

Stormwater detention will add additional cost if adjacent stormwater facilities do not have the capacity to accommodate runoff from the bridge.

9.0 Contingency

The project includes a 30% allowance for indeterminates (AFI) based on the level of design applied to the subtotal of construction costs and a 30% project contingency applied to construction and non-construction costs. The AFI and contingency are intended to cover uncertainties and unforeseeable elements of cost within the defined project scope.

The 30% AFI was chosen in coordination with City of Kenmore staff due to the uncertainty of existing site conditions and the long-term nature of this estimate.

10.0 Attachments

Attachment A: SR 522 Crossing Vehicle Tunnel Plan and Profile Sheets (September 26, 2022)

Attachment B: SR 522 Crossing Pedestrian/Bicycle Tunnel Profile Sheet (November 4, 2022)

Attachment C: SR 522 Crossing Pedestrian/Bicycle Bridge Plan and Profile Sheets (December 12, 2022)

Attachment D: SR 522 Crossing At-grade Plan Sheet (September 13, 2022)

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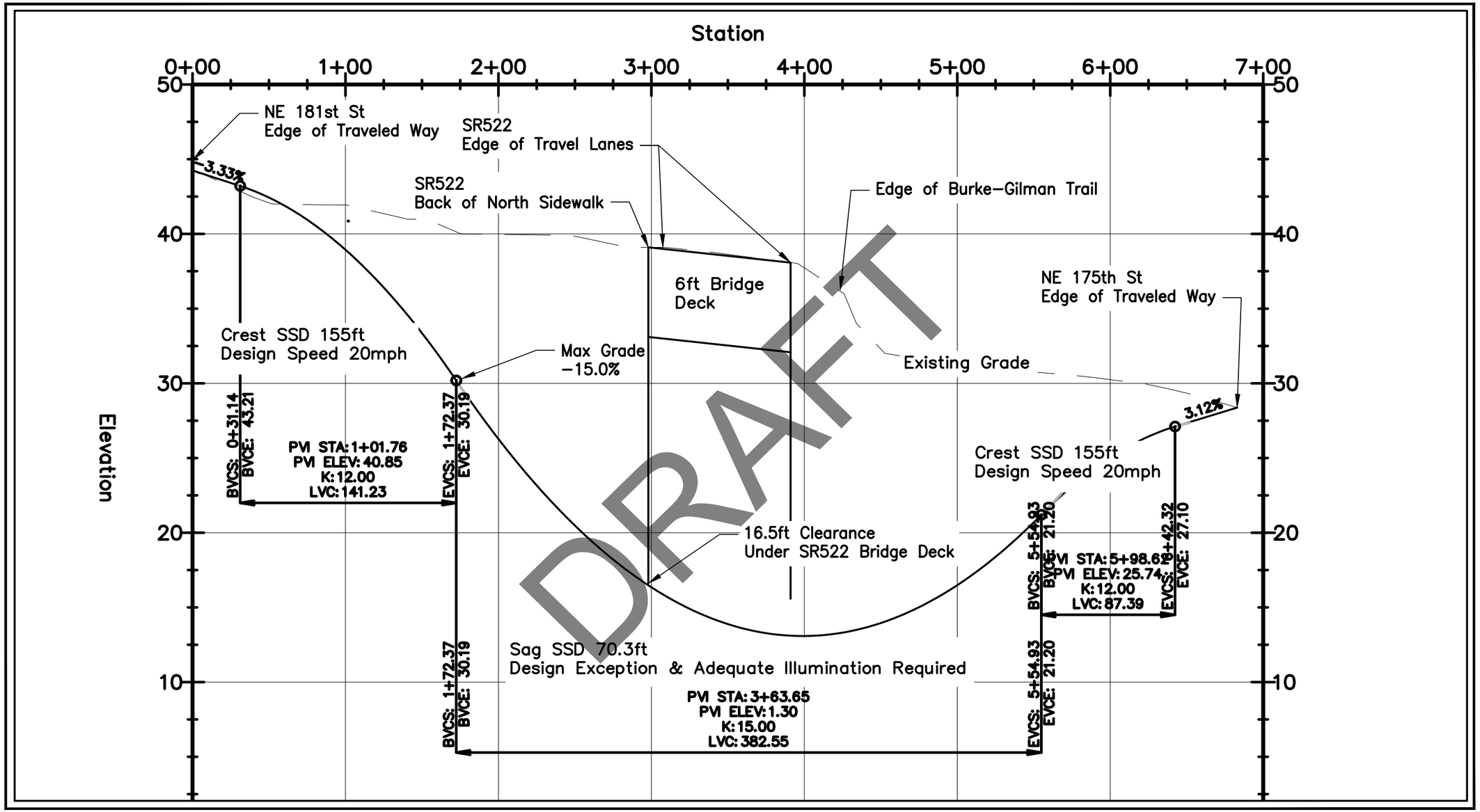

Parametrix DATE: September 26, 2022 FILE: 522CROSSING

N

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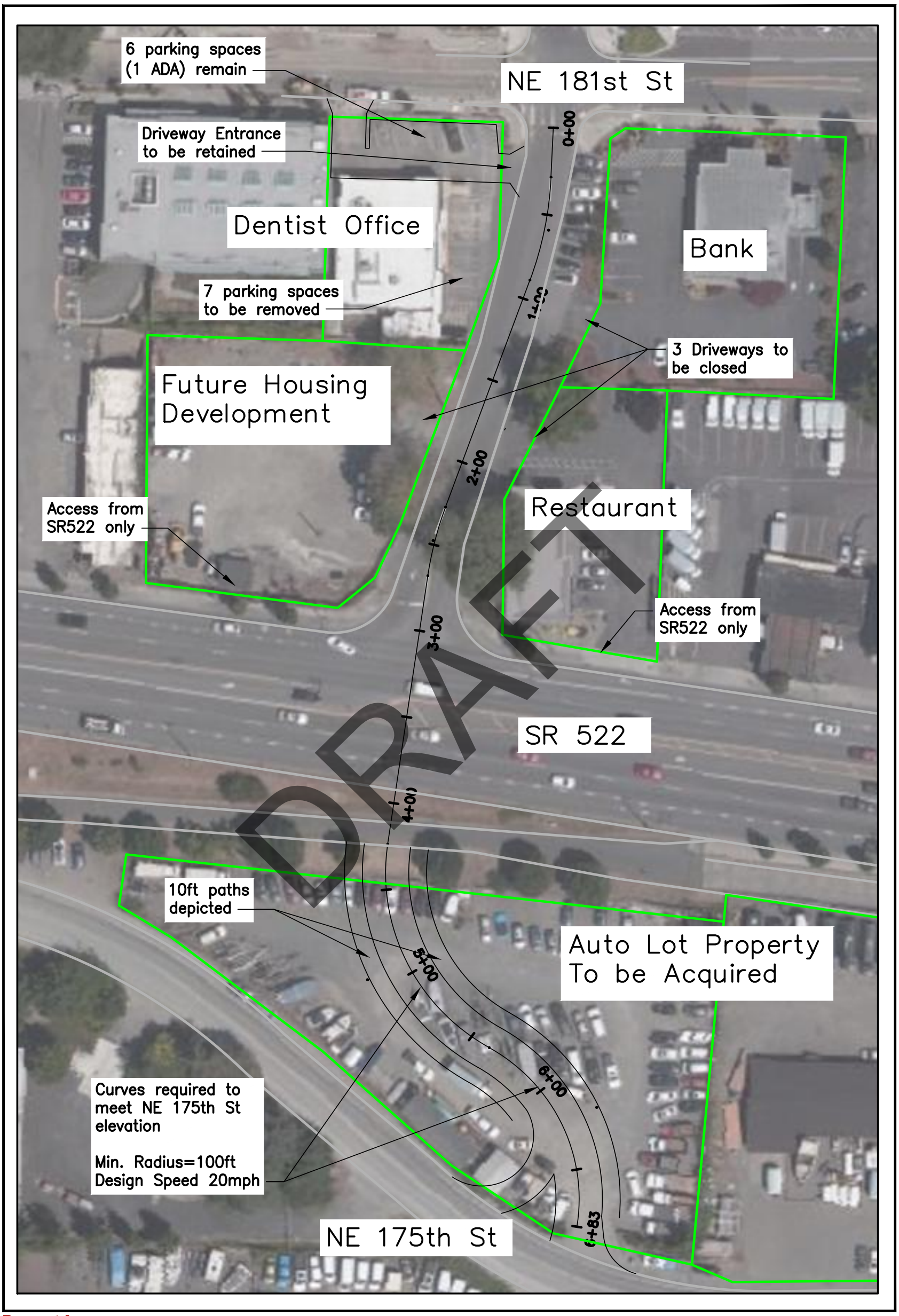
1 INCH = 1 INCH

67th ave NE Vehicle Tunnel Option
DRAFT Concept



Parametrix DATE: September 26, 2022 FILE: 522CROSSING

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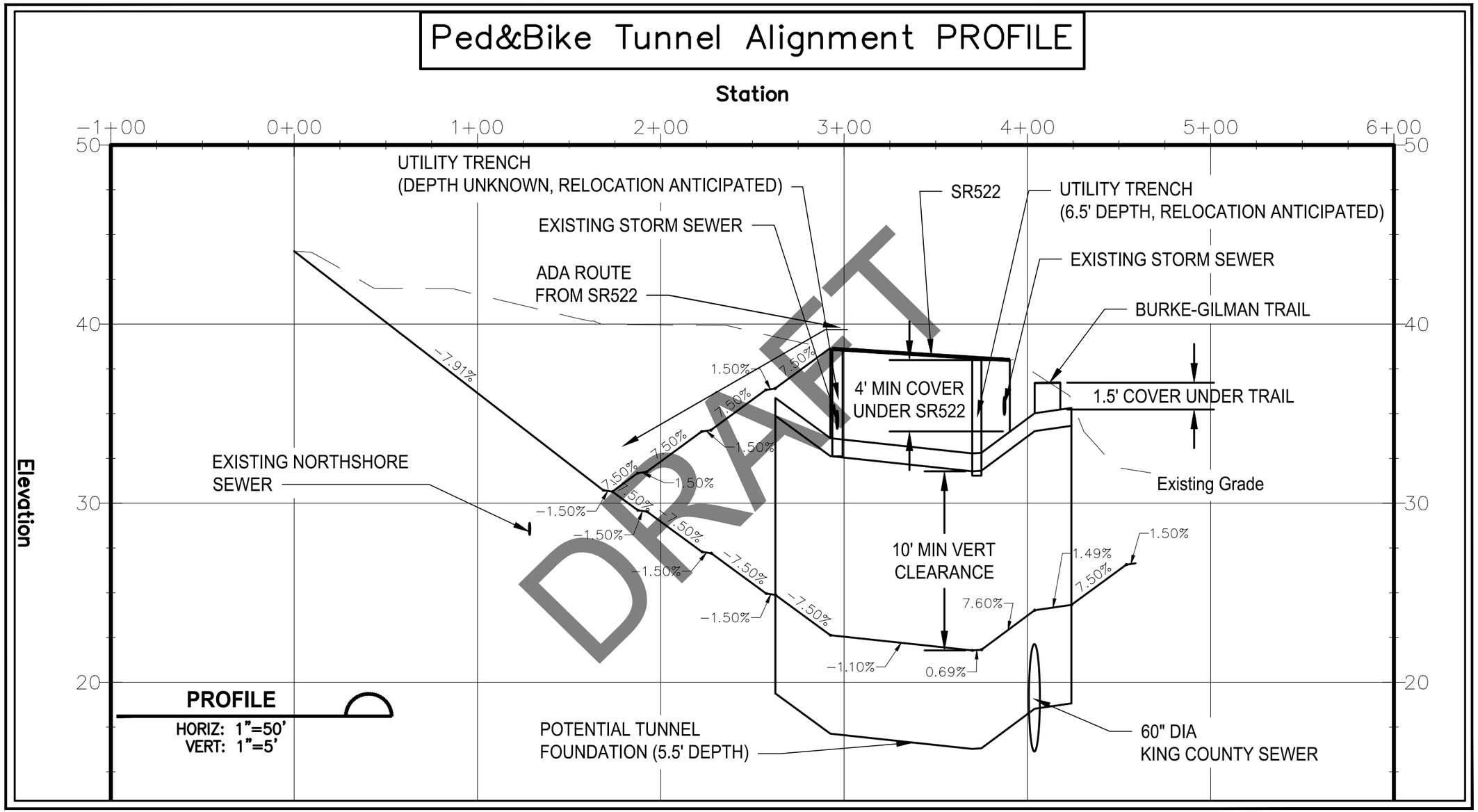
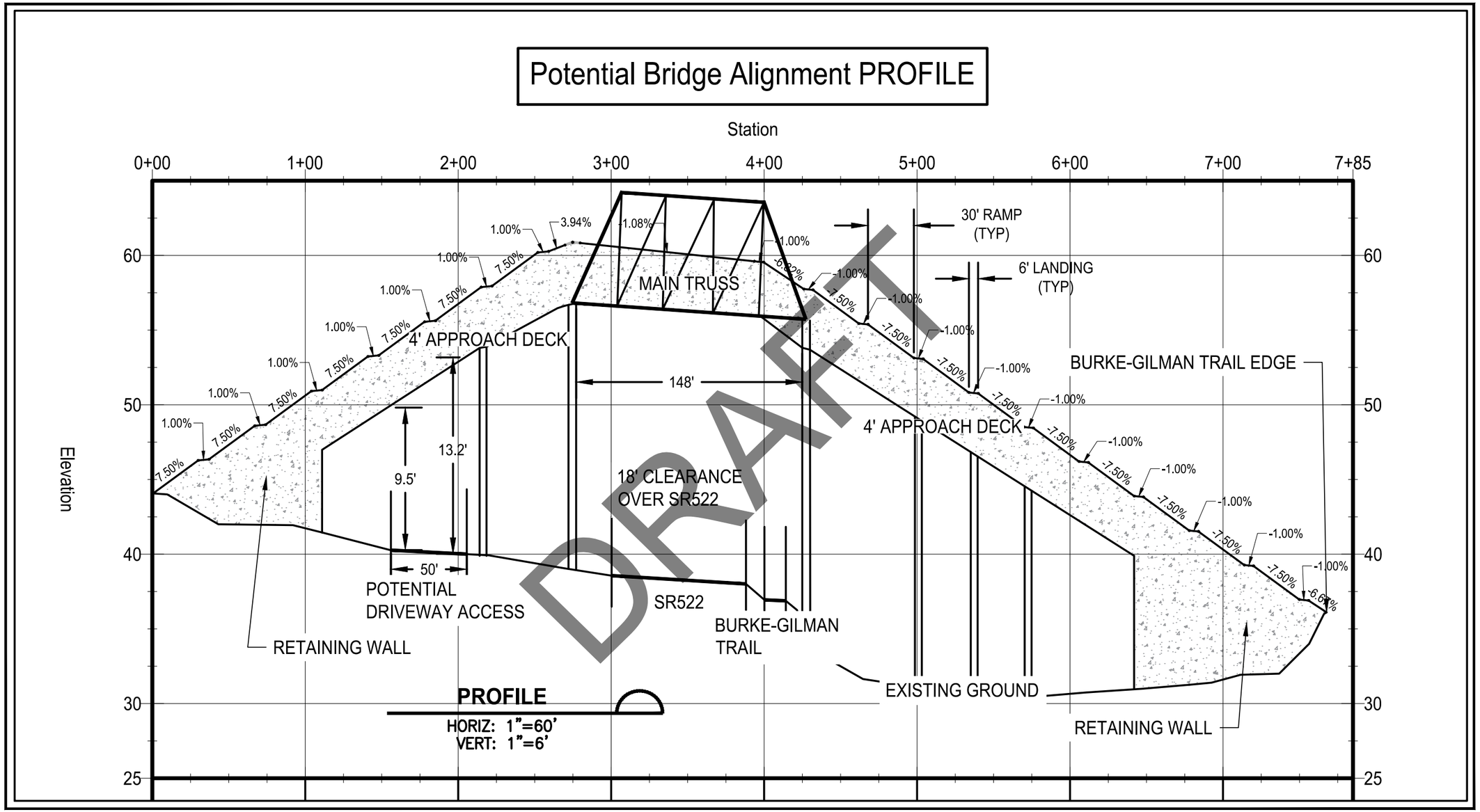
1 INCH = 1 INCH

67th Ave NE Vehicle Tunnel Option
DRAFT Concept



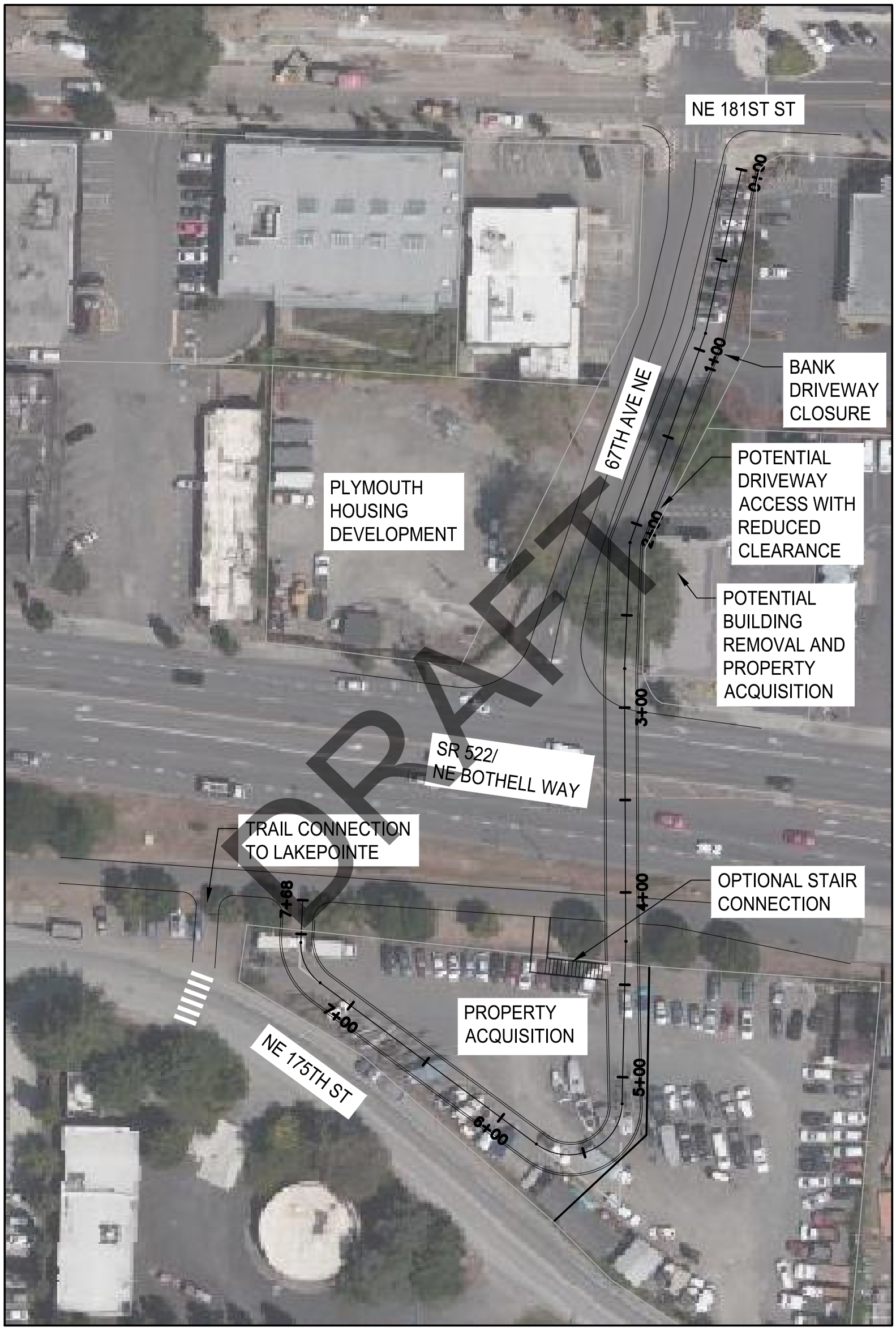
Parametrix DATE: November 4, 2022 FILE: 522CROSSING-PEDBIKETUNNELV3

SR 522 Crossing
Ped/Bike Tunnel
DRAFT Concept



Parametrix DATE: December 12, 2022 FILE: 522CROSSING-BRIDGE-V2

SR 522 Crossing
Potential Bridge Profile
DRAFT Concept



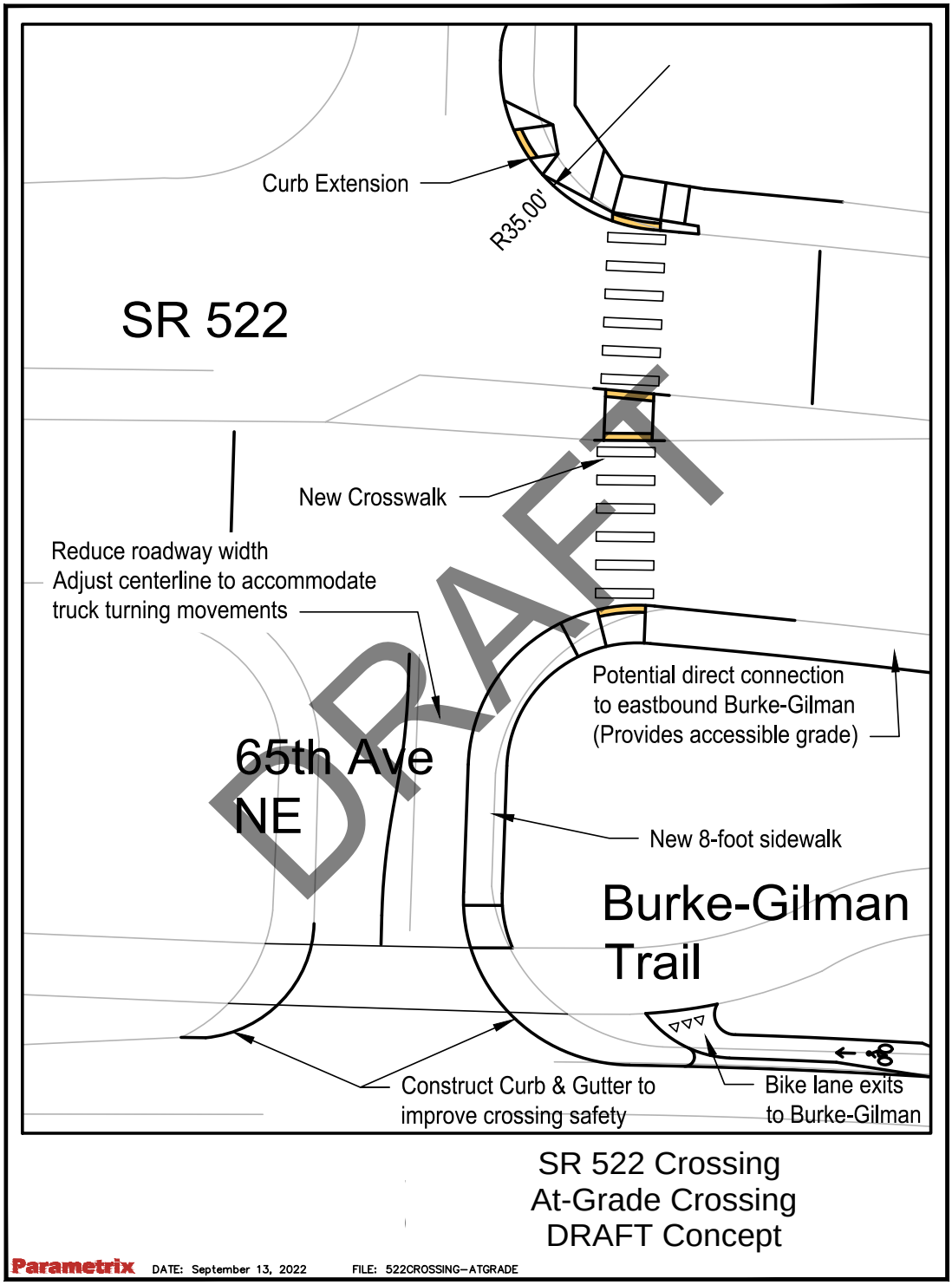
Parametrix DATE: December 12, 2022 FILE: 522CROSSING-BRIDGE-V2

N

0 50

1 INCH = 50 FT.

SR522 Crossing
Potential Bridge Alignment
DRAFT Concept


Curb Extension
R35.00'
SR 522
New Crosswalk
Reduce roadway width
Adjust centerline to accommodate
truck turning movements
Potential direct connection
to eastbound Burke-Gilman
(Provides accessible grade)
65th Ave
NE
New 8-foot sidewalk
Burke-Gilman
Trail
Construct Curb & Gutter to
improve crossing safety
Bike lane exits
to Burke-Gilman
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SR 522 Crossing
At-Grade Crossing
DRAFT Concept
Parametrix
DATE: September 13, 2022
FILE: 522CROSSING-ATGRADE

SR 522 Pedestrian and Bicycle Bridge Crossing
CITY OF KENMORE

ENGINEER'S ESTIMATE - PLANNING LEVEL
AACE International Unclassified Estimate

PREPARED BY: Jenna Anderson, PE and Edward Wang DATE: 11/18/2022
CHECKED BY: Joe Merth, PE, and Cindy Clark, PE DATE: 11/20/2022

NO.	ITEM	QUANT.	UNIT	UNIT COST	AMOUNT
1	ROADWAY SURVEY	1	LS	$ 18,000	$ 18,000
2	CLEARING AND GRUBBING	0.2	ACRE	$ 25,000	$ 5,000
3	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS	$ 70,000	$ 70,000
4	REMOVAL OF CEMENT CONC. SIDEWALKS	10	SY	$ 30	$ 1,000
5	REMOVAL OF CEMENT CONC. PAVEMENT	0	SY	$ 57	$ -
6	REMOVAL OF CEMENT CONC. CURB	0	LF	$ 15	$ -
7	SELECT BORROW INCL. HAUL	2300	TON	$ 26	$ 60,000
8	CATCH BASIN TYPE 1	8	EACH	$ 2,500	$ 20,000
9	STORM SEWER PIPE, 12 IN. DIAM.	900	LF	$ 55	$ 50,000
10	CRUSHED SURFACING BASE COURSE	100	TON	$ 50	$ 5,000
11	HMA CL 1/2 IN. PG 58H-22	110	TON	$ 160	$ 18,000
12	LANDSCAPING/PLANTINGS	2300	SY	$ 36	$ 83,000
13	CEMENT CONC. SIDEWALK	10	SY	$ 100	$ 1,000
14	CEMENT CONC. CURB RAMP	2	EACH	$ 4,000	$ 8,000
15	PAVEMENT MARKINGS	1500	LF	$ 10	$ 15,000
16	PERMANENT SIGNING	1	LS	$ 5,000	$ 5,000
17	RECTANGULAR RAPID FLASHING BEACON SYSTEM	0	EACH	$ -	$ -
18	ILLUMINATION SYSTEM, COMPLETE	1	LS	$ 120,000	$ 120,000
19	MODULAR BLOCK WALL	5000	SF	$ 96	$ 480,000
	STRUCTURAL - MAIN & APPROACH BRIDGE SPANS				
20	SHORING OR EXTRA EXCAVATION CL. A	1	LS	$ 50,000	$ 50,000
21	CONSTRUCTING 6 FT DIAMETER SHAFT	120	LF	$ 2,500	$ 300,000
22	CONSTRUCTING 8 FT DIAMETER SHAFT	360	LF	$ 3,000	$ 1,080,000
23	REMOVING SHAFT OBSTRUCTIONS	1	LS	$ 145,000	$ 145,000
24	STEEL REINFORCING BAR FOR BRIDGE	34000	LB	$ 2.25	$ 77,000
25	CONC. CLASS 4000 FOR BRIDGE	200	CY	$ 1,200	$ 240,000
26	SUPERSTRUCTURE - APPROACH SPANS	1	LS	$ 600,000	$ 600,000
27	SUPERSTRUCTURE - MAIN TRUSS	1	LS	$ 600,000	$ 600,000
28	STRUCTURAL CARBON STEEL	220000	LB	$ 3.00	$ 660,000
29	**OPTIONAL SOUTH STAIRS**	1	LS	$ 400,000	$ 400,000
	Subtotal				$ 5,111,000
	Erosion Controls and Water Pollution Prevention	*5%*			$ 255,550
	Temporary Traffic Controls	*12%*			$ 643,986
	Mobilization	*10%*			$ 601,054
	Allowance for Indeterminates	*30%*			$ 1,983,477
	CONSTRUCTION SUBTOTAL (ROUNDED)				**$8,600,000**
	Engineering Design Fees	*12%*			$ 1,032,000
	Construction Administration Fees ($60000 per month)	18 MOS		$ 60,000	$ 1,080,000
	Right of Way Cost				$ 1,800,000
	City of Kenmore Staff Labor	*8%*			$ 688,000
	NON-CONSTRUCTION SUBTOTAL				**$4,600,000**
	Project Contingency	*30%*			$ 3,960,000
	YEAR 2022 PROJECT TOTAL (ROUNDED)				**$ 17,160,000**
	Year 2044 Escalation	*4.4%*			$ 29,040,000
	YEAR 2044 PROJECT TOTAL (ROUNDED)				**$ 46,200,000**

ESCALATION FORECAST ASSUMPTION

CURRENT DATE 11/1/2022
FORECAST DATE 12/31/2044

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BASIS OF ESTIMATE

Project Name	**NE 181st Street/SR 522 East Connection**
Project Number	554-3744-004
Date Prepared	12/1/2022
Prepared by	Jenna Anderson, PE, and Edward Wang
Estimate Classification	Unclassified
Estimate Purpose	Long-term Planning for Transportation Element
Estimate ID (Version)	
Project Manager	McIntire, Alicia

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Note that the accuracy of the associated cost estimate is dependent upon the various underlying assumptions, inclusions, and exclusions described herein. Actual project costs may differ and can be significantly affected by factors such as changes in the external environment, the manner in which the project is executed and controlled, and other factors that may impact the estimate basis or otherwise affect the project. Estimate accuracy ranges are only assessments based upon the cost estimating methods and data employed in preparing the estimate and are not a guarantee of actual project costs.

BASIS OF ESTIMATE

Project Name: ***NE 181st Street/SR 522 East Connection***

Project Number: ***554-3744-004*** Date: 12/1/2022

1.0 Purpose

This project improves the portion of NE 181st Street east of 73rd Avenue NE and extends it eastward and southward to intersect with SR 522/NE Bothell Way at the 7700 block. This project will create a local street connection to serve existing development and future transit-oriented development north of SR 522/NE Bothell Way and east of 73rd Avenue NE.

This cost estimate is based on the attached conceptual design and is intended to provide planning guidance for the City.

2.0 Project Scope Definition

The project includes the survey, design, right-of-way acquisition, permitting, and construction of a roadway corridor according to City of Kenmore's local street standard section. The project scope does not include utility relocations or building demolition.

Surveys will entail a review of existing data as well as the collection of field data as necessary to complete design.

Design will entail advancing the conceptual design to a detailed final design, with reviews occurring at intermediate plan completion percentages.

3.0 Design Basis

The cross section of this roadway uses a standard City of Kenmore local street section based on the City's Road Standards Table 6.1, with the following elements:

- 6-foot sidewalk on both sides of the street
- 4-foot amenity strip on both sides of the street
- Curb and gutter on both sides of the street
- 20-foot roadway width, measured from curb to curb
- 46-foot total right-of-way width

The 4-foot amenity strip is narrowed or removed at a few locations along the Heron Rookery to prevent encroachment into the wetland and rookery while also providing space for turning vehicle movements.

The standard design speed of the segment is 25mph. There are four reduced-speed curves: two 15mph curves and two 10mph curves. The design vehicle is SU-30, and the horizontal curves are widened to allow two SU-30 vehicles to pass within the curve. Eight traffic-calming speed humps are included in the

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estimate. These humps will be located on the approaches to the reduced-speed curves to ensure vehicles approach these curves at safe speeds.

No channelization changes are made at the intersection with 73rd Avenue NE, which remains one lane westbound and one lane eastbound. The intersection at SR 522/NE Bothell Way also matches the existing configuration, with one southbound right-turn lane and one southbound left-turn lane.

From Station 100+00 to 104+00, the proposed roadway alignment follows an existing roadway. In this segment, a 2-inch grind and overlay is assumed. For the remainder of the roadway, a full-depth reconstruction is assumed. This includes a 6-inch depth of hot mix asphalt for all roadways and 2 inches of crushed surfacing under all paved and sidewalk areas, per City of Kenmore Road Standards.

A new proposed storm drainage system meets the catch basin spacing, pipe diameter, pipe zone backfill, and trench backfill specifications in the City of Kenmore Road Standards.

Street trees are assumed to be placed at a 40-foot interval, on average, for the entire length of the corridor and on both sides of the street. The remainder of amenity strip will be seeded and fertilized. In accordance with Downtown Improvements Standard 4 in the City of Kenmore Road Standards Figure 2.2, the street trees will be equipped with irrigation and electrical receptacles. Street and pedestrian lighting will also be provided in accordance with Downtown Improvements Standard 4.

No driveways or intersections are included in the conceptual design because these are expected to be configured and provided by development activity.

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4.0 Cost Basis

Unit costs are sourced from projects within the Puget Sound region that have been bid out between January 2021 and November 2022.

Escalation cost is assumed to be 4.4% per year from the current year, 2022, to the forecasted construction year of 2044.

5.0 Allowances

Survey costs are calculated based on the length of the project, using an assumed hourly rate and productivity rate based on other projects estimated in 2021 and 2022. The estimate includes both field time and office time.

The estimated traffic signal modifications at 73rd Avenue NE include the relocation of one junction box, the relocation of two pedestrian push button poles, and the installation of four new accessible pedestrian signals at the east leg of the intersection.

The estimated traffic signal modifications at SR 522/NE Bothell Way include a new or relocated signal pole and mast arm to accommodate the new southbound approach, which has been realigned to meet SR 522 at a right angle. This also includes relocating one pedestrian push button pole, one pedestrian signal pole, and new accessible pedestrian signals on the north side of the intersection.

The estimated scope of proposed signage accounts for:

- R2-1 (speed limit) signs, two in each direction
- W1-1a (combination turn/advisory speed) and W1-6 (single direction large arrow) facing each direction at each reduced speed curve
- W17-1 (speed hump) facing each direction at each speed hump

The proposed illumination system adheres to Downtown Street Lighting (2.08.F) and Downtown Pedestrian Lighting (2.08.H) standards per the City of Kenmore Road Standards. Spacing of luminaries is assumed to match existing spacing of approximately 150 feet on other streets in Downtown Kenmore.

6.0 Exclusions

The estimate excludes the following costs. The scope of these items is expected to be borne by redevelopment activity:

- Utility relocations
- Removal of structures, including buildings, retaining walls, and other obstructions

7.0 Assumptions

The estimate makes the following construction assumptions:

- Roadway fill sections can be filled using material excavated from cut sections of the roadway. The feasibility of this assumption will need verification by a geotechnical engineer.
- All crushed surfacing used beneath sidewalks and the roadway, as well as for trench backfill for the storm sewers, is assumed to be crushed surfacing base course (CSBC).
- Continuous centerline striping is assumed for the full length of the corridor.

It is assumed that portions of the roadway conflicting with existing structures will only be built either concurrently with redevelopment or after redevelopment occurs. This allows the removal of structures and obstructions to be borne by developers, as mentioned in the Exclusions section.

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8.0 Risks (Threats and Opportunities)

This estimate was prepared without the use of detailed survey information, so utility locations, detailed topography, and other potential obstructions have not been precisely identified. There is potential for unforeseen survey details to add additional cost.

If the roadway excavation material is not suitable for fill, the borrowed material will need to be hauled in at additional cost.

9.0 Contingency

The project includes a 30% allowance for indeterminates (AFI) based on the level of design applied to the subtotal of construction costs and a 30% project contingency applied to construction and non-construction costs. The AFI and contingency are intended to cover uncertainties and unforeseeable elements of cost within the defined project scope.

The 30% AFI was chosen in coordination with City of Kenmore staff due to the uncertainty of existing site conditions and the long-term nature of this estimate.

10.0 Attachments

Attachment A: Kenmore NE 181st Street/SR 522 East Connection Draft Concept Plan Sheets (October 19, 2022)

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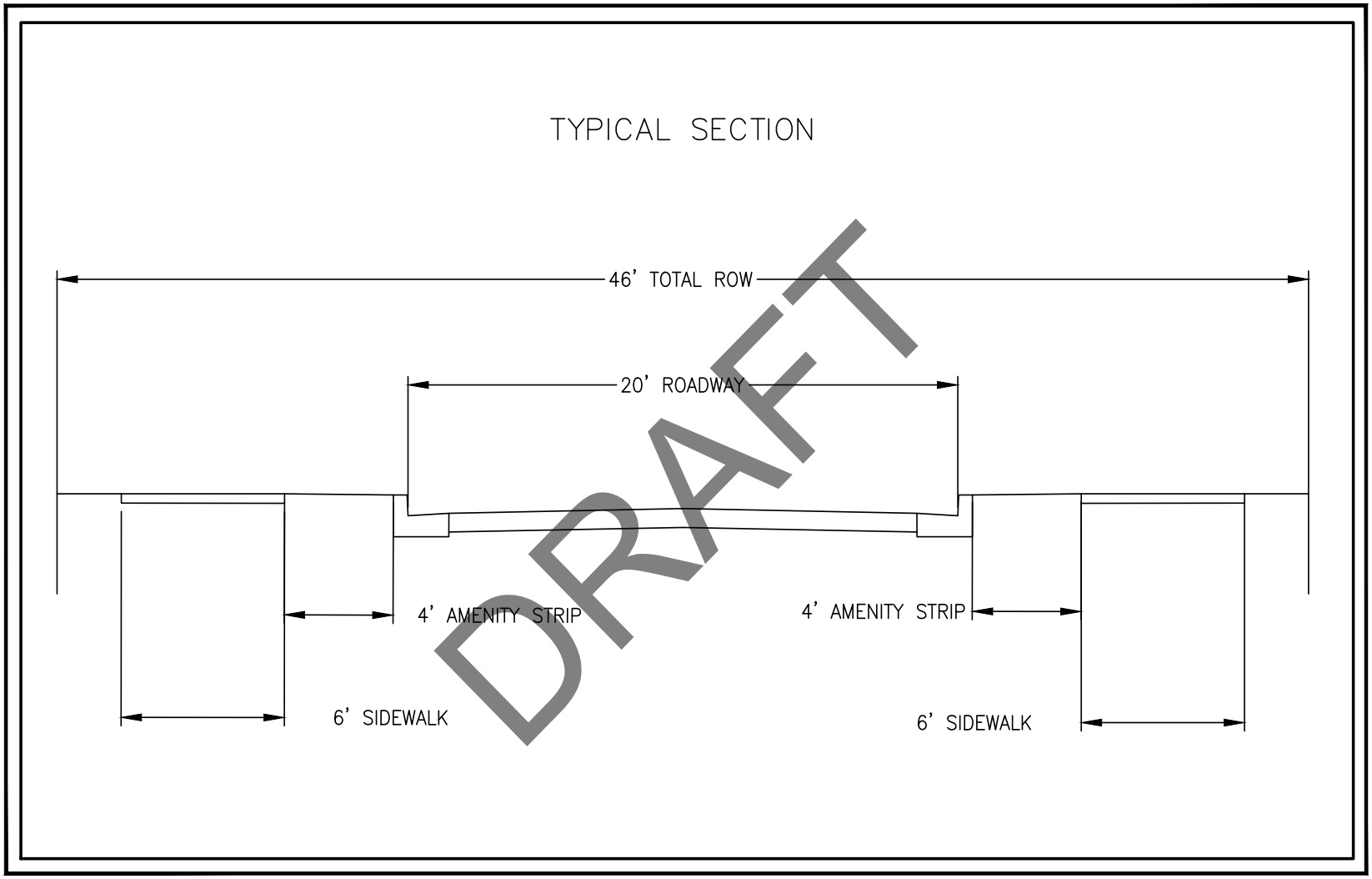
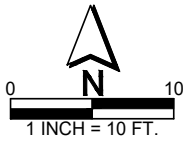
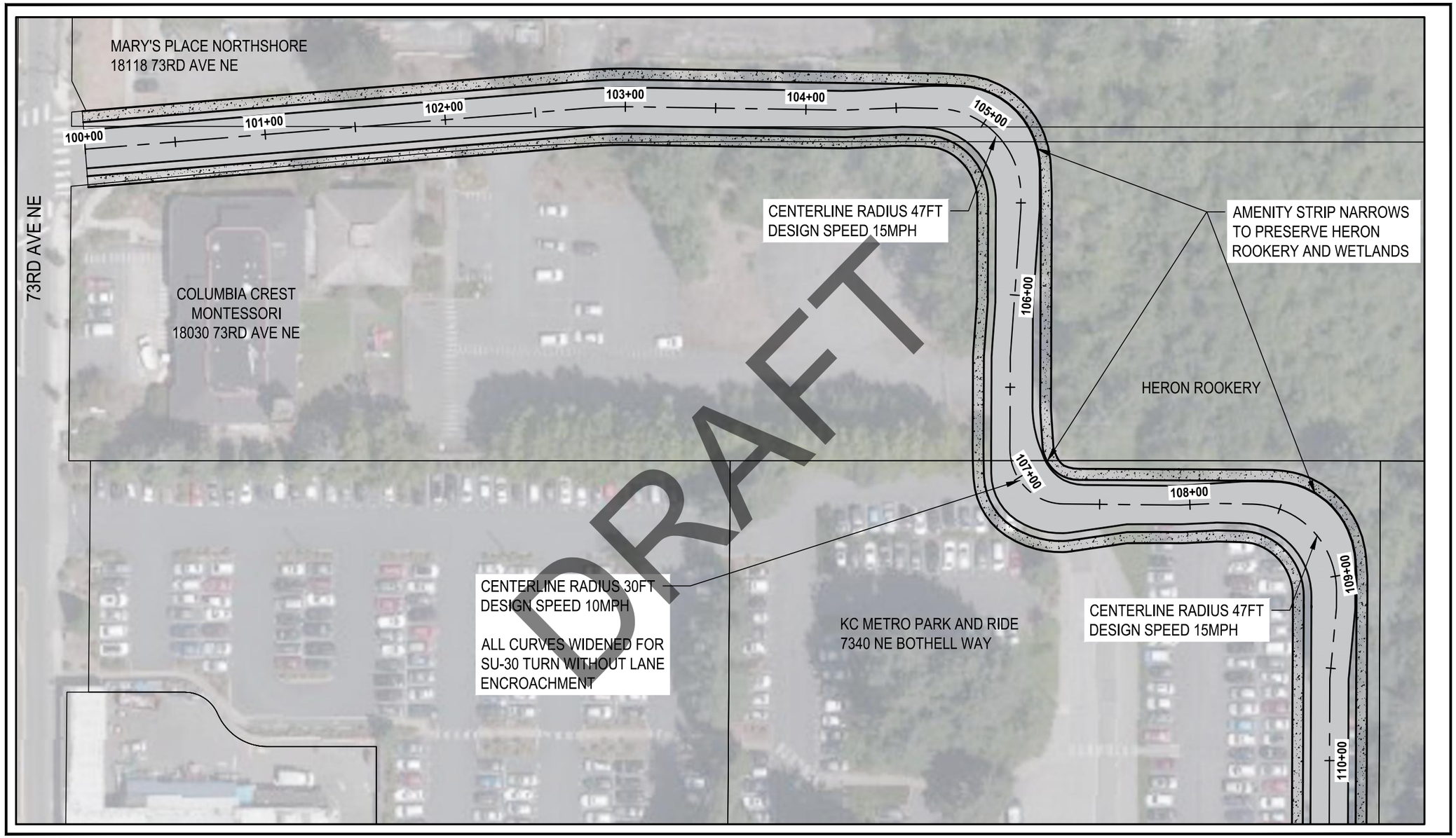


Parametrix DATE: October 19, 2022 FILE: ACCESSROAD_V3-FEATLINES



Kenmore NE 181st Street/SR 522 East Connection
Draft Concept



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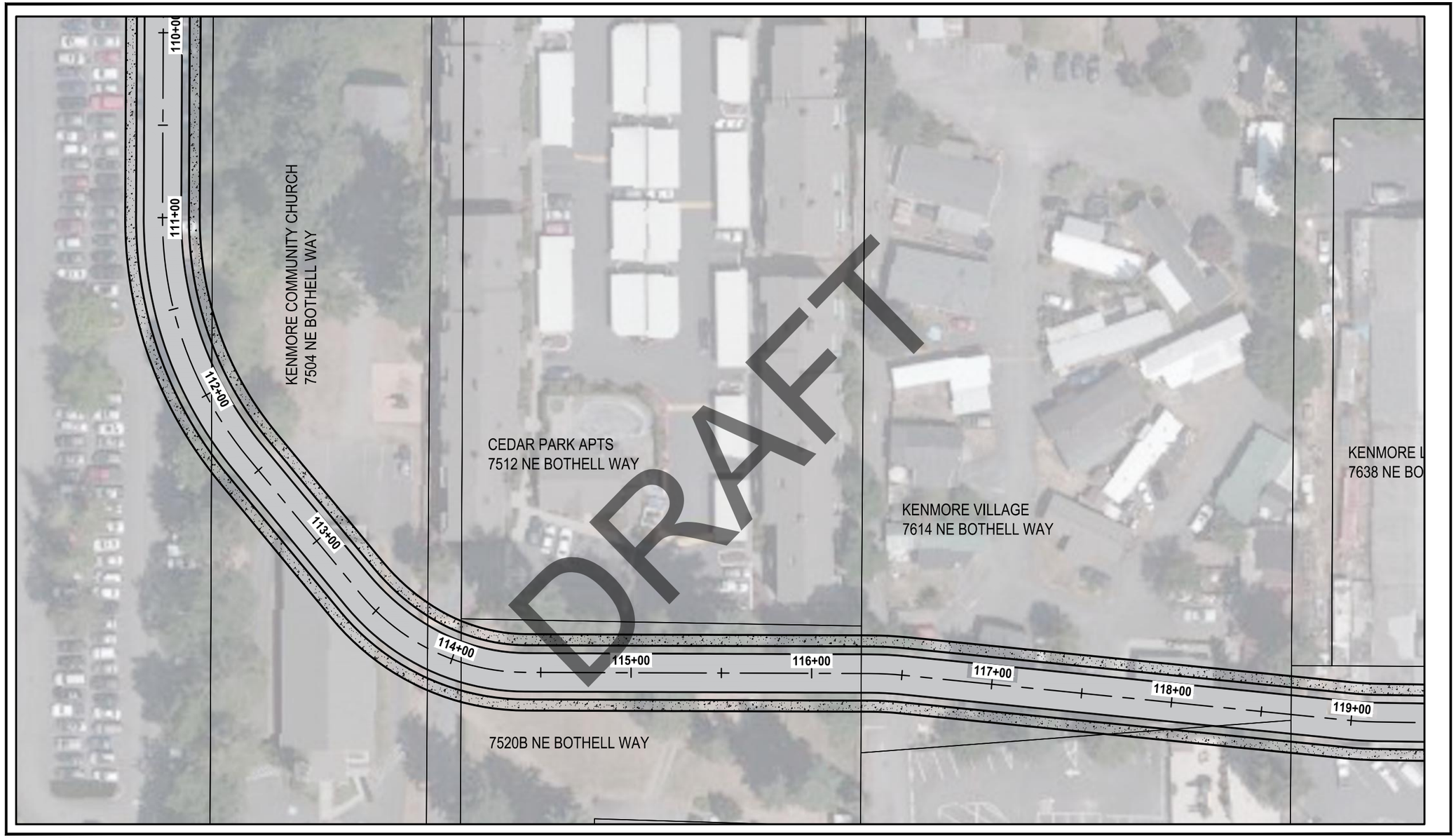
Kenmore NE 181st Street/SR 522 East Connection
Draft Concept



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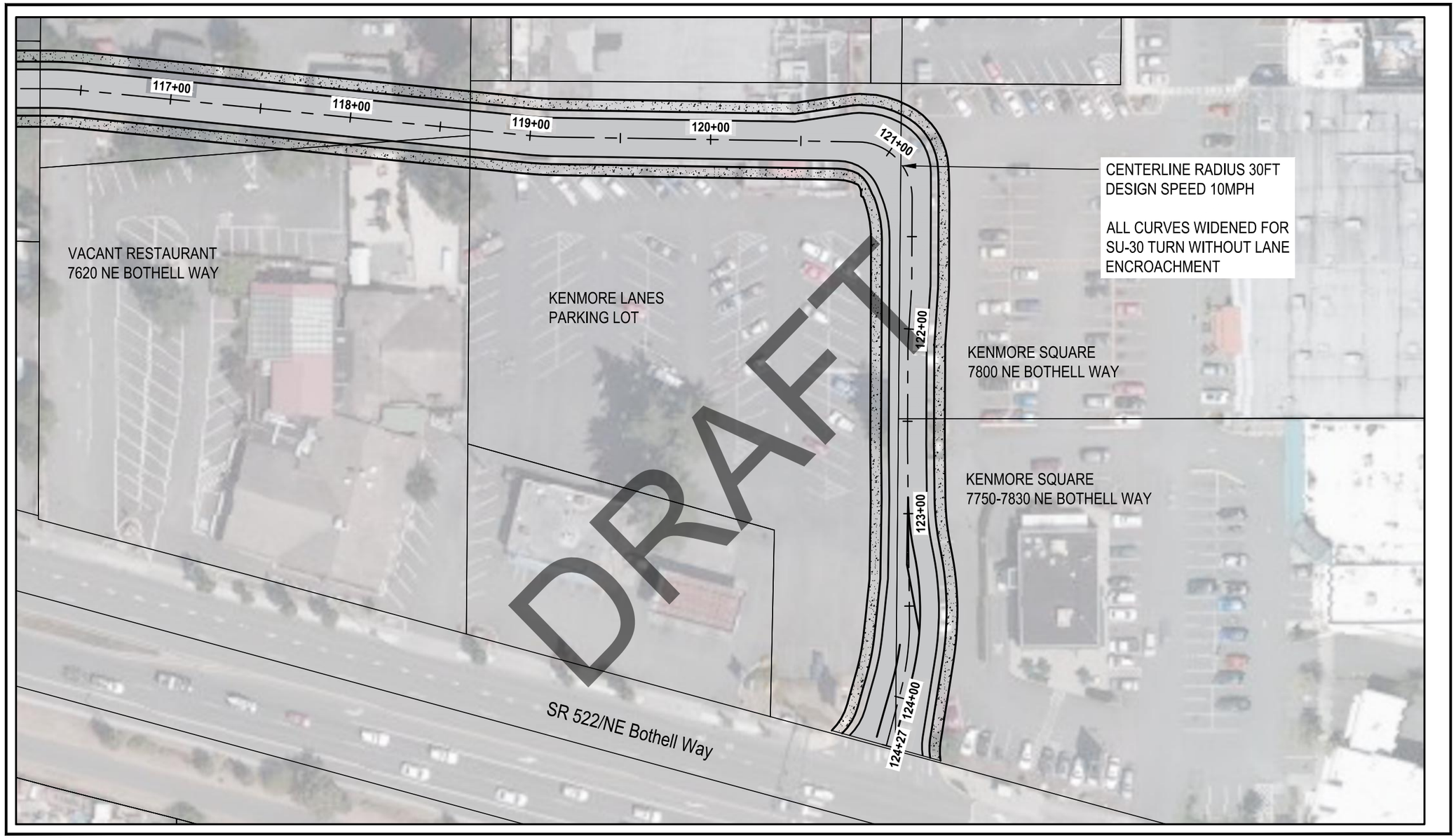

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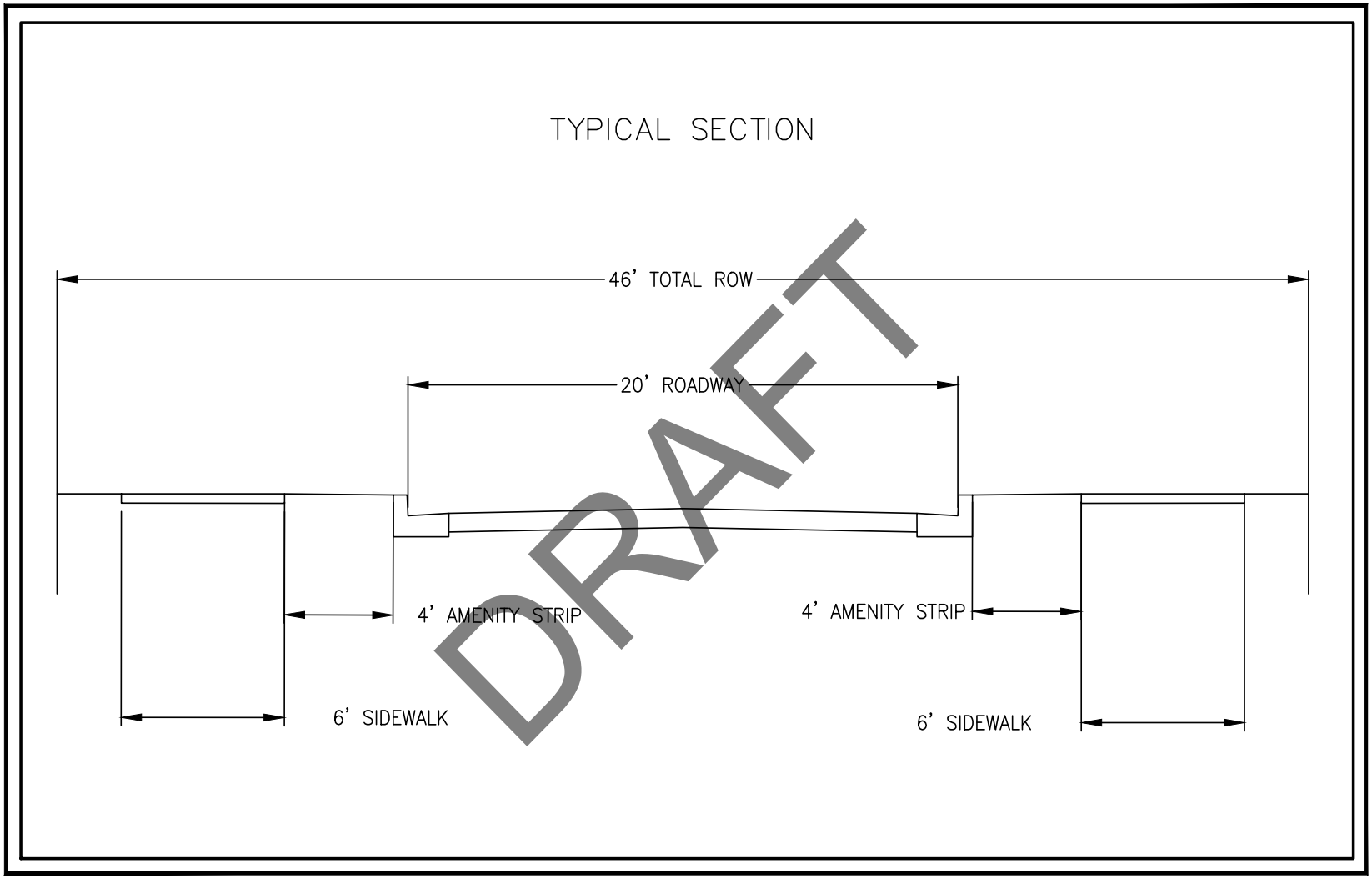

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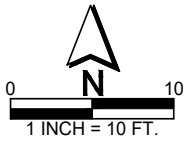

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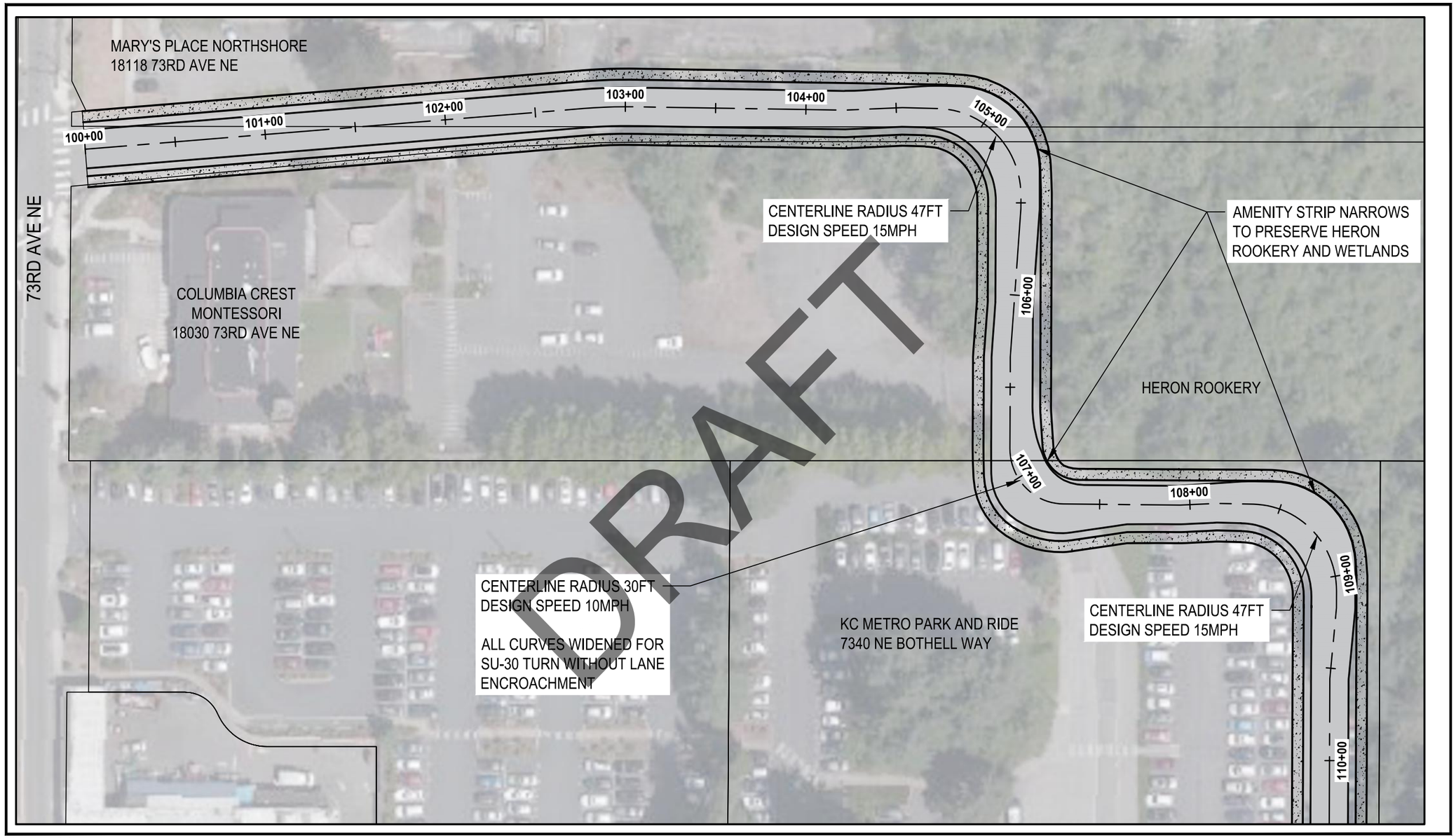

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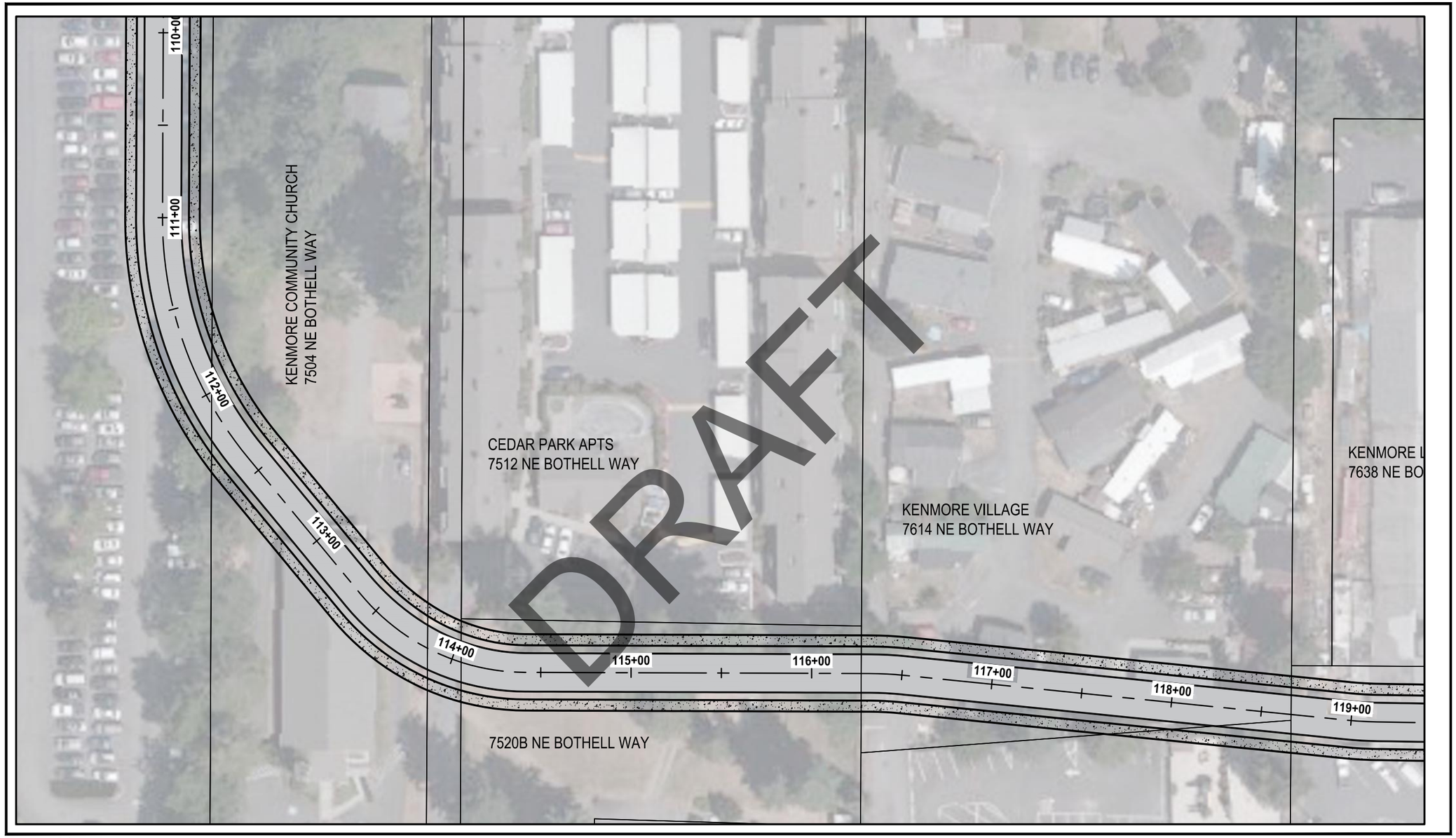
Draft Concept



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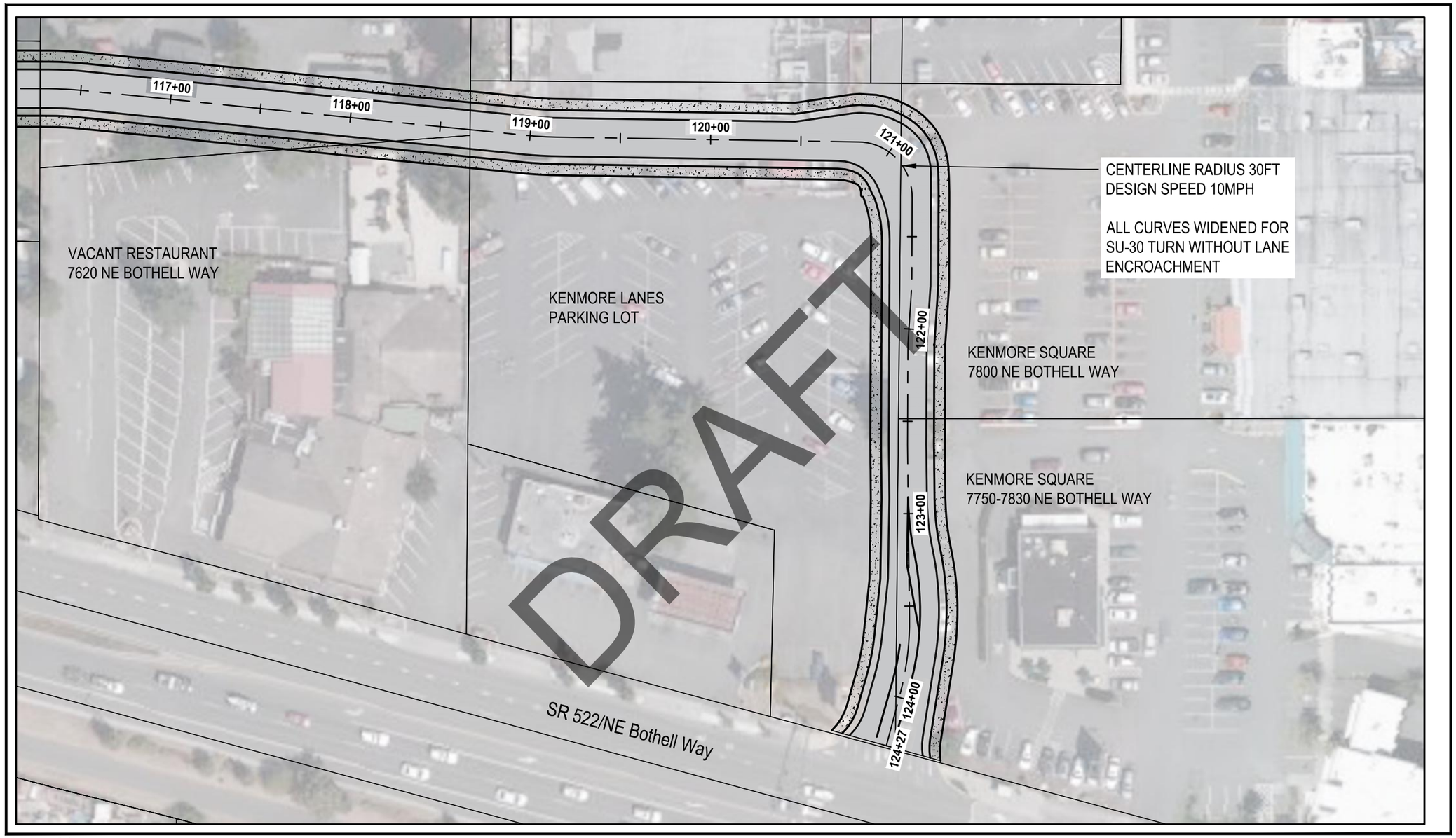

Parametrix DATE: October 19, 2022 FILE: ACCESSROAD_V3-FEATLINES

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Kenmore NE 181st Street/SR 522 East Connection
Draft Concept

NE 181st Street/SR 522 East Connection
CITY OF KENMORE

ENGINEER'S ESTIMATE - PLANNING LEVEL
AACE International Unclassified Estimate

PREPARED BY: Jenna Anderson, PE and Edward Wang DATE: 11/18/2022
CHECKED BY: Cindy Clark, PE DATE: 11/20/2022

NO.	ITEM	QUANT.	UNIT	UNIT COST	AMOUNT
1	ROADWAY SURVEY	1	LS	$ 27,000	$ 27,000
2	CLEARING AND GRUBBING	1	ACRE	$ 25,000	$ 25,000
3	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	0	LS	$ -	$ -
4	REMOVAL OF CEMENT CONC. SIDEWALKS	40	SY	$ 30	$ 2,000
5	REMOVAL OF ASPHALT CONC. PAVEMENT	5800	SY	$ 57	$ 331,000
6	REMOVAL OF CEMENT CONC. CURB	3400	LF	$ 15	$ 51,000
7	ROADWAY EXCAVATION INCL. HAUL	2100	CY	$ 40	$ 84,000
8	CATCH BASIN TYPE 1	46	EACH	$ 2,500	$ 115,000
9	STORM SEWER PIPE, 12 IN. DIAM.	3000	LF	$ 55	$ 165,000
10	CRUSHED SURFACING BASE COURSE	2400	TON	$ 50	$ 120,000
11	CRUSHED SURFACING TOP COURSE	0	TON	$ -	$ -
12	HMA CL 1/2 IN. PG 58H-22	2100	TON	$ 160	$ 336,000
13	CEMENT CONC. TRAFFIC CURB AND GUTTER	4900	LF	$ 50	$ 245,000
14	CEMENT CONC. TRAFFIC CURB	0	LF	$ -	$ -
15	CEMENT CONC. SIDEWALK	3300	SY	$ 100	$ 330,000
16	CEMENT CONC. CURB RAMP	7	EACH	$ 4,000	$ 28,000
17	PAVEMENT MARKINGS	5400	LF	$ 10	$ 54,000
18	PERMANENT SIGNING	1	LS	$ 8,000	$ 8,000
19	RECTANGULAR RAPID FLASHING BEACON SYSTEM	0	EACH	$ -	$ -
20	ILLUMINATION SYSTEM, COMPLETE	1	LS	$ 510,000	$ 510,000
21	TRAFFIC SIGNAL SYSTEMS MODIFICATIONS	1	LS	$ 130,000	$ 130,000
22	PLANING BITUMINOUS PAVEMENT	1200	SY	$ 5	$ 6,000
23	GRAVEL BACKFILL FOR PIPE ZONE	700	CY	$ 50	$ 35,000
24	SPEED HUMP	8	EACH	$ 2,000	$ 16,000
25	EMBANKMENT COMPACTION	1400	CY	$ 5	$ 7,000
26	SEEDING AND FERTILIZING	2200	SY	$ 36	$ 80,000
27	STREET TREES WITH ELECTRICAL RECEPTACLE	120	EACH	$ 1,500	$ 180,000
28	STREET TREE IRRIGATION SYSTEM	1	LS	$ 70,000	$ 70,000
29	STORMWATER DETENTION & TREATMENT	1	LS	$ 650,000	$ 650,000
	Subtotal				$ 3,605,000
	Erosion Controls and Water Pollution Prevention	*5%*			$ 180,250
	Temporary Traffic Controls	*12%*			$ 454,230
	Mobilization	*10%*			$ 423,948
	Allowance for Indeterminates	*30%*			$ 1,399,028
	CONSTRUCTION SUBTOTAL (ROUNDED)				**$6,060,000**
	Engineering Design Fees	*10%*			$ 606,000
	Construction Administration Fees ($50000 per month)	12 MOS		$ 50,000	$ 600,000
	Right of Way Cost				$ 3,000,000
	City of Kenmore Staff Labor	*8%*			$ 484,800
	NON-CONSTRUCTION SUBTOTAL				**$4,690,800**
	Project Contingency	*30%*			$ 3,225,240
	YEAR 2022 PROJECT TOTAL (ROUNDED)				$ 14,000,000
	Year 2044 Escalation	*4.4%*			$ 23,700,000
	YEAR 2044 PROJECT TOTAL (ROUNDED)				$ 37,700,000

ESCALATION FORECAST ASSUMPTION

CURRENT DATE 11/1/2022
FORECAST DATE 12/31/2044

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APPENDIX D-5
POTENTIAL TRANSPORTATION PROJECT FUNDING SOURCES

ATTACHMENT 8

Funding Sources	Funding Recipient	Focal Investment	Funding Description	Awarding Entity	Funding Type	Project Expenditure Type	Amount Available	Typical Award Amount	Local Match	Application Deadlines	Scoring Criteria	Application Process	Program Link/Contact
Highway Safety Improvement Program (HSIP)	Counties and Cities in Washington State are eligible to apply, other organizations may work with a county to propose/develop a project.	Roads, Transit	Provides funds to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The City Safety program provides funding for projects that reduce fatal and serious injury crashes on city/town streets and state highways using engineering improvements/countermeasures.	Federal	Grant	New Construction, Other Mass Transit, Maintenance, Engineering & Administration	$35 million of federal HSIP funds, $4 million of state Reducing Roadway Departures funds	Projects in Washington funded in 2021 ranged from $50,000 to $3,000,000 grants	Federal share is 90%	Closed March 2022. Allocated annually.	Selecting Emphasis Areas and Strategies, Strategic Data and Analysis Improvement, Program Management, Network Screening and Project Solicitation, Diagnosis and Countermeasure Selection, Economic Analysis and Eligibility Criteria, etc.	The BIL directs FHWA to apportion funding as a lump sum for each State then divide that total among apportioned programs	https://wsdot.wa.gov/sites/default/files/2021-11/LP-County-Safety-Awards-2021.pdf https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/highway-safety-improvement-program https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/highway-safety-improvement-program/highway-safety-improvement-program-call-projects
STBG set-aside for Transportation Alternatives (TA)	Funding is apportioned to the States and MPOs, then subrecipients can apply for the funding	Roads, Trails	Provides funds for smaller-scale transportation projects such as pedestrians and bicycle facilities, historic preservation, safe routes to school and other transportation-related activities. BIL increases TAP funding to 10% of the STBG amount.	Federal	Grant	New Construction, Reconstruction, Other Mass Transit, Engineering & Administration	$15,000,000	2022 funded project grants ranged from >$10,000 to $4.6 million	Federal share is 80 percent, HSIP funds may be used to meet the non-Federal share requirements up to 100% Federal share	Next PSRC TAP competition TBD	Scoring criteria are dependent on the MPOs that receive the federal apportionments, and which are responsible for allocating the apportioned funds to relevant projects	A State or MPO are required to obligate TA funds to develop a competitive process to allow eligible entities to submit projects for funding that achieves program objectives	https://www.fhwa.dot.gov/bipartisan-infrastructure-law/ta.cfm https://wsdot.wa.gov/sites/default/files/2022-04/LP-STBG-Set-Aside-Allocation-Distribution-Final-2022.pdf
Surface Transportation Block Grant (STBG) [formerly STP]	Funding is apportioned to the States and MPOs, then subrecipients can apply for the funding	Roads, Transit	The Surface Transportation Block Grant Program (STBG) promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs. Eligible projects include highway/bridge construction/repair; transit capital projects; bicycle, pedestrian and recreational trails; and construction of ferry boats and terminals. BIL adds several new eligibilities including wildlife crossings, EV charging infrastructure, and ITS technologies.	Federal	Grant	New Construction, Reconstruction, Other Mass Transit, Engineering & Administration	$64,800,000,000	$1 million to $5 million are the recommended grant amounts for the recently approved projects in Washington	Federal share is 80 percent	PSRC 2022 FHWA funding competitions concluded; Next competition in 2024.	Scoring criteria are dependent on the MPOs that receive the federal apportionments, and which are responsible for allocating the apportioned funds to relevant projects	The BIL directs FHWA to apportion funding as a lump sum for each State then divide that total among apportioned programs; 55% of a State's STBG apportionment is to obligated to urbanized areas with population greater than 200,000, urbanized areas with population of at least 50,000 but no more than 200,000, urbanized areas with population of 5,000-49,999, and areas with population less than 5,000	https://www.fhwa.dot.gov/bipartisan-infrastructure-law/stbg.cfm https://www.psrc.org/media/6965
Bridge Investment Program	States, MPOs serving an urbanized area with a population of over 200,000, a unit of local government, a political subdivision of a State or local government, a special purpose district or public authority with a transportation function, an FLMA, a Tribal government, some combination of any of the other eligible recipients	Bridges	Provide grants, on a competitive basis, to improve bridge condition and the safety, efficiency, and reliability of the movement of people and freight over bridges	Federal	Grant	Reconstruction, New Construction, Maintenance, Engineering & Administration	$12,200,000,000	Minimum grant of $50 million for Large Bridge Projects, or $2.5 million for other Bridge Projects	Up to 50% for "Large Bridge Projects", up to 80% for other BIP projects, up to 90% for off-system bridges	2022 funding has concluded, next NOFO is expected to start in 2023	DOT considers the Department's rating of the project, specified factors relating to bridge person and freight throughput, bridge condition in the State, geographic diversity and balance between the needs of rural and urban communities, the extent to which a bridge seeking BIP funding is in	Proposals will be submitted and then chosen off criteria	https://www.fhwa.dot.gov/bipartisan-infrastructure-law/bip_factsheet.cfm
Safe Streets and Roads for All	MPOs, counties, cities, towns, and transit agencies or other special districts that are subdivisions of a State, federal recognized Tribal governments, and multijurisdictional groups comprised of the above entities	All	Support local initiatives to prevent death and serious injury on roads and streets	Federal	Grant	Engineering & Administration	$5,000,000,000	For Action Plan Grants, minimum of $200,000 to maximum of $1,000,000 to $5,000,000. For Implementation Plan Grants, minimum of $5,000,000 to maximum of $30,000,000 to $50,000,000	Federal share is 80 percent	Closed 9/15/22 for this year, next NOFO will open up in 2023, funds will be distributed over the next 5 years	BIL requires DOT to consider the extent to which an eligible applicant: is likely to significantly reduce or eliminate transportation-related fatalities and serious injuries involving road users, demonstrates engagement with a variety of public and private stakeholders, seeks to adopt innovative technologies/strategies to promote safety, employs low-cost, high-impact strategies that can improve safety, ensures equitable investment in the safety needs of underserved communities, includes evidence-based projects/strategies and achieves other conditions the Secretary deems necessary	Funding is allocated on a competitive basis, from proposals submitted to FTA in response to NOFOs	https://www.fhwa.dot.gov/bipartisan-infrastructure-law/ss4a_fact_sheet.cfm
Wildlife Crossings Pilot Program	State highway agency, MPO, unit of local government, regional transportation authority, special purpose district or public authority with a transportation function, an Indian tribe, a Federal land management agency, any combination of the others	Trails	Established to reduce the number of wildlife-vehicle collisions while improving habitat connectivity for terrestrial and aquatic species	Federal	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	$350,000,000	No information currently available about typical award amounts as this is a new fund	Federal share is 80 percent	Has not been decided at this time	Proposals will be judged on the primary goal of reducing wildlife-vehicle collisions while improving connectivity, and the secondary goals of leveraging the investment of Federal funds by encouraging non-Federal contributions, supporting local economies and improving local visitation opportunities, integration of innovative technologies, inclusion of educational and outreach opportunities, incorporation of evaluative monitoring and/or research opportunities	Competitive program which will award grants to eligible recipients	https://arc-solutions.org/wp-content/uploads/2021/11/Wildlife-Crossings-Pilot-Program-Summary.pdf https://largelandscapes.org/wp-content/uploads/2021/12/Crossing-Toolkit_Final.pdf
Pedestrian and Bicycle Program	All public agencies in Washington, including tribal governments	Trails, Roads	Improve the transportation system to enhance safety and mobility for people who choose to walk or bike	State	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	$56,700,000	Wide range from past projects ($10,000 to $1,750,000)	Match not required for requests of $800,000 or less, review criteria for requests greater than $800,000 will include a consideration of a match	Closed May 30, 2022 for this year, is a program that has been funding projects since 2005, and will continue to fund projects in the future. Funds are allocated on a 2-year basis.	The proposals will be judged on the following criteria: Safety (systemic safety approach or crash location improvement, up to 40% of consideration), Equity (up to 20% of consideration), Deliverability/other (up to 12% of consideration), Value (up to 10% of consideration), and Project Quality (up to 18% of consideration)	WSDOT staff will conduct a quantitative assessment of the applications using the applicant's responses, WSDOT 2017-2021 crash data, US Census data, and WSDOT local project search data	https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/pedestrian-bicycle-program/pedestrian-bicycle-program-call-projects
Safe Routes to School Program	All public agencies in Washington, including tribal governments, and nonprofit entities responsible for the administration transportation safety education and encouragement programs	Trails, Roads	Enable and encourage children to walk, roll, and bicycle to school; make bicycling and walking to school a safer and more appealing form of transportation; facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, etc.	Federal and State	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	$59,000,000	Wide range from past projects ($100,000 to $2,000,000)	Match not required for requests of $800,000 or less, review criteria for requests greater than $800,000 will include a consideration of a match	Closed June 6, 2022 for this year, is a program that has been funding projects since 2005, and will continue to fund projects in the future. Funds are allocated on a 2-year basis.	The proposals will be judged on the following criteria: Safety (systemic safety approach or crash location improvement, up to 40% of consideration), Equity (up to 20% of consideration), Deliverability/other (up to 12% of consideration), Value (up to 10% of consideration), and Project Quality (up to 18% of consideration)	WSDOT staff will conduct a quantitative assessment of the applications using the applicant's responses, WSDOT 2017-2021 crash data, US Census data, and WSDOT local project search data	https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/safe-routes-school-program/safe-routes-school-program-call-projects
Land and Water Conservation Fund	Local agencies, special purpose districts, Native American tribes, State agencies	Trails	Preserve and develop outdoor recreation resources, including parks, trails and wildlife lands	State	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	$14,000,000	$2,000,000 at max	50% match requirement	Application due May 3, 2022	A proposal plan must have the following elements: goals and objectives; an inventory of current facilities and/or properties; public involvement in the process; a demand and need analysis; a capital improvement program; adoption by the organization's board, council, etc.	Submit a long-range comprehensive plan along with documentation of the public outreach used to develop the plan, completed self-certifaction form checklist, and submit a copy of the ordinance or resolution that indicates plan adoption.	https://rco.wa.gov/grant/land-and-water-conservation-fund/
Arterial Preservation Program	Cities with a population greater than 5,000 and assessed valuation less than $3 billion	Roads	Provides funding for overlay of federally classified arterial streets in cities	State	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	$82,000,000	From previous projects: ~$200,000 to $600,000	Local match is based upon a city's assessed valuation	Applications due August 19, 2022, funding allocated on a yearly basis	Criteria scoring are based on the following criteria: agency rating and segment rating	Projects are selected annually on a competitive basis	http://www.tib.wa.gov/grants/Grants.cfm http://www.tib.wa.gov/grants/documents/2022%20APP%20criteria.pdf
Urban Arterial Program	Counties with urban unincorporated areas and cities with a population of 5,000 or greater	Roads	Improves unsafe conditions, prevents human injury and property damage	State	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	$82,000,000	Maximum request of $4.5M-$5M	Local match requirement is determined by the city's valuation, with minimum local match ranging from 10 to 20 percent	Applications due August 19, 2022, funding allocated on a yearly basis	Criteria scoring are based on the following criteria: safety; commercial growth & development; physical conditions; mobility; sustainability; and constructability	Projects are selected annually on a competitive basis	http://www.tib.wa.gov/grants/Grants.cfm http://www.tib.wa.gov/grants/documents/2022%20UAP%20criteria.pdf
Active Transportation Program	Counties with urban unincorporated areas and cities with a population of 5,000 or greater	Roads	Provides funding to improve pedestrian and cyclist safety, enhanced pedestrian and cyclist mobility and connectivity, or improve the condition of existing facilities	State	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	$8,000,000	Minimum request for funds is $250,000	Local match requirement is determined by the city's valuation, with minimum local match ranging from 10 to 20 percent	Applications due August 19, 2022, funding allocated on a yearly basis	Criteria scoring are based on the following criteria: safety; mobility; physical condition; nature of project; constructability; and sustainability	Projects are selected annually on a competitive basis	http://www.tib.wa.gov/grants/Grants.cfm http://www.tib.wa.gov/grants/documents/2022%20AT%20criteria.pdf
Complete Streets Award	Any city or county that has an adopted completed streets ordinance	Roads	Funds for planning and building streets to accommodate all users, including pedestrians, access to transit, cyclists, and motorist of all ages and abilities	State	Grant	Engineering & Administration, New Construction, Reconstruction, Maintenance	N/A	Offers between $100,000 and $1 million grants to local governments	N/A	Next awards will be in 2023 or 2024	TIB staff will evaulate all nominations. There will not be set criteria established, and TIB staff will evaluate base on policy quality, plan integration, community outreach and engagement, past project actions, and future project plans	Nominating agencies will fill out a form describing what motivates a nominator to nominate a city for an award	http://www.tib.wa.gov/grants/Grants.cfm https://wacities.org/advocacy/news/advocacy-news/2021/07/12/complete-streets-grant-nominations-now-open

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APPENDIX D-5
POTENTIAL TRANSPORTATION PROJECT FUNDING SOURCES

Funding Sources	Awarding Entity	Amount Available	Local Match	SR 522 West B (West boundary to 61st Ave NE)	NE 181st St South Side (61st Ave NE-63rd Ave NE) Sidewalk	61st Ave NE Sidewalk Replacement (NE 181st St-62nd Ave NE)	80th Ave NE Sidewalks (SR522-NE 185th St)	NE 192nd St Sidewalks (73rd Ave NE - 75th Ave NE)	Arrowhead Drive Sidewalks (NE 151st St-64th Ave NE)	84th Ave NE Sidewalks (NE 150th St - NE 155th St)	Lower Swamp Creek Bridge Replacement	Pavement Preservation Program (Short-term)	ADA Transition Plan Program (Short-term)	Pedestrian Facilities Plan Program (Sidewalk Program) (Short-term)	Pedestrian Facilities Plan Program (Sidewalk Program) (Long-term)	ADA Transition Plan Program (Long-term)	Pavement Preservation Program (Long-term)	61st Ave NE/NE 193rd St Intersection	73rd Ave NE/NE 192nd St Intersection	Nonmotorized crossing of SR 522	NE 181st Street/SR 522 East Connection
Highway Safety Improvement Program (HSIP)	Federal	$35 million of federal HSIP funds, $4 million of state Reducing Roadway Departures funds	Federal share is 90%	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
STBG set-aside for Transportation Alternatives (TA)	Federal	$15,000,000	Federal share is 80 percent, HSIP funds may be used to meet the non-Federal share requirements up to 100% Federal share	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Surface Transportation Block Grant (STBG) [formerly STP]	Federal	$64,800,000,000	Federal share is 80 percent	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bridge Investment Program	Federal	$12,200,000,000	Up to 50% for "Large Bridge Projects", up to 80% for other BIP projects, up to 90% for off-system bridges								Yes										
Safe Streets and Roads for All	Federal	$5,000,000,000	Federal share is 80 percent	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wildlife Crossings Pilot Program	Federal	$350,000,000	Federal share is 80 percent			Yes					Yes										
Pedestrian and Bicycle Program	State	$56,700,000	Match not required for requests of $800,000 or less, review criteria for requests greater than $800,000 will include a consideration of a match	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Safe Routes to School Program	Federal and State	$59,000,000	Match not required for requests of $800,000 or less, review criteria for requests greater than $800,000 will include a consideration of a match	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)		Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)	Yes (if related to going to school)
Land and Water Conservation Fund	State	$14,000,000	50% match requirement			Yes					Yes							Yes	Yes	Yes	Yes
Arterial Preservation Program	State	$82,000,000	Local match is based upon a city's assessed valuation	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)		Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)	Yes (if federally classified arterial street)
Urban Arterial Program	State	$82,000,000	Local match requirement is determined by the city's valuation, with minimum local match ranging from 10 to 20 percent	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Active Transportation Program	State	$8,000,000	Local match requirement is determined by the city's valuation, with minimum local match ranging from 10 to 20 percent	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Complete Streets Award	State	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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ATTACHMENT 9

Staff Responses to Citizen Comments: Kenmore Transportation Element Update

(Comments Received as of 2/27/23, 5:00 pm)

	Commenter	Concern	Staff Response
1.	Bob Kaplan 1/27/2023 Email	I live at Trailwalk condos on NE 175th St. Why not have a local bus route connecting downtown and shopping centers with residential areas/condo developments. It would make it easier to use a bus instead of a personal car to do local shopping and dining, etc.	Policy T-2.4.3 identifies the need for local transit connections from the City's residential areas to the SR 522 corridor and downtown area.
2.	Bob Fish 1/21/2023 email	• **Overall, I rate the plan a B-. It is well above average "checking many of the necessary boxes" but with significant room for improvement. Two of the things I liked best about the plan are:** • Its goal of accommodating and making accessible a commuter ferry from the downtown Kenmore to Husky Stadium. Perhaps the day will come when a second boat route goes from downtown Kenmore to downtown Kirkland. • Another laudatory goal is rolling out transportation plans in ways that enhance and heal rather than damage our local wetlands, streams, and Lake Washington.	• **Comment noted.** • Comment noted. • Comment noted.

2.	Bob Fish 1/21/2023 email *(continued)*	• **Six general comments regarding the plan follow:** • A significant shortcoming of the plan is the scant research, data, and analysis on any type of trips besides commuting to and from work. It would be useful to know why, where, how, and how often people were making these trips for other reasons. • Even with commuter traffic; we learn little learn very little about where commuters are coming from and going to. • While saying we are "pro-transit" we don't connect that stance with what kind of transit we need to go where and why based what places people are actually trying to get to and from. • Very little is said about how we might solve the "last mile" problem and providing alternatives to cars for local shopping and accessing major transit resources. It is heartening to see some attention paid to this in the proposed changes. • On a related subject the plan should be more explicit about the importance of maintaining sufficient parking for local businesses until alternatives to cars for these trip are developed and adopted. The plan should acknowledge the perils in not doing so; including a downtown that fails to thrive and people just driving further away where there is parking for their needs resulting in even more carbon emissions. • It might well be worth exploring the potential for east-west transit connecting downtown Woodinville, UW Bothell, Downtown Bothell, Downtown Kenmore, Lake Forest Park Town Center, The Mountlake Terrace Light Rail Station, Aurora Village, Westwood Village, Edmonds Ferry Terminal/Downtown Edmonds. Besides connecting all these places; such service would allow Kenmore residents wishing to access downtown Lynnwood, Alderwood Mall (now a bigger issue with what's happened to Northgate) and Paine Field without going all the way in to 145th Street to board light rail. Kenmore cannot make this happen on our own but we can get the discussion started.	• **Comment noted.** • The focus of Kenmore's traffic modeling effort was to evaluate impacts to the transportation network during the PM peak period, as this is how the City measures level of service for intersections for its concurrency assessment. A concurrency assessment is required as part of the Growth Management Act for the City's Transportation Element of the Comprehensive Plan and helps the City identify some needed transportation facility improvements. Traffic impacts are informed, in part, by travel demand modeling performed using the regional Activity Based Travel Demand model. Created by the Puget Sound Regional Council, this model is designed to forecast, for all trip purposes on an average weekday, where and how people travel in the Puget Sound region based on the intensity and distribution of different kinds of land uses, given historic trip generation rates associated with these trip purposes along with propensities for how trips will be distributed throughout the region and by which modes trips will be made. While traditionally, more travel in the PM Peak is related to commuting, the model does not isolate results to only commute trips and would include any trip purpose that might occur in the PM Peak. Analysis of impacts outside of the PM peak period would not provide supplemental information regarding

	Commenter	Concern	Staff Response
			would not provide additional information regarding compliance with concurrency requirements or identify additional needed transportation improvements. In addition, the focus of concurrency does not rely on overall origins or destinations of trips but, as noted, on overall level of service regardless of the start or end points of trips that travel through the network. (Applies to Bullets #1 and #2) • The Transportation Element discusses the importance of HCT and local transit service as a means to providing options for the City's transit needs. • Policy T-2.2.1(k) identifies consideration of last-mile connection to transit. • The Future Transportation System chapter notes that the City should monitor downtown parking and consider a variety of options to manage demand. • The Future Transportation System chapter (Figure T-19 Transit Priority Network) identifies transit priority corridors for regional connections, including east-west along SR 522 and north-south along Juanita Drive NE/NE 155th Street/84th Avenue NE.

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	Commenter	Concern	Staff Response
2.	Bob Fish 1/21/2023 email *(continued)*	• **Separate but equal is terrible education policy but generally good transportation policy. Related public safety issues are detailed below:** • Downtown sidewalks should adhere to the rules used on the Edmonds waterfront. Pedestrians, baby carriages, wheelchairs, and scooters for the non-ambulatory only. In outlying areas who can and can't use sidewalks should be examined on a case-by-case basis. • The plan needs to acknowledge and deal with conflicts between pedestrian and cyclist use of the Burke Gilman Trail and the safety issues involved. It would be worth exploring if the 15 foot right of way could be allocated 5 feet for pedestrians and 10 feet for bikes. The two modes could be separated by a curb or even better a waist high railing. This issue is bigger than Kenmore, but we can be a catalyst for change. • If we are serious about Target Zero, we should also be serious about motorcyclists, cyclists, and any and all wheel craft users (powered or otherwise) wearing helmets and their use should be strictly enforced. No one should be without a helmet because they can't afford one and any fines collected could go to the cost of providing them. Any additional funds could go to nonprofit organizations that provide housing to people who are incapacitated dues to head injuries.	• **Comment noted.** • Regulations for sidewalk users is outside of the scope of the Transportation Element. The City's Local Road Safety Plan (LRSP) takes a proactive approach to addressing risk factors across the City. • Regulations for users along the Burke-Gilman Trail is outside of the scope of the Transportation Element. The City's Local Road Safety Plan (LRSP) takes a proactive approach to addressing risk factors across the City, including conflicts with bicycle or pedestrian users. • Regulations for bicycle and pedestrian users is outside of the scope of the Transportation Element. The City's *Local Road Safety Plan* (LRSP) and *Target Zero* plans take a proactive approach to addressing risk factors across the City. • Not within the scope of the Transportation Element – See Kenmore's Traffic Calming Program for additional information.

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	Commenter	Concern	Staff Response
2.	Bob Fish 1/21/2023 email *(continued)*	• Another worthwhile safety issue to address is finding street that are neither primary nor secondary arterials that would benefit from speed bumps. One good candidate would be 60th Avenue NE north from NE 196th Street to the County line. • Another capital improvement that would promotes safety, encourage alternatives to cars, help local businesses, and increase access to Log Boom Park would be a pedestrian and bike/wheel craft overpass of Bothell Way at 61st Avenue NE. Having such a crossing this way might even improve traffic flow. If Express Bus Service had a stop here transit riders getting off a westbound bus could get to the north side of Bothell Way safely. The overpass could be given the native American name of the small creek that enters Lake Washington near the intersection (Tschet Cha Thl). This would tie in nicely with the History of Kenmore theme in Log Boom Park and the now being renovated Tl' awh-ah-dees Park. • As sidewalks are redone in the 61st Avenue NE consideration should be given to where additional pedestrian activated crossing lights are appropriate. Two candidates worthy of consideration are where Brier Road Branches off at NE 193rd Street and at about 196th Street where 60th Avenue NE branches of from 61st Avenue NE.	• The plan envisions a nonmotorized crossing of SR 522 at 67th. This is near the planned location for the 68th Street Stride BRT station. This location was selected over 61st Avenue NE for several reasons, such as proximity to downtown Kenmore and forecast higher density development, including Lakepointe, as well as more available space. • Not within the scope of the Transportation Element – See Kenmore's Pedestrian Facilities Plan for additional information on future facilities.

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	Commenter	Concern	Staff Response
2.	Bob Fish 1/21/2023 email *(continued)*	• **Below are some additional concerns related to the functionality and quality of our public right of ways and other public spaces:** • On page 53 of the plan; a bike lane is contemplated going straight up the Tolt Pipeline right of way west of 61st Avenue NE. Given the steep grade on the Kenmore part of the right of way and the even steeper grade of the right of way to the west where it enters Lake Forest Park this seem a completely illogical place for a bikeway. • While I am in general agreement with having impact fees for developments that will generate the need for additional parking; it may be appropriate to waive such fees if the residents of such housing are unlikely to have cars. • Another issue the plan should address explicitly is plantings in public right of ways. Not only should plants be chosen with an eye to hardiness for drought and climate change; but policy should also include budget for care and watering in the initial years so the plants can get established. Additionally, policy should be in place to ensure that type of street trees selected are compatible with the types of sidewalks contemplated in a given corridor. • Yet another area when we could put our money where our mouths are is parks. Historically we seem to have assumed local park users were from the immediate neighborhood or drove a car to the park to use it. Park users who don't live in the immediate vicinity and arrived on foot, by bike or by other non-auto means would appreciate the parks having restrooms or at least well-maintained Sani-cans in Linwood, Northshore Summit and Wallace Swamp Creek Parks.	• **Comment noted.** • The Bicycle Priority Network identifies local connections to the Burke-Gilman Trail and Juanita Drive corridors, which are major commuter and recreational corridors. Challenging topography is noted in the text as one obstacle for users. • Specific requirements for payment of impact fees is addressed within the adopting ordinance. • The Street Planning Toolkit (Figure T-14) identifies a flexible approach to incorporate landscaping along the roadway. • Park facilities are not within the scope of the Transportation Element.

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	Commenter	Concern	Staff Response
3.	Russ Johnson	• I would like to add one more project to your plan and apologize if I am late in the process. I have discussed this with the city before. There is no sidewalk on either side of the street from 193rd to the county line along 55th NE. I realize this is the border of our city and projects likely would need to be coordinated with Lake Forest Park. However, this is a busy traffic corridor with heavy trucks and commuters constantly traveling along it. Any residents (and kids) walking or biking along this route put themselves in significant risk of harm. In a few places, there is really no paved shoulder for mothers with baby strollers, to utilize. We have kids running to catch busses in places with no sidewalk and no shoulder. When I leave 202 ST and head either north or south on 55th on my bicycle, I am having to merge with traffic. I find this a little bit harrowing. This is not a case of improving a fence or sidewalk, that may already exist, but rather addressing a public safety issue in our community. I would invite someone from the city to join me along 55th so I can show you what I mean. I hope the Planning Commission will take a look at this before finalizing their plan going forward.	• No action required - this project is currently listed in the pedestrian facilities plan.

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	Commenter	Concern	Staff Response
4.	Nancy Hansen	• I'm referring to **Goal 3 of the Transportation plan - the part on making sure any development is both fiscally and environmentally sustainable**. I question whether the critical areas in the Moorlands can handle increased development along with road improvements that will be needed. It's easy to see steep slopes, but Kenmore has taken no effort in updating underground and above ground water in this area. The last wetlands study done was the National Wetlands Inventory I believe in 2011. Most of Kenmore's wetlands and riparian areas are not included, plus so much has changed now that underground water has been altered to a major extent in most urban areas. Ecology is talking about requiring updated wetland maps every 5 years for the 2024 Critical Areas updates. Accurate **mapping requires a certified wetlands specialist** onsite as well as computer mapping to get a better picture of conditions that contribute to flooding. In the Moorland development it's easy to trace underground water by the cracks in the roads. (See lengthy walking trip notes below.) I have noted wetlands beginning at Moorlands Park all the way to the 7.2 acre wetland between 75th and 78 Knowing some of the homes with moisture ants is another indication that many wetlands have been filled for building. One development on 150th approved by King County years back has 8' of fill in the back and the water from a small wetland area causes the back yards to have water at a 2' depth right outside their back doors. All the duplexes on west end of the street require sump pumps. Can this kind of land and the streets already there support increased traffic, plus more frequent buses? This costs the City money to continue the repairs. The actual cost of repairs and upkeep on these roads, along with the storm drain issue brings up questions of actually dollars spent on road upkeep in the Moorlands, along with projections of future needs if development is set to increase along with more frequent bus service and more cars as well.	• Stormwater management is not within the scope of the Transportation Element; see Surface Water Element. • Water and wetlands are addressed in the Natural Environment sub-element • Pavement management is addressed in the 6-year Capital Improvement Plan

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	Commenter	Concern	Staff Response
4.	Nancy Hansen	• The value of the wetlands for one is to keep the steep slopes safe from slides. Kenmore has the kind of soils with hard clay close to the surface where water will just run off if too much accumulates at one time. We have 2 streams that converge into a salmon bearing stream at the bottom of the steep slopes, at 165th and 76th Ave NE, one stream now only flows during the wetter seasons due to development and blocking of wetland functions likely in the Jackson area wetland. I also believe mapping of wetlands by a qualified, certified wetlands specialist would save the City money in the long run. There have been too many mistakes I've observed that are costly to repair, and have damaged water flows at the same time. We need to know what water is underground.* I believe the tremendous amount of water coming off the steep slopes deserves some special consideration in the Transportation Plan. Kenmore's Critical Area Codes and Goal 3 in the current Transportation Plan requires this. • **Bus ridership from Moorlands:** It is difficult finding a transportation route. Has a survey been done of expected ridership in the area. Many people I've talked to said they would never either use the bus system - or they would not be able to get to where they work if they used it. As many have said, it's highly unlikely they can live here without access to vehicles. I know personally that I either drive to the park n ride or, more likely, drive to Kirkland to take the bus where I need to go. The buses in Kirkland are packed because they go directly to the U District - fast - and they go downtown where it's easy to get around once you're at a light rail station. It would take me 2 hrs, not including waiting for buses to get to 190th and Aurora approx. vs 20 minutes in my car. (There is not really too much choice in making a decision.) It seems like a lot is being asked of Kenmore in exchange for receiving transportation. Is there any way to get some help with the fact that relatively little land is buildable? Once agreed, we won't be able to save critical areas that are likely to be needed with climate change. I think Kenmore is giving up a lot of what we take for granted by using all available space for building due to the trade-off for transportation.	• Stormwater management is not within the scope of the Transportation Element; see Surface Water Element. • Water and wetlands are addressed in the Natural Environment sub-element • Policies T-2.4.3 and T-4.1.2 highlight the need for local transit connections from the City's residential areas to the regional high-capacity transit system along the SR 522 corridor. Metro Flex, a King County Metro demand-response service that serves the Juanita area, is not included in the scope of the Transportation Element.

4.	Nancy Hansen	• **NOTES ON CRACKS IN MOORLANDS ROADS INDICATING MUCH WATER RUNNING THROUGH UNDERGROUND/UNDER THE ROADS:** Follow route from 7531 155th **Cracks in road**: - north side 155TH at 76TH Ave NE (1 of 2 streams runs off 155th west of 76th Pl - (This area likely joins wetlands from 80th Laurel Ridge development off 150th) - Some road damage heading towards stream at 7833 155th from wetlands same as above - Note cracks in spot up to 81st St - go up 81st St - Note wet yards west side of 81st going towards Moorlands Park and undeveloped lot across from 15127 81st (types of vegetation is a wetlands indicator) - also wet and moss in front yard at 15106 all the way to corner of 150th - Go west on 150th - mud next to sidewalk on corner of 81st and turn onto 150th . 7909 and west to 78th street duplexes - very wet all have sump pumps in spite of all the 8' of fill added when developed water table is at 2' at back doors here except for dry season —a plant that depend totally on on ground water, no vascular system has a large presence at lower end of this row of duplexes - the water source here is a stream and class 2 wetlands on 78th Ave Laurel Ridge development at 80th off 150th St Note homes on berms up to 5' - forested wetlands likely filled for this development - go to back and see degraded (due to being likely enclosed in concrete) fenced wetland . Lots of frogs here but diversity lacking due to the function of the wetlands being destroyed with development. - Road eruptions here from 150th and 78th south to where area where stream and wetlands spread out (to be developed due to City allowing mitigation, as normal) - note street next 14616 with extreme cracking and wet yards at the rear Note also in this area on west side - the deep ditches, large culvert and wet yards - all indicative of constant wet - Go north on 78th towards 155th and note wet yards, especially east side of street. This leads to parcels set aside for conservation by a conscientious landowner who still lives in the home there since 1970's. She said the stream goes under 78th St - the cracks at south near 155th indicate likely spot. Then, runs underground onto her property and surfaces at points. This stream feeds the stream visible off 155th east of 76th Place Included in this is a 7.2 acre wetlands (Jackson) between 78th and 75th.	• Stormwater management is not within the scope of the Transportation Element; see Surface Water Element. • Water and wetlands are addressed in the Natural Environment sub-element • Pavement management is addressed in the 6-year Capital Improvement Plan

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	Commenter	Concern	Staff Response
4.	Nancy Hansen	• I am guess this was once one large interlocking system that has protected the steep slopes. With more damage, we may not have as much luck with these slopes. (See portion relating to soils above.)	• Water and wetlands are addressed in the Natural Environment sub-element
4.	Nancy Hansen	• add later and send: Streets are cracked, with the largest and most significant areas where the water is obviously flowing to get to the 2 streams viewable at the top of the slopes off 155th St. newer park used for school ballfields. This was property donated years ago by neighbors who chipped in and bought the parcel to donate to the school for wetlands education. Now the park is in the hands of the City. It appears the land was drained by Kenmore recently since the park opened in 2019, but there is a lot of signs of wetlands yet - in yards and cracks in the street that help indicate where the water comes from. These wetlands are showing up with the cracking of roads up here. I have a detailed account of exactly where the roads are cracks. This begins at Moorlands Park, and includes a smaller identified as Class 2 wetlands at 150th and 78th, plus the 7.2 acre Jackson area wetlands further west. One stream runs underground coming from Moorlands Park, a previously drained wetland, and joins into a degraded wetlands at the Laurel development on 80th from 150th. I am assuming that the entire area was forested wetlands with bowl shaped land forms that created a significant amount of water.	• Stormwater management is not within the scope of the Transportation Element; see Surface Water Element. • Water and wetlands are addressed in the Natural Environment sub-element

Attachment 10

FRAMING THE FUTURE

KENMORE 2044

TRANSPORTATION ELEMENT AND CAPITAL FACILITIES PLAN UPDATE

March 7, 2023 (Corrected)

KENMORE BY THE LAKE

Agenda

- Public hearing regarding proposed updates to the Transportation Element and Capital Facilities Plan
- Changes since January 17 meeting
- Discussion and development of recommendation

Purpose of the Transportation Element

- **Reflects and supports recently adopted land use element**
  - High capacity transit community
  - Activated, thriving downtown
  - Supports multimodal travel – bicycle, walking, rolling, transit, auto
  - Supports City Diversity, Equity and Inclusion Policy
  - Reflects goals in the Climate Action Plan

Transportation Element Overview

- Introduction
- Existing Conditions
- Goals, Objectives, and Policies
- Future Transportation System
- Near Term and Long Term Capital Projects
- Implementation Strategies

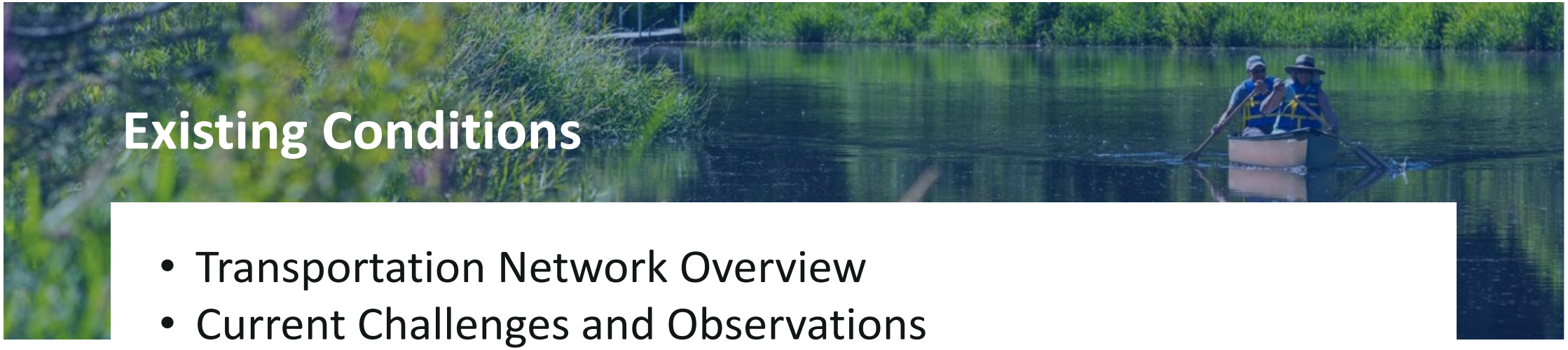
FRAMING – THE – FUTURE

KENMORE 2044

KENMORE BY THE LAKE

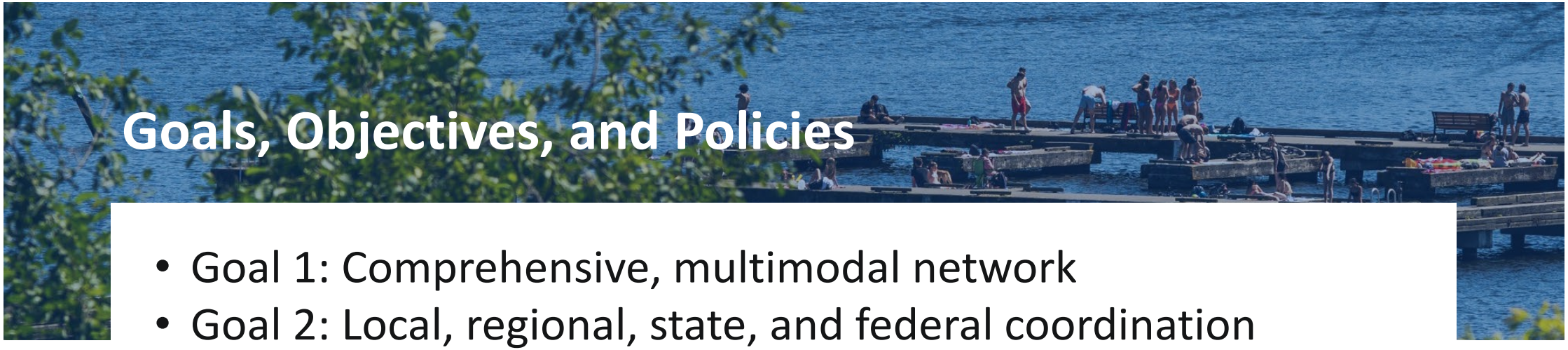
Major Changes

- Prioritizing non-motorized mobility
- Emphasis/support of Kenmore as a high capacity transit community
- Renaming roadway types
- Standards for structured parking facilities
- New and evolving technologies
- Level of Service for all modes
- Regional planning for SR 522
- Support for expanded transit service in Kenmore
- Environmental impacts of the transportation system and proactive direction
- Alignment with other City plans and policies



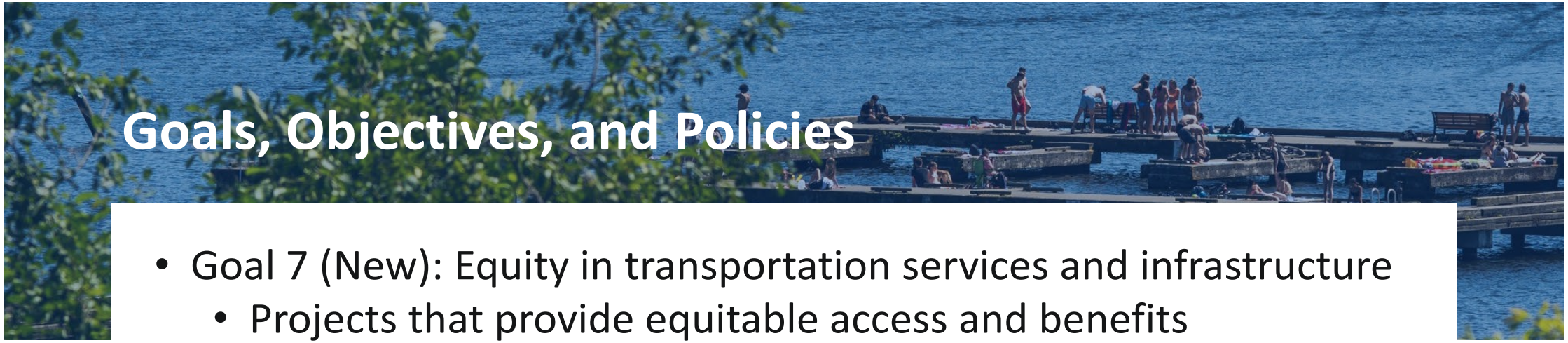
Existing Conditions

- Transportation Network Overview
- Current Challenges and Observations
  - Bicycle and pedestrian safety
  - Transit availability
  - Limited nonmotorized connectivity
- Trends
  - Transportation related climate impacts
  - Downtown development
  - Regional growth



Goals, Objectives, and Policies

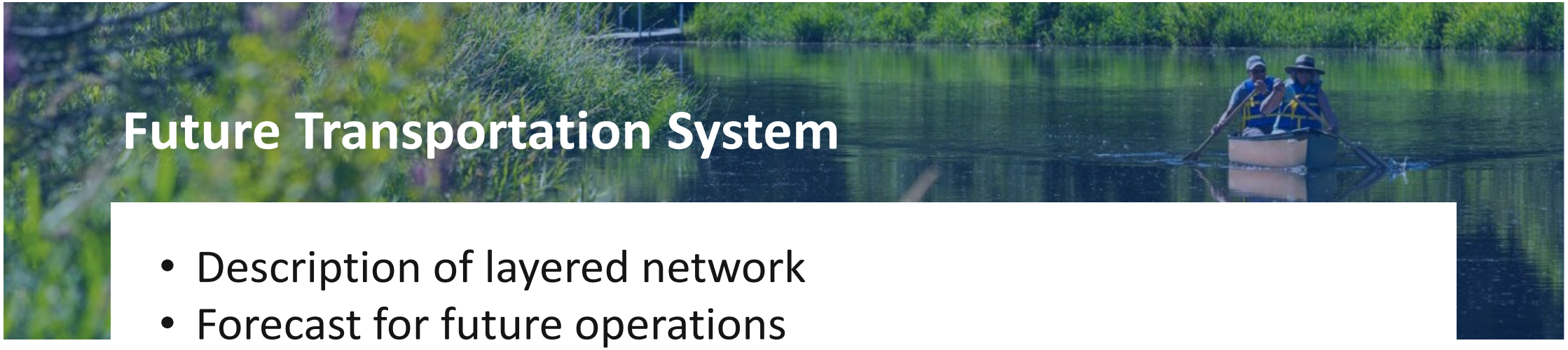
- Goal 1: Comprehensive, multimodal network
- Goal 2: Local, regional, state, and federal coordination
- Goal 3: Fiscal, environmental, and equitable sustainability
- Goal 4: Encourage travel other than single occupancy vehicles
- Goal 5: Maintain safe air travel services
- Goal 6: Facilitate freight mobility



Goals, Objectives, and Policies

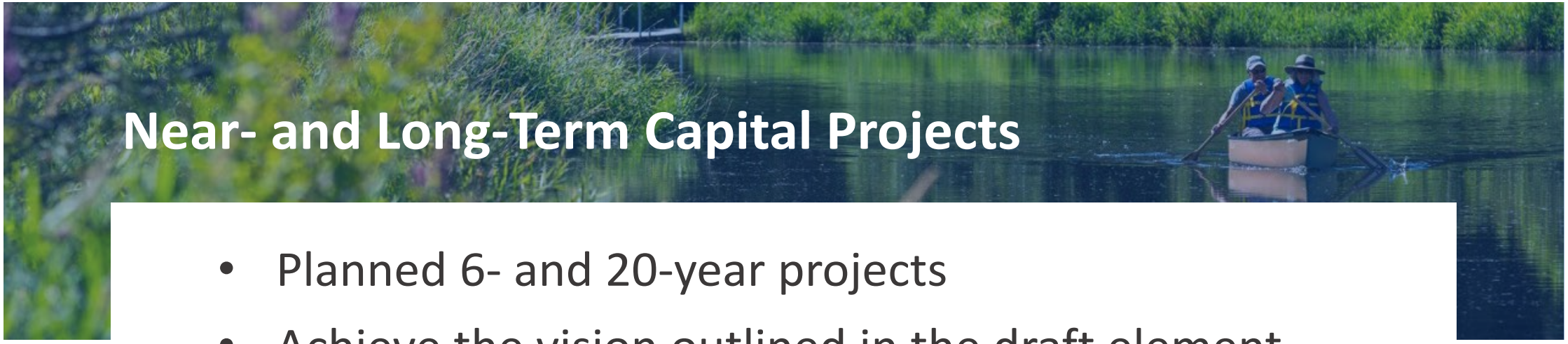
- Goal 7 (New): Equity in transportation services and infrastructure
  - Projects that provide equitable access and benefits
  - Promote inclusive and affordable services
  - Collaborative planning process

- Goal 8 (New): Minimize, mitigate, and respond to effects of climate change
  - Balance demands with sustainable growth strategies
  - Reduce vehicle miles traveled



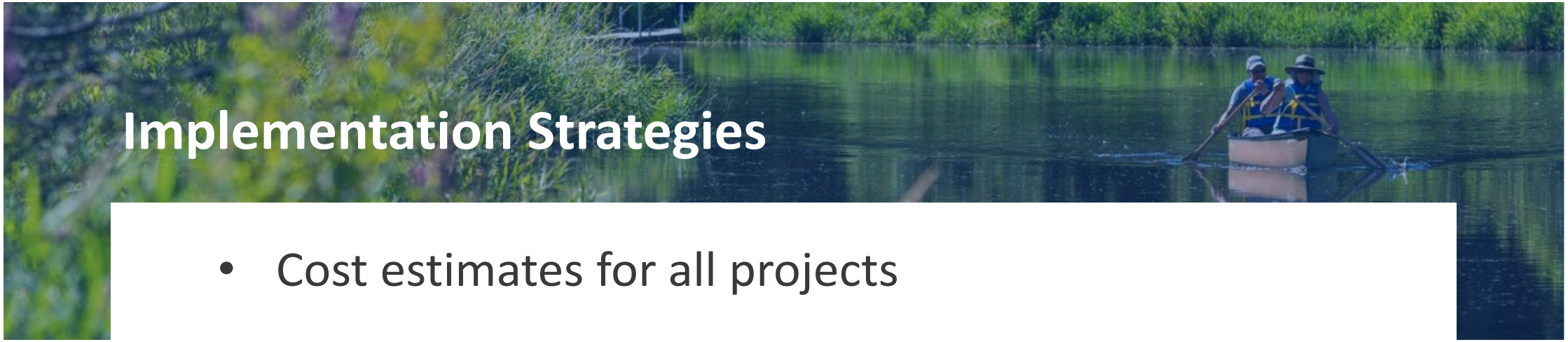
Future Transportation System

- Description of layered network
- Forecast for future operations
- Roadway typologies
- Vision for modal networks



Near- and Long-Term Capital Projects

- Planned 6- and 20-year projects
- Achieve the vision outlined in the draft element
- Projects address safety, nonmotorized mobility, and water quality
- No projects needed to maintain adopted LOS standards for traffic



Implementation Strategies

- Cost estimates for all projects

Appendices

- Appendix D-1 Traffic modeling methodology and outputs
- Appendix D-2 Land use distribution
- Appendix D-3 Roadway typologies
- Appendix D-4 Conceptual Design and Cost Estimates
- Appendix D-5 Funding Sources

Draft Capital Facilities Plan

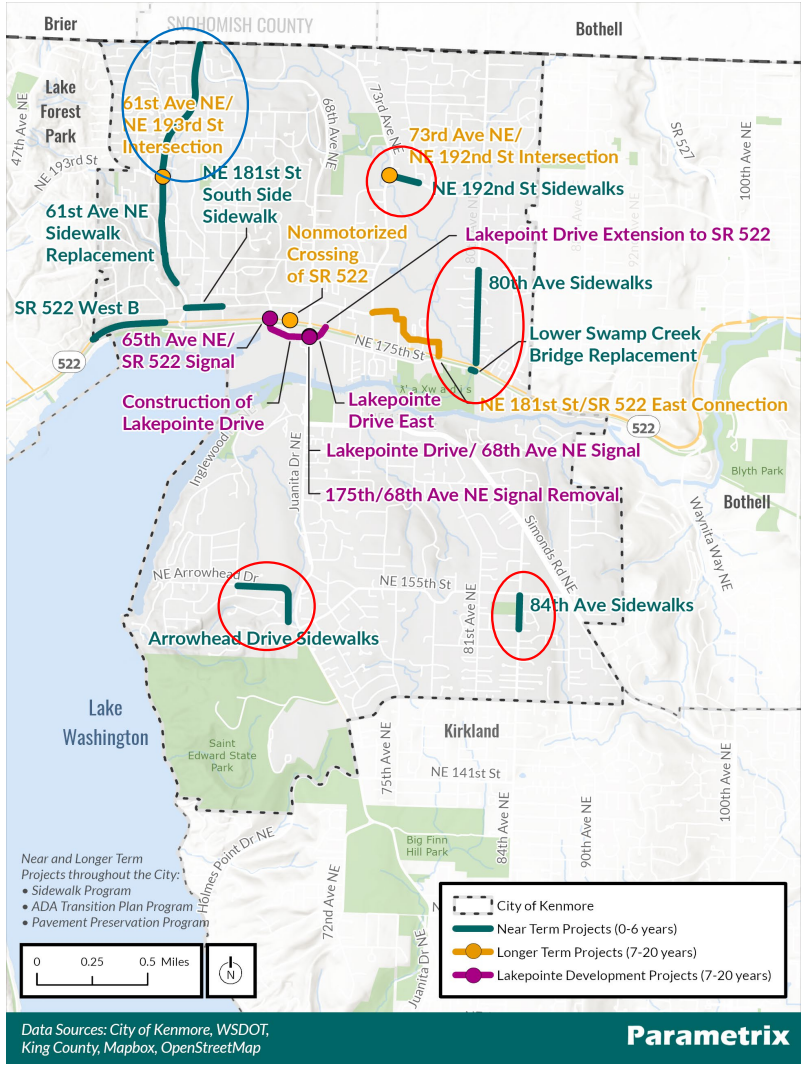
- All projects included in 6- and 20-year plans
- Costs in 2022 dollars

TABLE CF-C 2024-2044 TRANSPORTATION CAPITAL IMPROVEMENTS

Projects	Total Cost (2022 $)
SR 522 West B (West boundary to 61st Ave NE)	$2,200,000
NE 181st St South Side (61st-63rd) Sidewalk	$1,300,000
61st Ave NE Sidewalk Replacement (181st-62nd)	$5,110,000
80th Ave NE Sidewalks (SR 522-NE 185th St)	$2,470,000
NE 192nd St Sidewalks (73rd Ave NE - 75th Ave NE)	$800,000
Arrowhead Drive Sidewalks (NE 151st St - 64th Ave NE)	$2,220,000
84th Ave NE Sidewalks (NE 150th St - NE 155th St)	$2,370,000
Lower Swamp Creek Bridge Replacement	$3,100,000
Pavement Preservation Program	$17,360,000
ADA Transition Plan Program	$11,500,000
Pedestrian Facilities Plan Program (Sidewalk Program)	$33,000,000
Lakepointe Development Mitigation	To be determined/Developer Funded
61st Ave NE/NE 193rd St Intersection	$2,200,000
73rd Ave NE/NE 192nd St Intersection	$3,700,000
Nonmotorized crossing of SR 522	$17,160,000
NE 181st Street/SR 522 East Connection	$14,000,000
Total	**$118,490,000**

Changes to Draft Transportation Element Since ~~November 1~~ January 17

- Pedestrian LOS standard applicable to facilities in downtown
- Four new sidewalk projects:
  - 80th Ave NE
  - NE 192nd St
  - Arrowhead Drive
  - 84th Ave NE
- Correction for sidewalk project on 61st Avenue NE
- Revision to Figure T-4 - reflects the two types of designated pedestrian facilities
- Update to Pedestrian Priority Network - new green standard sidewalk: 67th Avenue NE from SR 522 to NE 181st Street
- LOS F for roadways in the Kenmore Countywide Growth Center
- Updated costs for two projects



Draft Capital Facilities Plan Appendices D-4 and D-5

- Added new sidewalk projects and costs
- Updated project costs
  - SR 522 West B
  - Pedestrian Facilities Plan Program

Public Engagement

- In person drop in – January 19
- Online open house – January 9-March 1
- Postcards, newsletter, and website

Public Engagement

- 138 surveys and 4 emails received

- How do you travel around Kenmore
  - Walking/Rolling – 74%
  - Driving – 94%
  - Biking – 36%
  - Transit/Ride Share – 21%

- How do you travel outside of Kenmore
  - Walking/Rolling – 10%
  - Driving – ~~28%~~ 94%
  - Biking – ~~94%~~ 28%
  - Transit/Ride Share – ~~60%~~ 58%

Public Engagement

- 91% do not use assisted mobility devices
- Supported the proposed changes
  - Strongly supported/supported – 55%
  - Neutral – 28%
  - Oppose/Strongly oppose – 17%
- Support level comments
  - Project specific
  - More transit
  - Alternative modes of travel
  - A lot to absorb/comprehend
  - Need parking and balance with automobiles
  - More pedestrian and bicycle improvements

Public Engagement

- Most important policies
  - Non-motorized – 44%
  - Expanded bus service – 28%
  - New/evolving transportation technologies – 11%
  - Climate change – 8.5%
  - Equity – 8.5%

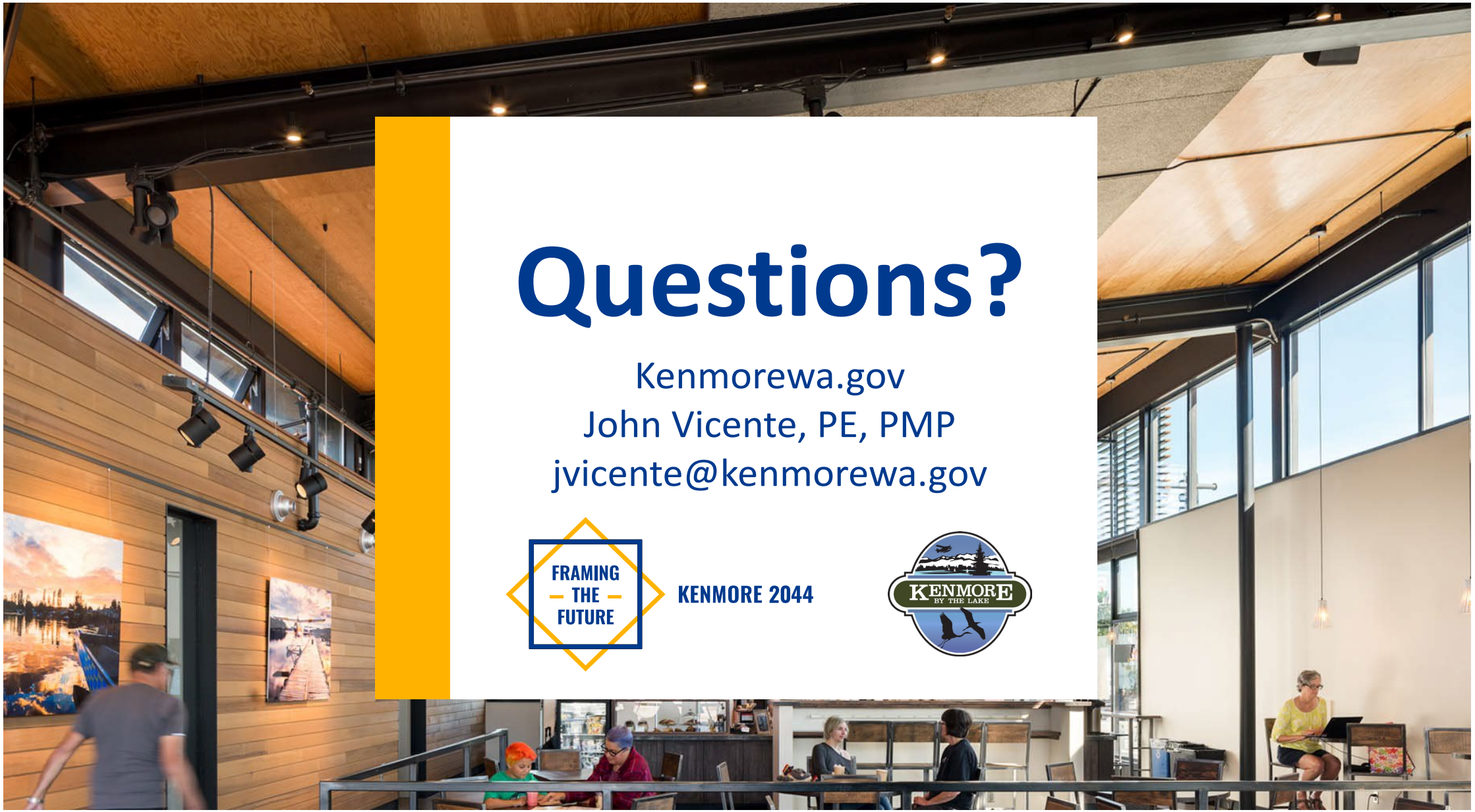
- General comments:
  - Focus on automobiles
  - More parking
  - More sidewalks and bicycle infrastructure
  - More transit and light rail

PSRC Feedback

- Language about the air harbor
- Funding sources
- Confirm jobs listed in appendix

Next Steps

- Planning Commission recommendation to City Council


Questions?
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John Vicente, PE, PMP
jvicente@kenmorewa.gov
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KENMORE 2044

TRANSPORTATION ELEMENT AND CAPITAL FACILITIES PLAN UPDATE

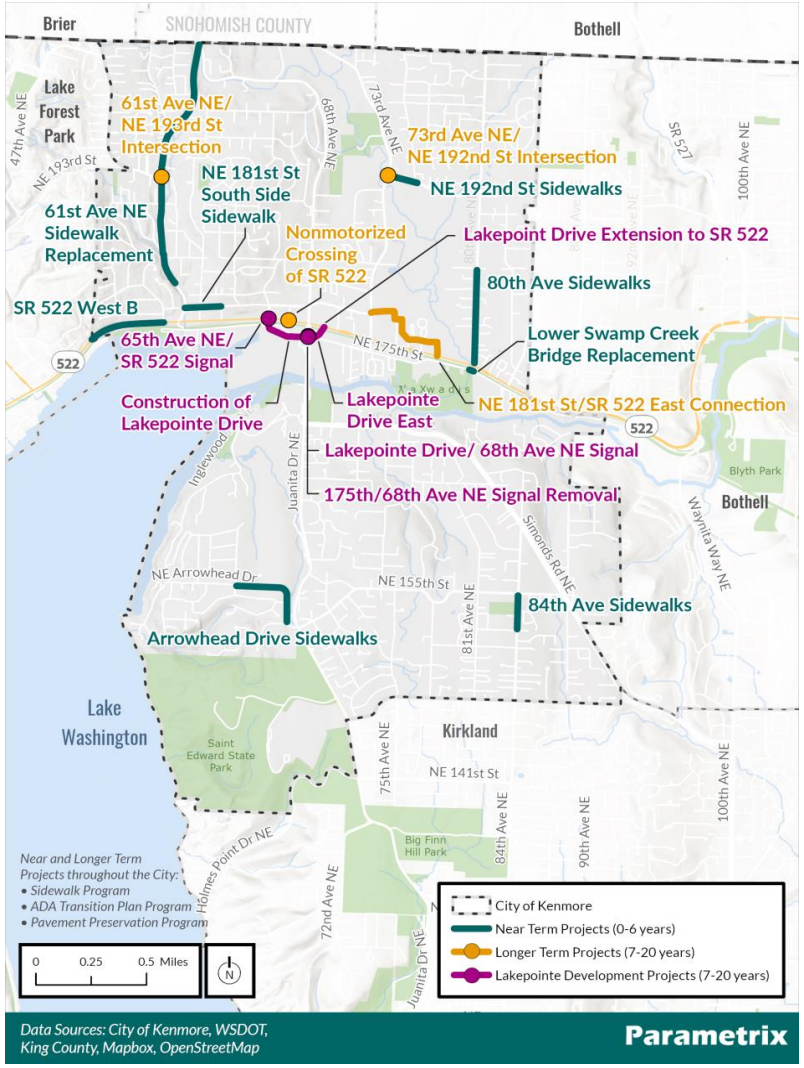
April 4, 2023

Agenda

- Changes since March 7 meeting
- Discussion and development of recommendation

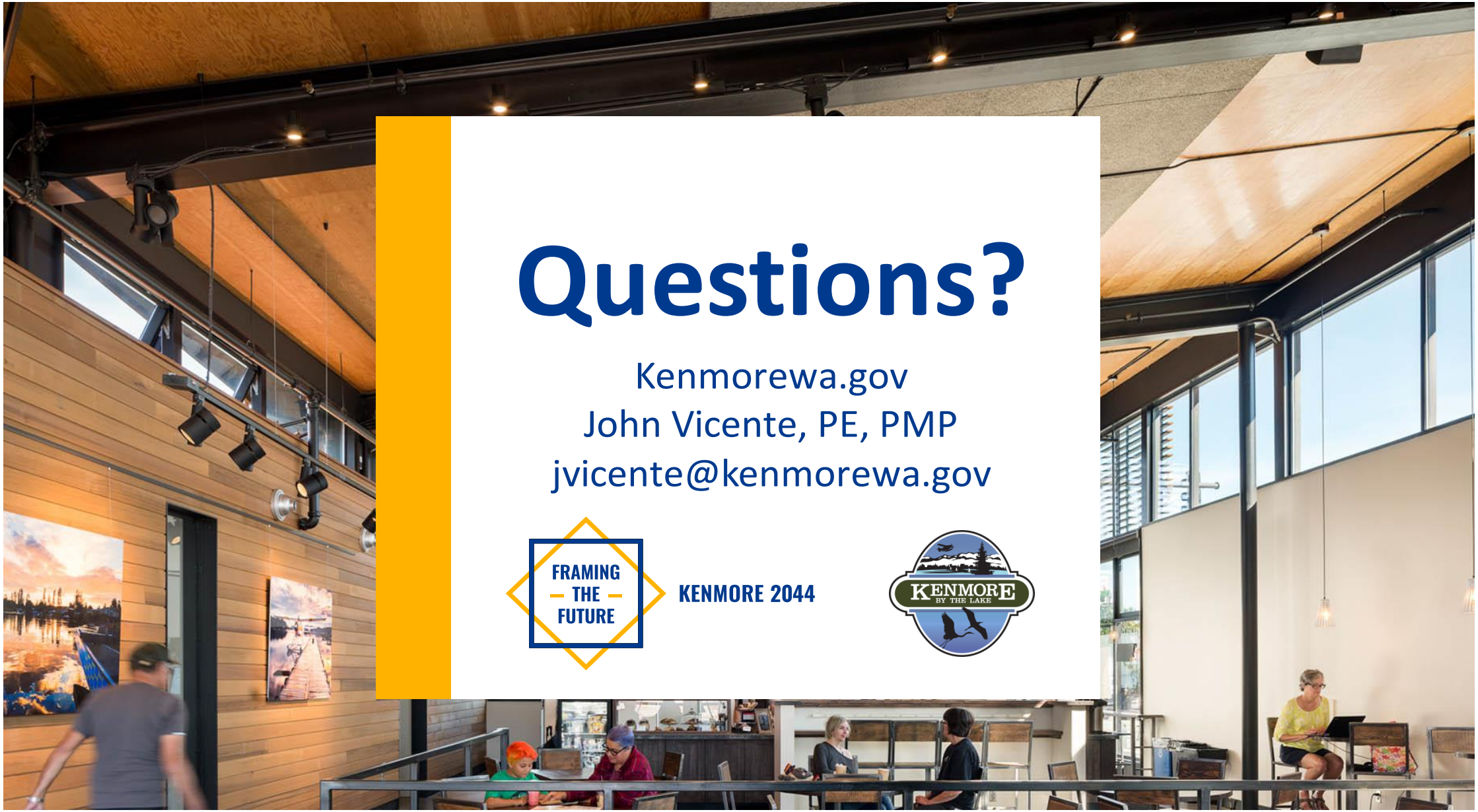
Changes to Draft Transportation Element Since March 7

- Text and figure title change addressing WSDOT FGTS classified routes
- New figure and added addressing the Kenmore Air Harbor
- Definition was provided for PM Peak period
- Updated titles of Figures T-18 and T-19 to denote they represent the future visions
- Figure T-23 updated to include the full length of the 61st Avenue sidewalk
- Table 11 amended and Table 12 added to provide additional detail regarding future project funding
- Typographic error corrected in Appendix D-2



Next Steps

- Planning Commission recommendation to City Council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City Of Kenmore, Washington

Memorandum

Date: March 28, 2023

To: Planning Commission

From: Debbie Bent, Community Development Director
Lauri Anderson, Principal Planner

Regarding: Comprehensive Plan Update: Utilities Element

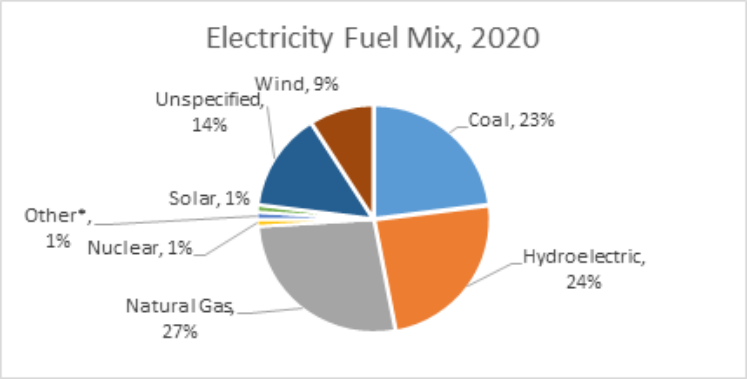
In preparation for your continued discussion of the Utilities Element, Patrick Robinson of Puget Sound Energy (PSE) has provided responses to some of the questions raised at your February 21 meeting (see below).

We anticipate that Mr. Robinson will attend a future Planning Commission meeting (potentially May 16) to discuss PSE's operations in Kenmore.

Planning Commission questions/responses

1) What percentages of power currently come from natural gas, coal, hydropower, solar, other sources? What are future goals?

The chart below shows the 2020 breakdown of PSE's energy sources.



*Biomass, non-biogenic and petroleum
Unspecified is from market purchases.

The Washington Clean Energy Transformation Act requires PSE electricity to be coal free by 2025, carbon neutral by 2030, and 100% renewable and non-carbon emitting by 2045. The table below is from PSE's Integrated Resource Plan (IRP), a document PSE updates every 2 years. While the exact steps to be made to reach CETA's benchmarks are not know and will

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evolve over time, the IRP provides a look at how PSE's is currently thinking about reaching those goals.

Figure 1-4: Electric Preferred Portfolio, Incremental Nameplate Capacity of Resource Additions

Resource Type	Incremental Resource Additions			Total
	2022-2025	2026-2031	2032-2045	
Distributed Energy Resources				
Demand-side Resources[1]	256 MW	440 MW	1,061 MW	1,757 MW
Battery Energy Storage	25 MW	175 MW	250 MW	450 MW
Solar	80 MW	180 MW	420 MW	680 MW
Demand Response	29 MW	167 MW	21 MW	217 MW
DSP Non-wire Alternatives[2]	22 MW	28 MW	68 MW	118 MW
Total Distributed Energy Resources	412 MW	990 MW	1,820 MW	3,222 MW
Renewable Resources				
Wind	400 MW	1100 MW	1750 MW	3,250 MW
Solar	-	398 MW	300 MW	698 MW
Biomass	-	-	105 MW	105 MW
Renewable + Storage Hybrid	-	-	375 MW	375 MW
Total Renewable Resources	400 MW	1,498 MW	2,530 MW	4,428 MW
Peaking Capacity with Biodiesel	-	255 MW	711 MW	966 MW
Firm Resource Adequacy Qualifying Capacity Contracts	574 MW	405 MW	-	979 MW

NOTES
1. Demand-side resources include energy efficiency, codes and standards, distribution efficiency and customer solar PV.
2. DSP Non-wire Alternatives are resources such as energy storage systems and solar generation that provide specific benefit on the transmission and distribution systems and simultaneously support resource needs.

More info at https://www.pse.com/IRP

2) Is hydropower salmon-safe?

Yes. Absolutely. But each hydropower facility is its own case study and it takes focused effort. PSE has done a lot of work to make sure that we are not only maintaining but improving the fish populations in the rivers where we have hydroelectric facilities. I have included an attachment those goes into further detail on our fish enhancement efforts. PSE also put a video (YouTube) together that takes a look at the history of our Baker River hydro facilities and the challenges and effort involved with maintaining the fish runs there.

3) How many customers in Kenmore are provided low-income assistance to cover utility fees? How is "low-income" determined?

In 2022 PSE served 168 customers with our PSE HELP program through Hopelink.

PSE currently uses the definition of low income from the WA State Clean Energy Transformation Act (bill 5116) which is: 80% of the county median household income or 200% of the Federal poverty level, whichever is greater; adjusted for household size.

4) Where are the most common power outages in Kenmore? Have outages decreased over the years? What are the priorities for restoring power?

Outage impacts vary across the city from year to year. Looking at recent data, the southern part of the city has seen the most impact from outages. For the past few years, PSE has submitted a Reliability Report to the city and at the City Council's request we have presented the data at a Council meeting. The most recent presentation was September 13th, 2021. The recording of the meeting would allow you to see that presentation.

Priorities for restoring power come into play during major storms. PSE has an Incident Command Center (ICC) that coordinates restoration efforts when outages within our service

territory exceed our immediate resources to address. In this situation, outages impacting hospitals, emergency facilities, major community centers etc are key targets to restore early on. As part of the ICC we also have people communicating with jurisdictions and customers with escalated needs to make sure that we can direct resources where they are needed.

5) What is the latest on undergrounding power in new development?

PSE utilizes the undergrounding of electric facilities as one of several tools to address system reliability. Other options include tree wire (which is coated to provide protection from contact with branches), automated facilities such as reclosers, and a proactive tree trimming schedule.

For projects where undergrounding is driven by a private customer or a municipality, PSE's regulator, the Washington Utilities and Transportation Commission (WUTC), has created specific tariffs that dictate who pays for the associated costs of undergrounding electric facilities. Specifically Schedule 73 for developers and Schedule 74 for municipalities.

6) How, exactly, does PSE plan to address new directives for natural gas replacement?

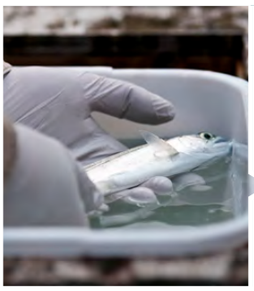
While this is a fairly straightforward question, there is much to unpack on the topic. I would be happy to discuss this further at your convenience.

PSE would like to work with the cities it serves and in which it operates to address this question. Targeted electrification is going to be one of many strategies utilized to decarbonize the energy systems that power our daily lives. We have already seen this around western Washington and the country. How much of the current natural gas load to be transferred to the electric system, and how quickly that happens, is complicated by several other factors impacting the electric grid, including:

- the peak loads that determine the size for the electric grid
- known regional transmission capacity constraints
- continued population growth

The electric grid will need to grow and update to serve the growing electric demand as natural gas use decreases. Energy efficiency and demand response programs will play a role in addressing the rising need, but new infrastructure will be needed. This is the poles, the lines, the transformers and substations that are already in our neighborhoods. This is also the solar panels, from small scale residential rooftop to community solar projects, and the battery storage facilities. For most of the cities we work with, including Kenmore, this infrastructure will need to fit into the existing fabric of communities and neighborhoods that are largely built out. PSE will be looking to cities to make sure that as they are contemplating a transition from natural gas use they are also looking at how their zoning and regulations will both allow and support the necessary electric infrastructure.

Attachments
Attachment 1: Fish Enhancement Information provided by PSE



PUGET SOUND ENERGY

Fish Enhancement

Puget Sound Energy shares the region's deep-rooted environmental ethic and embraces our responsibility to protect natural resources, including our cherished salmon runs. Our biologists and fisheries technicians have been working for decades with Native American tribes and government agencies to boost salmon and trout populations, particularly in rivers where PSE has hydropower operations.

The Baker River Hydroelectric Project

The Baker River Hydroelectric Project, PSE's largest hydropower operation, is a 215-megawatt facility in northwest Washington. It features the Upper Baker Dam and Lower Baker Dam, each with its own powerhouse. Each dam also has its own reservoir: Lake Shannon behind the Lower Baker Dam and Baker Lake behind the Upper Baker Dam.

The Baker River is a major tributary of the Skagit River, one of Washington state's most prolific river systems for fish. Over the years, advances in technology, greater knowledge of fish biology, ongoing PSE investments in fisheries systems and continued collaboration with resource agencies and Northwest Indian tribes have produced significant gains in the river's fish stocks. These gains show great promise to continue in the years ahead.

▲ Baker River hydroelectric project

Fish profile in Skagit-Baker watershed

The basin contains a variety of anadromous (migratory) fish species. The Baker River's most abundant stocks are sockeye and coho salmon. Its annual adult-sockeye returns have averaged about 3,500 since the 1920s, but plunged to a low return of just 99 fish in 1985, imperiling the stock.

Fish-restoration efforts since the mid-1980s have had a dramatic effect in the recovery of Baker sockeye, with eight of the 10 highest annual returns on record occurring since 1994, including an all-time high of 48,367 in 2012.

▲ Sockeye, Chinook and Coho salmon

New license's fish initiatives

The Federal Energy Regulatory Commission in 2008 issued PSE a new, 50-year operating license for the Baker River Hydroelectric Project after eight years of collaborative consultation between PSE and 23 other parties, including government agencies, Indian tribes, and environmental groups.

The project's license calls for major PSE initiatives to further enhance fish populations in the Skagit-Baker watershed, including installation of new upstream and downstream fish-passage facilities, construction of a new fish hatchery, construction of a second Lower Baker powerhouse for better river-flow control, and riparian-habitat protection. Fisheries managers expect PSE's Baker River investments to produce continued increases in the river's salmon runs and expanded recreational, tribal and commercial fishing opportunities.

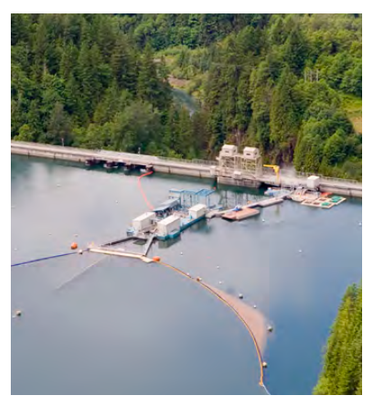
Juvenile-salmon downstream fish trap (floating surface collector)

Both of PSE's Baker River facilities use an innovative "floating surface collector" (FSC) to improve downstream migration of juvenile salmon around both PSE dams. The first FSC received national acclaim when it was installed on Baker Lake, above the Upper Baker Dam, in 2008. A similar FSC was completed in 2013 on Lake Shannon, behind the Lower Baker Dam.

Key FSC features include:

- Shore-to-shore, surface-to-lakebed guide nets covering five acres of surface area.
- A specially designed "net transition structure" linking the guide nets with the 130-foot-by-60-foot, barge-like FSC, which weighs 1,000 tons.
- An elaborate fish-sampling station.
- Enhanced fish-loading facilities for downstream "fish taxi" transport past the dams.

Now that both are operational, the two FSCs set a combined record for downstream juvenile fish outmigration with a growing sockeye population in excess of 850,000 and close to a million total fish, including sockeye, coho, Chinook, trout and char.



▲ Floating surface collector

pse.com

New adult-salmon upstream fish trap

In 2010, PSE replaced the original fish trap below Lower Baker Dam with a new, enhanced fish trap to capture migrating adult salmon for upstream "fish taxi" transport around both Baker River dams.

Key features of the trap include:

- A water-filled "aquatic elevator" that stands 60 feet tall and 7 feet in diameter and raises captured fish from river level to the trap's elevated facilities.
- A programmable control system and operator's booth for sorting fish by species and segregating them into six separate holding pools.
- A sampling area with electronic data-management equipment for collecting a wide range of biological information about captured fish before they are transported upstream.

Three of the four highest sockeye returns have occurred since the new trap system was put into operation. In 2013, 12,534 sockeye were collected at the trap (8th highest) and 17,032 estimated total sockeye returned to Skagit/Baker River system (5th highest).

The highest returns were recorded in 2012 – the trap collected 28,410 sockeye and an estimated 48,014 total sockeye returned to Skagit/Baker River system.

▲ Lower Baker River fish trap

State-of-the-art fish hatchery

In 2010, PSE completed construction of an advanced fish hatchery and refurbished sockeye spawning beach located near the Upper Baker Dam. The performance of these facilities increased sockeye fry production two-fold from levels prior to 2008. Each year since completion, more than 5 million sockeye fry have been produced and released into the Baker Basin reservoirs. By comparison, PSE's previous Baker River fish-culture facility, which slowly expanded from its start in the early 1970s, could produce about 1.7 million fry per year.

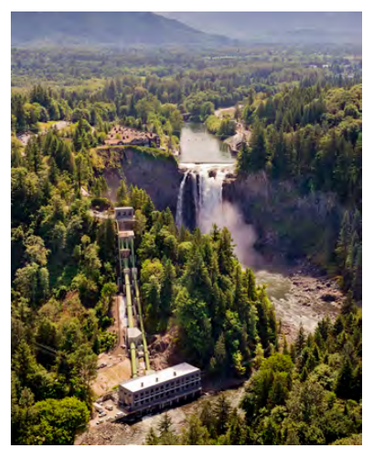
▲ Baker River fish hatchery

Snoqualmie Falls Hydroelectric Project

The Snoqualmie Falls Hydroelectric Project is PSE's oldest power-generating operation and the world's first completely underground power plant. The facility, located along the Snoqualmie River in Snoqualmie, Washington, about 30 miles east of Seattle, recently underwent a four-year redevelopment project, which included substantial upgrades and enhancements to the power-generating infrastructure and public recreational facilities.

Because the falls provide a natural barrier, PSE's fish program doesn't need to be as extensive as the one at Baker River. Here's how PSE protects fish at Snoqualmie Falls:

- Minimum instream flows in the Plant 1 tailrace and the plunge pool below the falls
- Modified the Plant 1 and Plant 2 tailraces to prevent the stranding of fish in these areas
- Manage the project operations to meet the rate of river-level fluctuations
- Included bypass valves at the new Plant 2 to help manage ramping of the units
- Funded the Snoqualmie River Game Fish Enhancement Plan and study conducted by the Washington Department of Fish and Wildlife – a comprehensive inventory and ecological study of the fishery resources in the upper Snoqualmie River watershed.



▲ Snoqualmie Falls hydroelectric project