

Chapter 8

Transportation



A Vision for Transportation

The city will develop an effective multimodal transportation system that emphasizes access, direct circulation and safety for vehicles, freight, public transportation, cyclists and pedestrians locally and to the region.

INTRODUCTION

The city of Lake Stevens and its UGA connect to the greater region by several regional highways. The local transportation system consists of a dispersed network of roads. This type of road network is reflective of the suburban development pattern within the city and its surrounding area. SR-9 is the major north-south highway that transects the Lake Stevens UGA. It connects to major east-west routes, including US-2, SR-92, SR-204, and 20th St SE. US-2 is a major route that connects Lake Stevens with the I-5 corridor and Everett. SR-92 defines the northern boundary of the city and provides an east-west route that extends from SR-9 eastward to Granite Falls. SR-204 serves as a connector between US-2 and SR-9. Machias Road is a north-south minor arterial extending north to SR-92 and south to US-2 and defines the city's eastern boundary and the eastern boundary of the RUTA south of the city. Except for these major routes and a limited number of arterial type streets, the street pattern within the Lake Stevens UGA is largely discontinuous. This street pattern tends to concentrate traffic flows onto collector and arterial roads.

PLANNING CONTEXT

State Planning

The Transportation Element's objective is to guide development of the city's transportation system in a manner that supports the city's vision and goals. The city has developed this chapter in accordance with RCW 36.70A.070(6)(a) to address motorized and non-motorized transportation needs of the city of Lake Stevens. It represents the community's policy plan for the next twenty years. The Growth Management Act (GMA) encourages jurisdictions to develop efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans. The GMA also directs jurisdictions to incorporate the following items into their local comprehensive plans:

- Land use assumptions used in estimating travel demand.

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- An inventory of existing transportation facilities and services.
- Multimodal LOS standards to gauge the performance of the system.
- Identification of actions and requirements needed to bring existing facilities and services up to standard.
- Forecasts of future travel demand based on the land use plan.
- Identification of improvements and programs needed to address current and future transportation system deficiencies, including Transportation Demand Management strategies.
- A realistic multi-year financing plan that is balanced with the adopted level of service standards and the land use element.
- An explanation of intergovernmental coordination and regional consistency.

Local transportation elements must also include the following:

- State-owned transportation facilities in the transportation inventory.
- The adopted LOS for state-owned transportation facilities.
- Identification and assessment of GMA concurrency requirements and the applicability to highways of statewide significance.
- An estimate of the impacts to state-owned transportation facilities resulting from local land use assumptions.

Regional Planning

Vision 2050 provides a structure for consideration of transportation issues for freight, roads, transit, bicycles and walking across the Puget Sound to support the regional growth strategy. A key concept revolves around linking regional and local growth centers into the decision-making process. Vision 2050 also recognizes the environmental and climate challenges created by transportation infrastructure and supports energy-efficient, sustainable and safe transportation options. Finally, it emphasizes a range of funding options to address transportation needs and promote prioritization criteria for funding.

Countywide Planning

“The County and cities will work proactively with transportation planning agencies and service providers to plan, finance, and implement an efficient,

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affordable, equitable, inclusive and safe multi-modal transportation system that supports state-level planning, the Regional Growth Strategy, and local comprehensive plans and promotes economic vitality, environment sustainability, and human health.” (Source: Countywide Planning Policies: Effective July 19, 2023)

The countywide planning policies emphasize a coordinated, efficient transportation system that minimizes impact to the climate and employs adaptive management strategies to meet growth patterns throughout the county. The countywide planning goals (including the transportation goal listed above) also echo the state and regional perspective of establishing multimodal transportation linkages between growth centers and residential areas. Snohomish County suggests the countywide planning policies “are intended to guide transportation planning by the County and cities in Snohomish County and to provide the basis for regional coordination with the Washington State Department of Transportation (WSDOT), the Puget Sound Regional Council (PSRC), and transportation operating agencies.”

Local Planning

The Transportation Element considers the location and condition of the transportation system; the cause, scope and nature of transportation problems; future needs; and addresses Level of Service (LOS) Standards. The type and availability of transportation resources are major factors in development of land use patterns, while conversely, the way land is used greatly influences the need and location for new transportation facilities. The relationship between transportation and land use is one of continuous interaction and must be coordinated. The city’s transportation plan integrates the assumptions from the Land Use Element and incorporates the state, regional and countywide principles for an effective transportation system.

TRANSPORTATION SYSTEM INVENTORY

This Transportation Element addresses all arterial (major and minor) and collector roads located within the city of Lake Stevens and the Lake Stevens Urban Growth Area including those which are the responsibility of the Washington State Department of Transportation (State highway system), the county or the city. The city compiled existing roadway functional classifications, the most recently available traffic volume counts and collision data. The inventory of the transportation system is included in this section.

Study Area

The study area includes the Lake Stevens city limits and Urban Growth Area (UGA). The UGA has been delineated with Snohomish County, consistent with the requirements of the GMA. The city lies adjacent to the UGAs of Everett, the city of Snohomish, and Marysville. Unincorporated areas of Snohomish County surround portions of Lake Stevens, and sections of the city limits are used to define portions of the regional Urban/Rural Boundary between urban and rural lands. A map depicting the transportation planning study area is shown in Figure 8.1.

Roadway Functional Classification

Roads in Lake Stevens are classified according to a hierarchy of function as follows:

1. Freeway/Expressway – state designated route, typically with limited access control. Road considered to have regional significance. Speeds range from 35 to 55 mph (typical).
2. Major Arterial – city designated route, typically highways and arterials with limited access and left turn movement is controlled. Roads considered to have regional significance. Speeds range from 30 to 35 mph (typical).
3. Minor Arterial – city designated route, typically connecting to highways, arterials, and collectors. Limited access is preferred. Roads considered to have local with some minor regional significance. Speeds range from 25 to 35 mph (typical).
4. Collector – city designated route, typically connecting neighborhoods to arterial roadways. Collectors may have direct access if no other alternative exists. These roads are considered to have local significance. Speeds range from 25 to 30 mph (typical).
5. Local Access – city designated route, typically connecting neighborhoods to collectors. There is no access control. Roads considered to provide direct access to residences. Typical speed is 25 mph.

The city's functional classification designations have been determined based on each route's regional significance and operational characteristics. Figure 8.2 shows the existing street system as well as signalized and roundabout controlled intersections within the city.

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This information is used in determining access control, frontage improvements required for development, guides programming of roadway improvements, and determines maintenance service priority levels for emergency events such as snow and ice control.

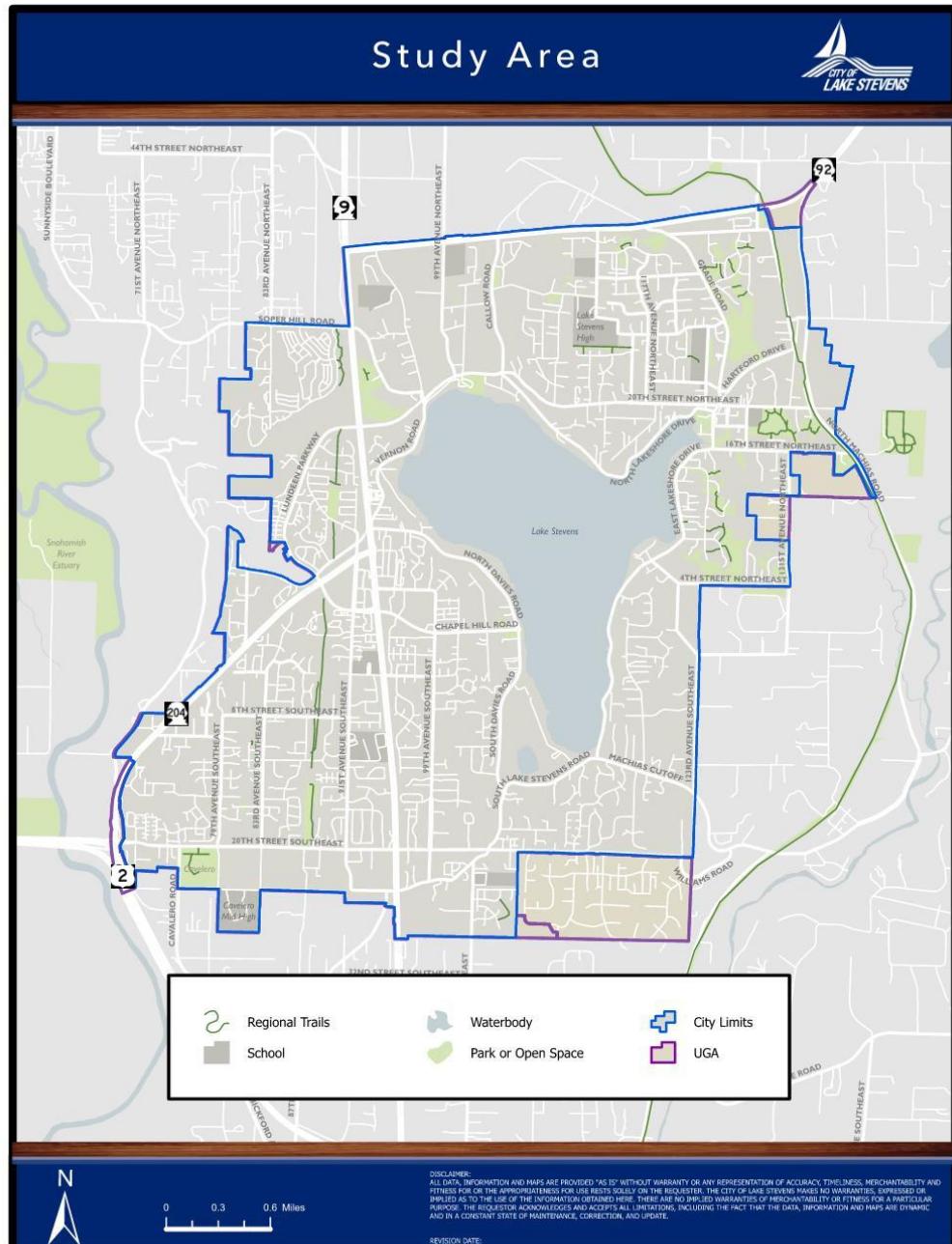


Figure 8.1 - Study Area

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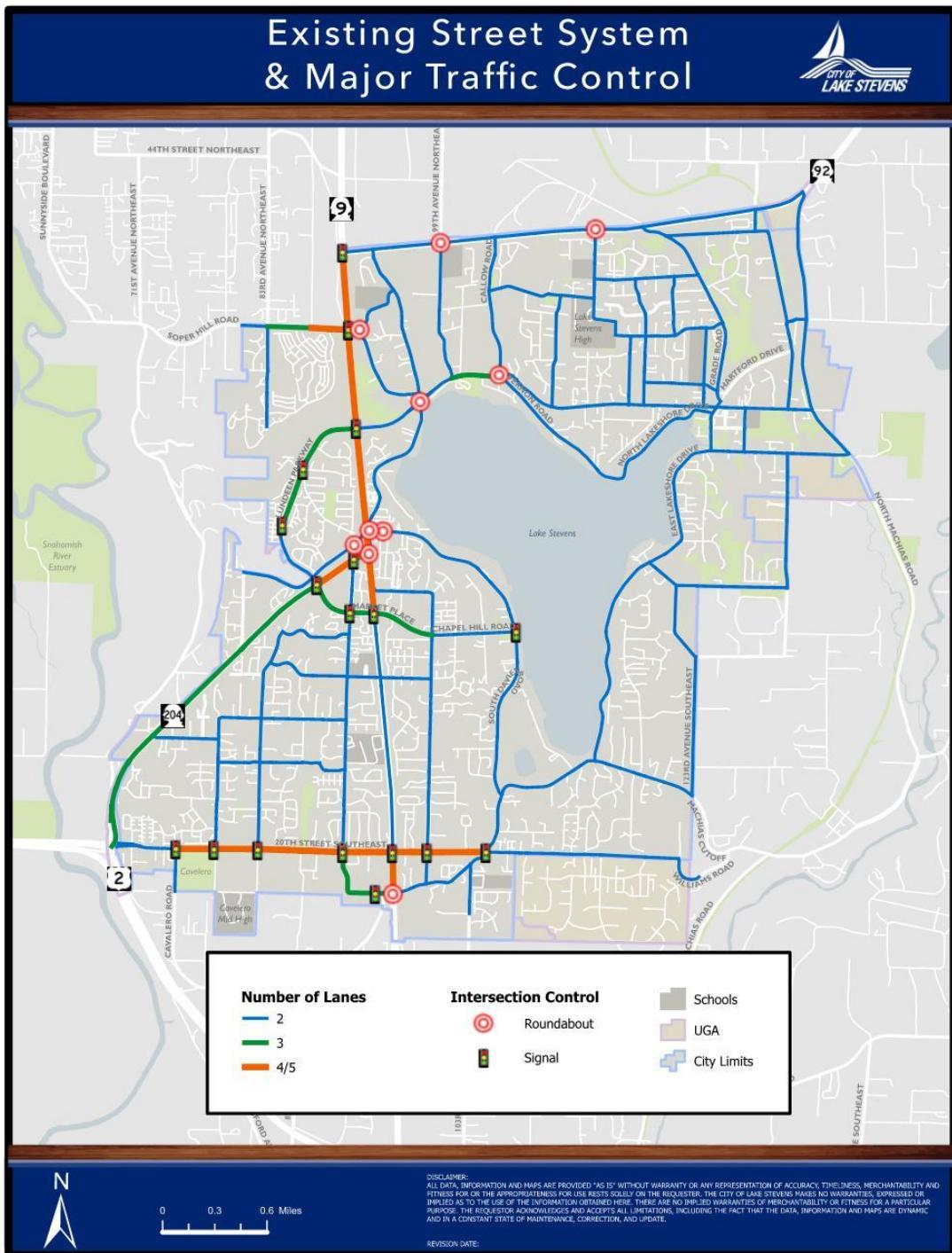


Figure 8.2 - Existing (2024) Street System & Major Traffic Control

For the Lake Stevens UGA, all roadways were classified by Snohomish County using the federal functional classification system. The major classifications of County roadways are principal arterial, minor arterial, collector and local access street.

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The backbone of the city's transportation system is its highway and major arterial system. These streets provide mobility and access for a range of travel modes and users. Lake Stevens' major regional arterials are SR-9, SR-92, SR-204 and 20th Street SE.

Minor arterials generally provide circulation for local traffic movement. These include Lundein Parkway, 20th Street NE, Grade Road, 91st Avenue NE/SE and Soper Hill Road (west of SR-9). North-south travel within downtown Lake Stevens primarily occurs along 91st Avenue SE, and Main Street (East Lake Stevens Road to the south and Grade Road to the north) East-west circulation is provided by 20th Street NE north of the lake, and 20th Street SE south of the lake.

State Routes

The Washington State Department of Transportation (WSDOT) coordinates with the city of Lake Stevens on projects within the UGA and city limits.

SR-9 is a highway of statewide significance (HSS) running north-south parallel to Interstate 5 from Snohomish County/King County to the Arlington area. Within the city, SR-9 begins approximately 0.1 miles south of 20th Street SE and ends on the north side of the SR-92 intersection. Approximately 3.6 miles lie within the city limits. This is a limited access roadway. The approximate weekday average daily traffic (ADT) volume is approximately 36,000 (north of SR-204).

SR-204 is a state highway that connects Lake Stevens to US-2 to the west. US-2 is a highway of regional significance that provides connectivity to Interstate 5 via US-2 and SR-9. Within the city, SR-204 begins at 71st Avenue SE and ends at SR-9. Approximately 1.8 miles are within the city limits. This is a limited access roadway. The approximate weekday ADT volume is approximately 36,000 (between Market Place and SR-9).

SR-92 is a regional connector between SR-9 and the city of Granite Falls. Within the city, SR-92 begins at the SR-9 intersection and ends approximately 250 feet east of 127th Drive NE. This is not a limited access roadway and is under the right of way jurisdiction of the city. Approximately 2.4 miles are within the city limits. The approximate weekday ADT is approximately 19,000 (east of SR-9).

Truck Routes

In 2011, the city adopted, through Ordinance 863, a designated truck route system and established weight limits on all streets. The designated truck routes within the city are:

- State Route 9
- State Route 92
- State Route 204
- 20th Street SE between US 2 and the east city limits
- Machias Road

Truck route exceptions are provided for repair, pickup, delivery and for businesses that operate trucks from within the city. (This does not apply where a residence is also a place of business.)

Access to the city's industrial area in the northeast portion of the city is along collector roadways which are not considered truck routes.

Roadway Design Standards

The city of Lake Stevens has adopted Roadway Standards commonly referred to as the EDDS (Engineering Design and Development Standards) which set specific and consistent road design elements. The standards include items such as right-of-way needs, pavement width, type and width of pedestrian and bicycle facilities, and roadway and intersection radii. The standards also provide requirements for the location and installation of utilities within the right-of-way.

The standards are intended to support the city's goals in providing adequate facilities to meet the mobility and safety needs of the community, as well as complying with storm water management, sensitive areas, and other regulations. The standards are intended to assist design professionals and developers for all new and reconstructed roadways and right-of-way facilities, both public and private, within the city.

Traffic Calming

Variations in roadway standards allow the installation of traffic calming measures for the purpose of slowing traffic. Traffic calming consists of physical design and other measures installed on roadways to reduce motor-vehicle traffic speeds as well as improving safety for pedestrians and cyclists. Possible techniques include traffic circles, mini roundabouts, streetscaping, chicanes (roadway barriers) or road diets (reduction in lanes).

On-Street Parking

On-street parking is typically limited with availability found primarily on local access and collector classification roadways. Along older street corridors, such as 20th Street NE, availability of parking is limited, and the quality of the available parking spaces is low (typically graveled shoulder).

Generally, the demand for on-street parking does not exceed the available parking areas within the city. On-street parking in residential areas is typically sufficient to handle vehicles that cannot be accommodated on private property. The primary exception is during special events and around Lake Stevens High School, City Hall, Festival Street and North Cove Park.

Public Transportation

Community Transit provides regional bus service with routes to Seattle, Granite Falls, Marysville and Everett. The Lake Stevens Transit Center, located at 9600 Market Place in the Lake Stevens Center subarea, provides bus connections for active Community Transit bus routes. The Lake Stevens Transit Center also provided a Park & Ride facility with 207 vehicular parking spaces and 13 bicycle parking spaces. Community Transit has designated two additional Park & Pool locations for vanpools and carpools at Ebenezer Lutheran Church (2111 - 117th Avenue NE) and Holy Cross Lutheran Church (9613 - 20th Street SE). A map of transit routes and stops in Lake Stevens is shown on Figure 8.3.

Active Transportation Facilities

Bicycle and pedestrian routes are discontinuous throughout the city, having been constructed in a piecemeal manner over the years. Existing facilities include bicycle lanes, paved shoulders and shared-use paths. An inventory of existing pedestrian and bicycle facilities are shown on Figures 8.4 and 8.5, respectively. This map also depicts School Safe Walk routes and planned active transportation connections.

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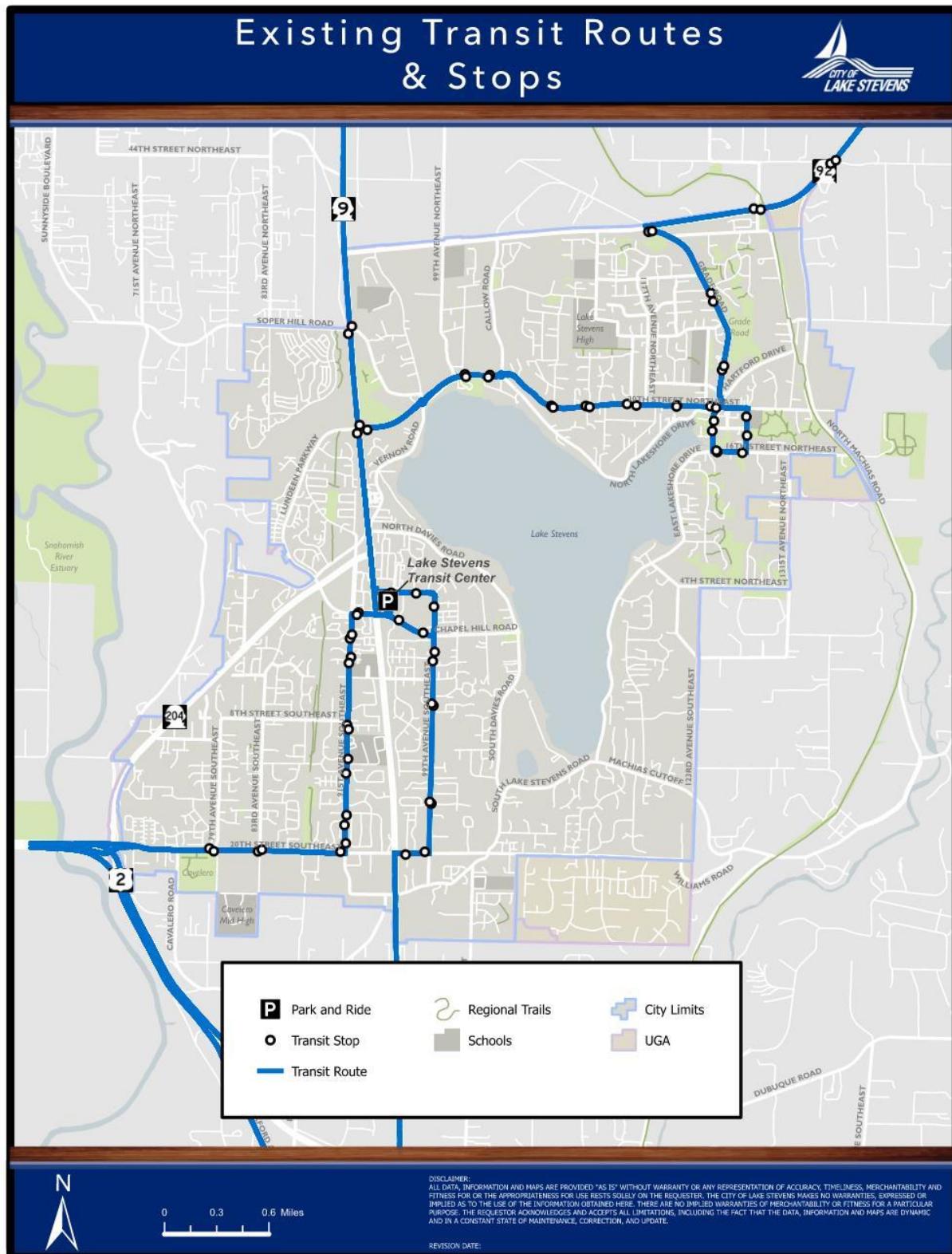


Figure 8.3 - Existing Transit Routes and Stops

Trails

The Centennial Trail, a multi-modal (pedestrian, bicycle, horse, etc.) facility was built by Snohomish County and runs along the eastern border of the city. Picnic areas, bicycle racks and other amenities are provided. Two trailhead connections have been constructed to provide Lake Stevens residents with connections to the Centennial Trail. The SR- 92 Overpass trailhead is located along 127th Drive NE (between SR-92 and 36th Street NE) and the Lake Stevens trailhead is located along 20th Street NE (near the intersection with Machias Road).

Many of the older residential areas are not yet connected by trail to recreational areas, schools, or shopping areas. Chapter 5 presents a discussion of the trail system in Lake Stevens as part of the Parks and Recreation Plan. The Land Use Section discusses how the Centennial Trail can assist in bringing pedestrian and bicycle traffic to the downtown.

Bicycle Facilities

As a unifying road feature, bicycle facilities including dedicated lanes and shared lanes (e.g., sharrows), are proposed along several streets connecting the city's growth centers and adjacent neighborhoods. Dedicated bike lanes can currently be found along the following roadways:

- 20th Street SE, between 88th Avenue SE and 106th Avenue SE
- Lundein Park Way, between SR 9 and SR 204
- Market Place, between SR 204 and 91st Avenue SE

In addition to these on-street bicycle lanes, the city's existing bicycle network also includes multi-use paths (including along South Lake Stevens Road and 83rd Avenue NE) which provide off-street facilities for active transportation use. The city's existing bicycle facilities are shown in Figure 8.4.

Sidewalks

City code requires new development projects to construct frontage improvements, including non-motorized facilities, landscaping and lighting improvements, in public right of way and internally as a part of the development approval. In 2023, the city completed an ADA Self-Evaluation and Transition Plan that identifies priorities and recommendations that the city can implement over time to achieve an ADA-compliant public right-of-way.

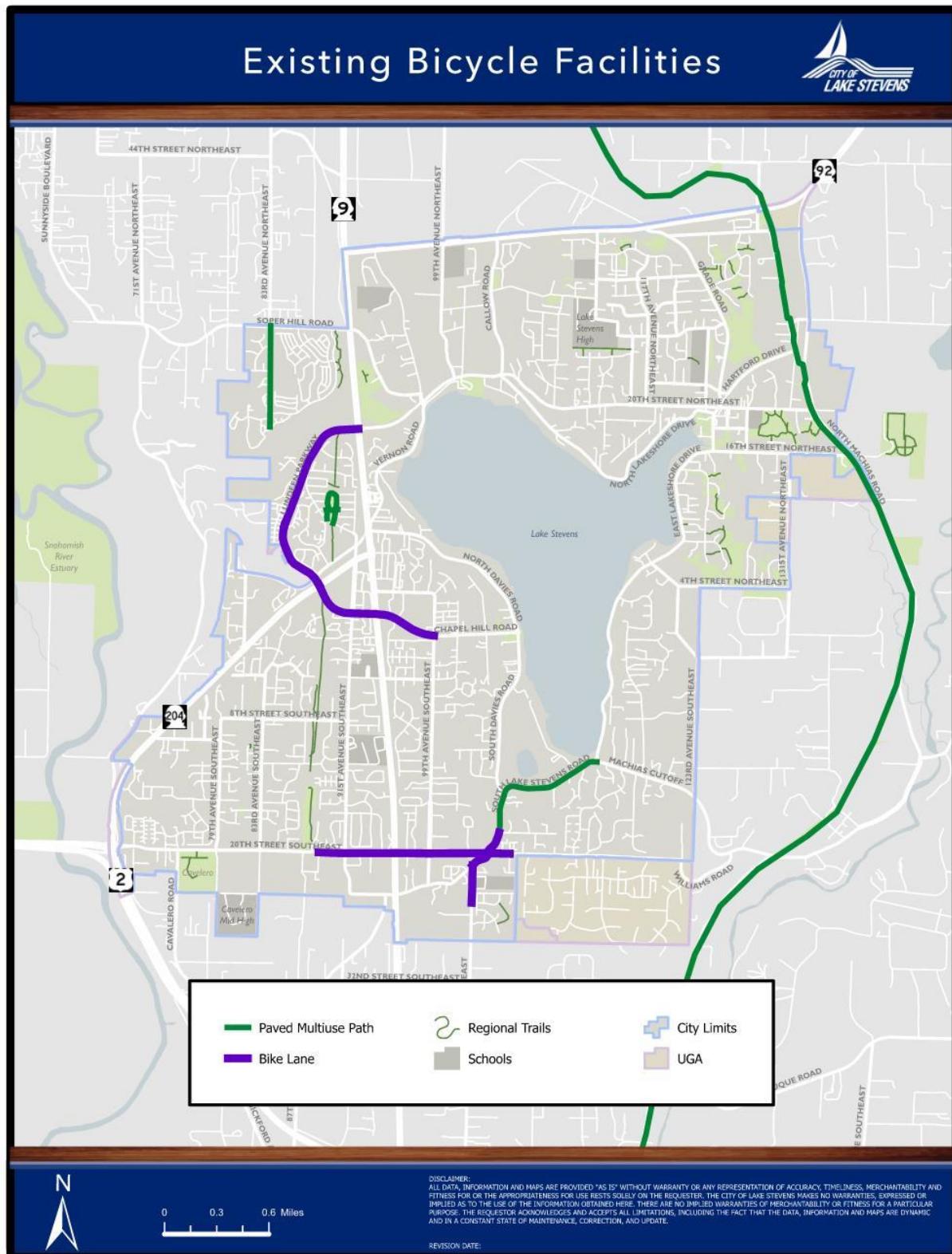


Figure 8.4 - Existing Bicycle Facilities

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The pedestrian features include concrete sidewalk, paved shoulder, asphalt path, and dedicated gravel shoulders. Funding opportunities are sought in the form of grants from state and federal agencies to augment budget dollars for construction of improvements.

Recent improvements to the pedestrian/sidewalk network include a multi-use path along South Lake Stevens Road between Machias Cutoff and 18th Street SE and 103rd Avenue SE and 100th Drive SE. These facilities provide a wide, off-street facility for use by pedestrians and bicyclists. The city's existing network of pedestrian facilities is shown in Figure 8.5

TRANSPORTATION SYSTEM PERFORMANCE

Daily traffic volumes were assembled to provide a general understanding of travel patterns throughout the city. The volumes were collected in June 2023. Figure 8.6 shows total daily vehicle volumes on major city roadways. PM peak hour intersection turning movements were also collected to assist in evaluating system performance.

As shown in Figure 8.6, the regional WSDOT facilities are those that experience the highest traffic volumes. The city roadways with the heaviest volumes are 20th Street NE and 20th Street SE, which experience between 15,000 and 21,000 average daily vehicles. Other city roadways range from approximately 1,000 to 11,000 average daily vehicles.

Traffic Operations

Traffic operations were evaluated based upon the latest level of service (LOS) methodologies contained in the Highway Capacity Manual (HCM), Transportation Research Board. The HCM is a nationally recognized and locally accepted method of measuring traffic flow and congestion. Criteria range from LOS A, indicating free-flow conditions with minimal vehicle delays, to LOS F, indicating extreme congestion with significant vehicle delays. At signalized intersections, LOS is defined in terms of average delay per vehicle. At un-signalized intersections, LOS is measured in terms of the average delay per vehicle and is typically reported for the worst traffic movement instead of for the whole intersection.

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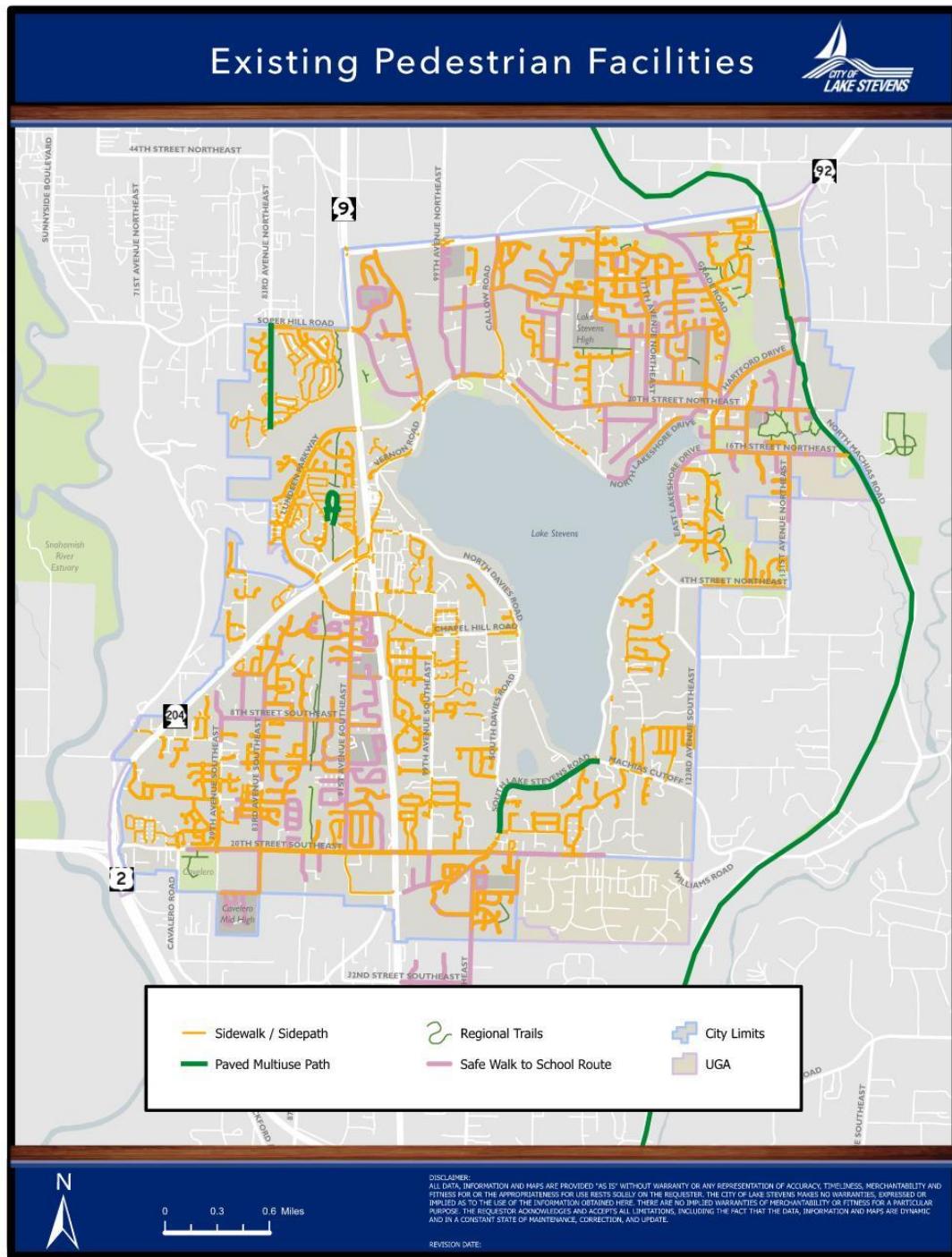


Figure 8.5 - Existing Pedestrian Facilities

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Intersection LOS analysis was performed for major intersections within the study area based on 2023 conditions. Major intersections throughout the city were selected for analysis, based upon location and likelihood that they might be impacted by future growth.

The PM peak hour vehicle volumes were used as the basis for the LOS assessment due to the higher traffic volumes that occur during that time. Table 8.1 presents the PM peak hour delay and LOS conditions at the study intersections for the weekday PM peak hour. Figure 8.7 maps out the existing weekday PM peak hour LOS conditions at the study intersections. The intersection LOS conditions represent the 2023 existing conditions and provides a basis to evaluate the forecast traffic operations against. The time shown is in seconds and is calculated for a specific intersection based on the average delay from all approaches over a one-hour PM peak hour period.

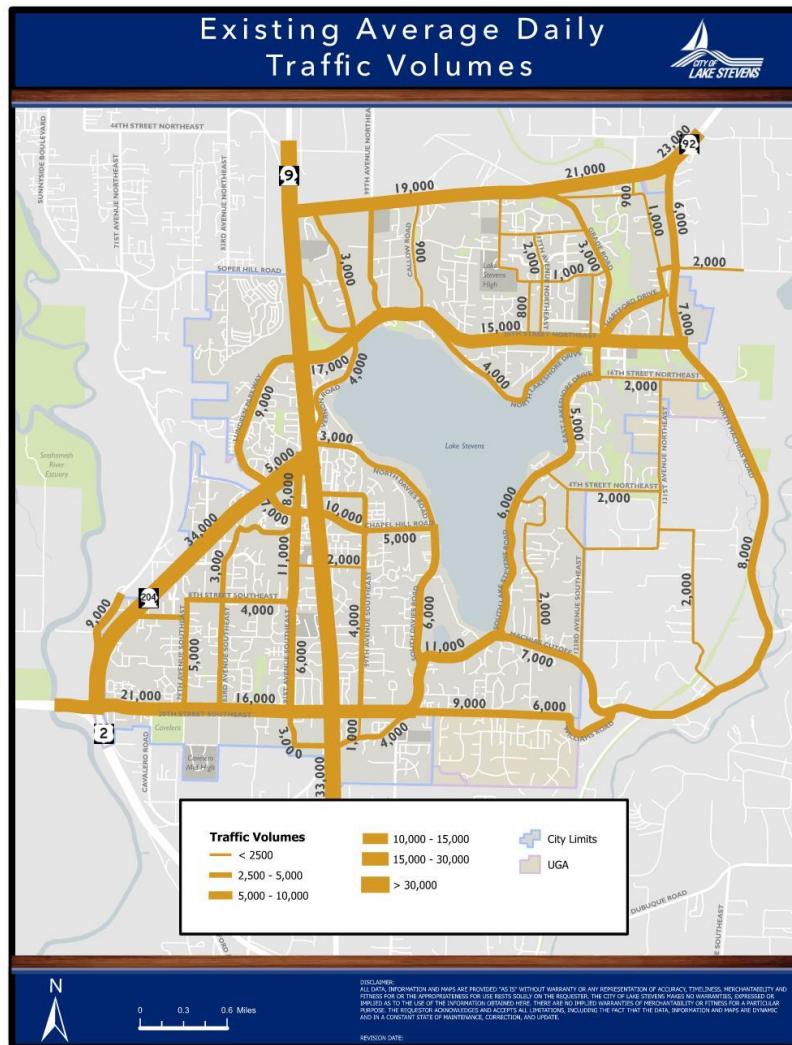


Figure 8.6 - Existing Average Daily Traffic (ADT) Volumes

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Intersection	2023 Existing		
	LOS ¹	Delay ² (WM) ³	Control ⁴
Callow Rd/SR 92	C	19 (NB)	TWSC
Grade Rd/SR 92	F	182 (NB)	TWSC
127th Dr NE/SR 92	C	17 (NB)	TWSC
127th Dr NE/36th St NE	A	9 (SB)	TWSC
Grade Rd/32nd St NE	A	9 (EB)	TWSC
Grade Rd/26th St NE	A	10 (EB)	TWSC
99th Ave NE/Lundeen Park Way	B	14 (NB)	TWSC
117th Ave NE/20th St NE	B	12 (SB)	TWSC
123rd Ave NE/20th St NE	A	10 (EB)	AWSC
Main St/20th St NE	B	14 (WB)	AWSC
Main St/N Lakeshore Dr	B	13 (EB)	TWSC
18th St NE/Main St	C	15 (SB)	TWSC
Main St/E Lake Stevens Rd	B	11 (EB)	AWSC
N Machias Rd/28th St NE	B	12 (NB)	AWSC
N Machias Rd/20th St NE	B	14 (EB)	TWSC
N Machias Rd/16th St NE	C	16 (EB)	TWSC
91st Ave NE/Market Pl	C	22	Signal
99th Ave NE/Market Pl	B	13 (EB)	AWSC
Davies Rd/Chapel Hill Rd	B	11	Signal
91st Ave SE/4th St SE	C	18 (EB)	TWSC
91st Ave SE/8th St SE	C	18 (EB)	TWSC
SR 204/Everett Rd	D	27 (EB)	TWSC
SR 204/Sunnyside Blvd	F	114 (EB)	TWSC
79th Ave SE/20th St SE	B	19	Signal
83rd Ave SE/20th St SE	A	9	Signal
91st Ave SE/20th St SE	B	16	Signal
99th Ave SE/20th St SE	A	9	Signal
S Lake Stevens Rd/20th St SE	C	28	Signal
S Lake Stevens Rd/S Davies Rd	B	15 (NB)	AWSC
S Lake Stevens Rd/Machias Cut-Off	B	13 (SB)	TWSC
118th Ave SE/Machias Cut-Off	B	10 (SB)	TWSC
E Lake Stevens Rd/118th Ave NE	C	15 (WB)	TWSC

1. Level of Service, based on Highway Capacity Manual 6th Edition methodology.

2. Average delay in seconds per vehicle.

3. Worst movement reported for stop-controlled intersections.

4. Intersection traffic control: "Signal" is traffic signal; "TWSC" has stop signs on minor approach; "Round" is a roundabout.

Table 8.1 - Existing (2023) Weekday PM Peak Hour LOS at Study Intersections

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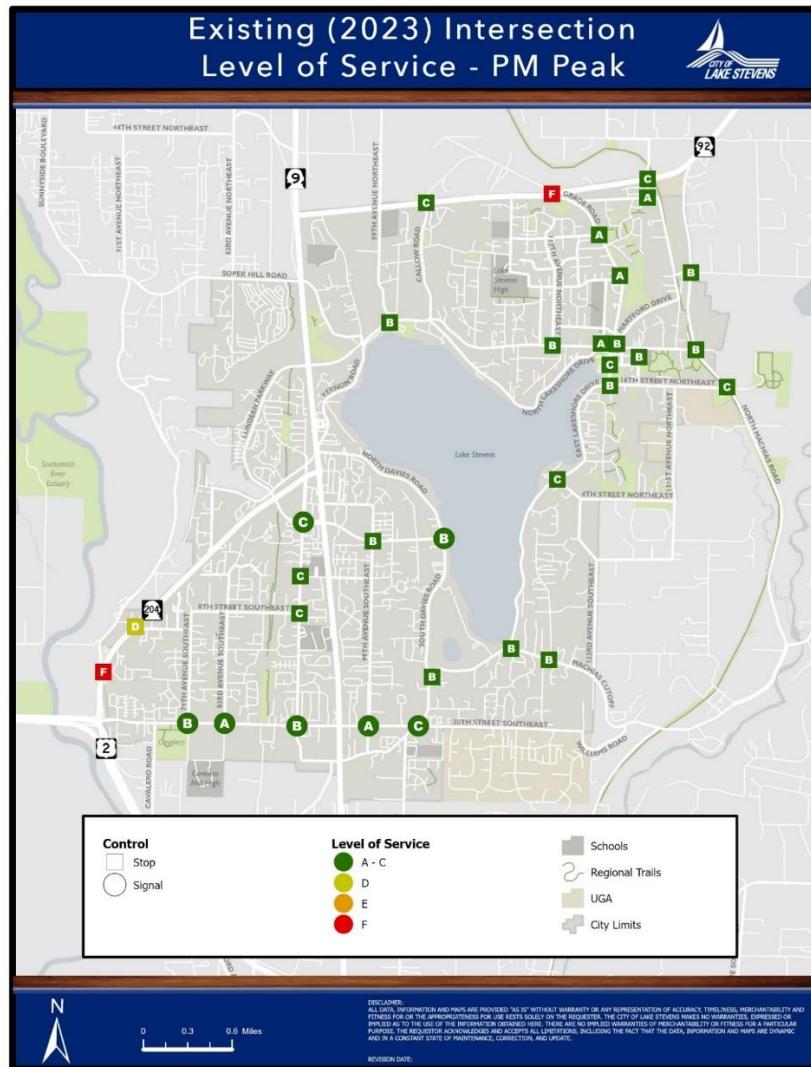


Figure 8.7 - Existing (2023) Intersection Level of Service (LOS)

Traffic Safety

Historical collision data were provided by WSDOT for the five-year period from 2018 to 2022 (the most recent data available). Over this five-year period, 1681 crashes were reported. Figure 8.8 presents the annual collision rates within Lake Stevens over the five-year period. Analysis of crash rates and trends show that the number of collisions per year on Lake Stevens streets has remained relatively constant over the five-year period.

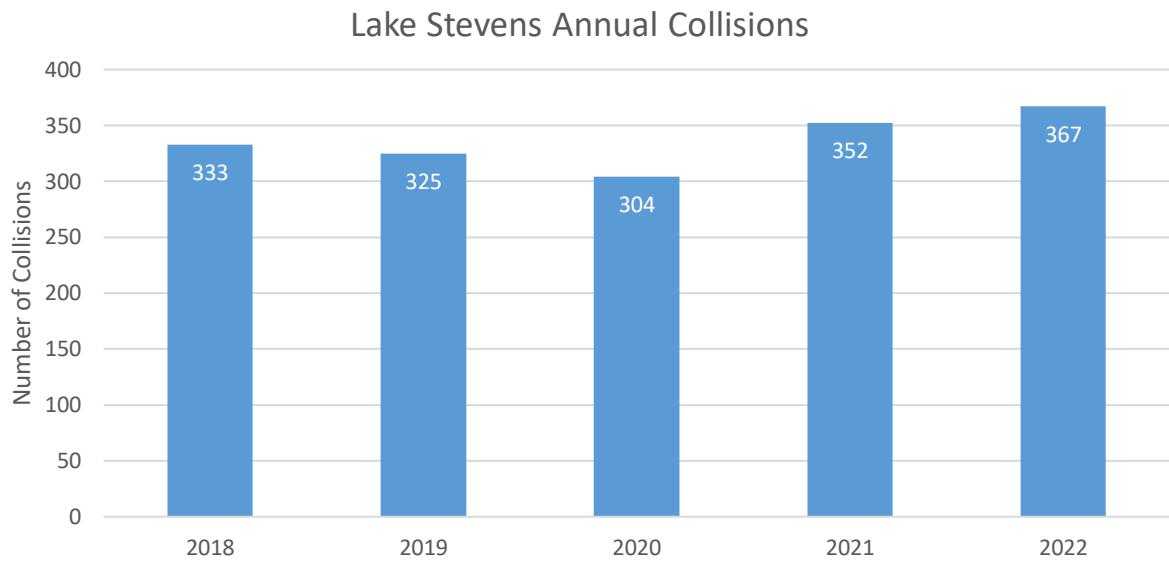


Figure 8.8 - Annual Collision Summary

Figure 8.9 summarizes the collision data by severity. Of the collisions occurring during this period, five (approximately 0.3%) resulted in fatalities and 424 (approximately 25%) resulted in serious injury.

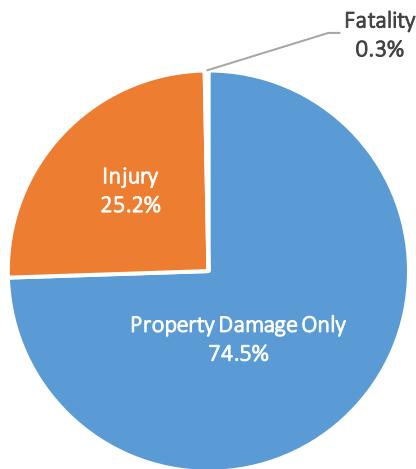


Figure 8.9 - Collisions by Severity

The type of collisions most frequently reported were rear-end crashes which accounted for approximately 34 percent of all collisions within the city. The second most often reported crash type were angle collisions which are characterized by one vehicle striking another at an angle that is between a side impact at 90 degrees, and a rear-end collision. A chart displaying the proportion of collision types is shown in Figure 8.10.

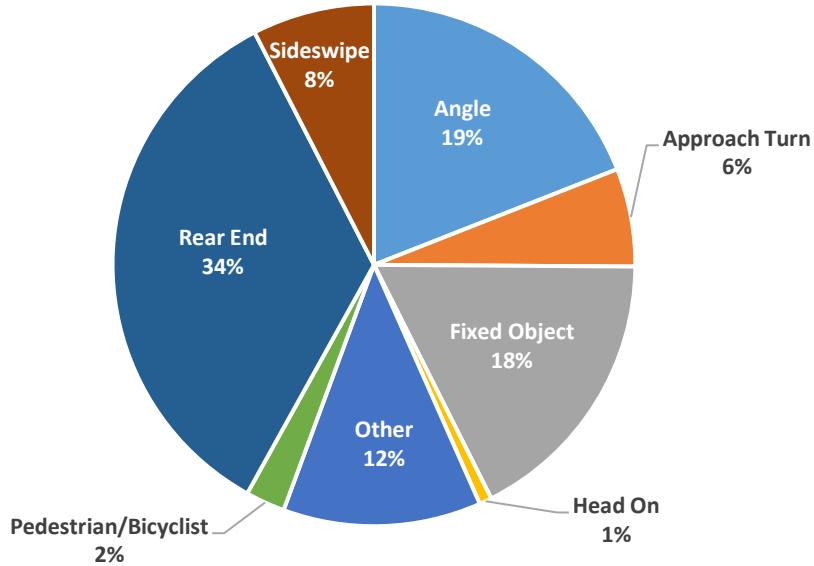


Figure 8.10 - Collisions by Type

Intersections along SR-9 showed significantly higher crash rates than other locations in the city, as well as being the location of numerous serious injury crashes. Figure 8.11 shows the location of collisions within the city over the five-year period, as well as those crashes which resulted in fatalities or serious injuries.

TRAVEL FORECASTING AND ALTERNATIVES ANALYSIS

The Transportation Systems Plan portion of the Transportation Element is partially developed based on the evaluation of the existing transportation system. The analysis of the existing transportation system identified locations with current operational, safety, and alternative transportation mode deficiencies.

To provide a framework for future transportation system needs, the plan must also consider the transportation needs of future growth. The Growth Management Act (GMA) requires that the transportation planning horizon be at least ten years in the future. The city of Lake Stevens selected a 2044 horizon year for the plan. Year 2044 provides a long-range look at the transportation system needed to support anticipated growth in the city and surrounding region. Travel forecasts have been developed and analysis has been conducted for average weekday conditions during the PM peak hour. The weekday PM peak hour generally has the

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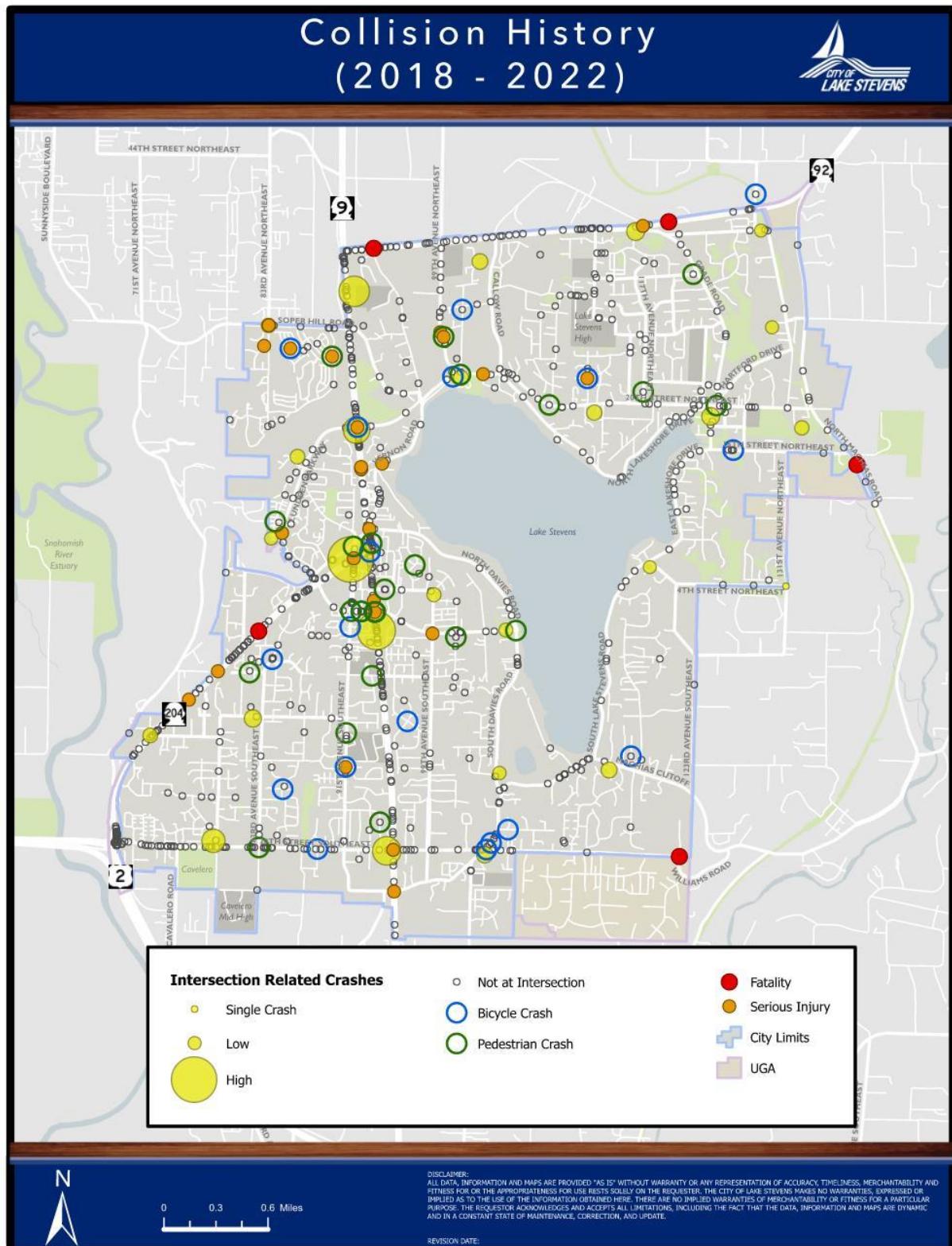


Figure 8.11 - Collision History (2018-2022)

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highest overall traffic volumes in the community and thus provides the basis for identifying capacity-related improvement needs.

The primary analysis of 2044 travel forecasts were initially based on the following travel forecasting assumptions:

- Improvement projects in the city of Lake Stevens's Transportation Improvement Plan (TIP).
- Improvement projects in TIPs from adjacent jurisdictions.
- Puget Sound Regional Council's Transportation Plan compilation of regional projects.
- City of Lake Stevens land use plan.
- Land use plans from adjacent jurisdictions.

Based on these assumptions, travel forecasts were developed using the Lake Stevens-Marysville-Arlington travel demand model. The model is a tool that is used to convert existing and future land uses into trips. Alternative roadway and intersection projects were then evaluated to understand the effect they would have on travel patterns within the study area and their ability to resolve existing and future deficiencies. The following provides an overview of the land use assumptions, travel demand model, and the alternatives analysis used in preparing the travel forecasts. The travel forecasts provide a technical basis for identifying the transportation improvement projects in the transportation systems plan.

In addition to addressing existing transportation system issues, the city must develop its transportation system to accommodate forecast growth. The Growth Management Act (GMA) requires that the transportation planning horizon be at least ten years in the future. The city has adopted 2044 as the forecast year for the Transportation Element, consistent with the Land Use Element.

The city's travel demand model was updated to support the evaluation of future transportation system needs. The travel demand model provides a tool for forecasting long-range traffic volumes based on the projected growth in housing and employment identified in the Land Use Element. The model is also useful in evaluating transportation system alternatives. However, it must be noted that the specific land use forecasts included in the model are intended for planning purposes only and in no way are intended to restrict or require specific land use actions. The land use forecasts are consistent and supportive with the city's growth targets.

Land Use Forecasts

Travel forecasts are largely derived based on changes in residential dwelling units and employment within the city and surrounding communities. Travel forecasts must incorporate growth in travel demand entering and exiting the greater Lake Stevens area, which reflect changes in regional growth forecasts. The regional changes in travel demand are based on land use plans for the Cities of Lake Stevens, Marysville, and Arlington.

Dwelling Unit Growth

Within Lake Stevens, the number of residential dwelling units is forecast to grow from 15,539 units (year 2023 data) to 20,357 units by 2044. This represents an annual growth rate of approximately 1.5 percent.

Approximately 33 percent of the dwelling unit growth is expected to be located within the 20th Street SE Corridor subarea, with over two-thirds of the housing growth in this area expected to be single-family homes. Additionally, approximately 27 percent of the dwelling unit growth is expected to occur within the Lake Stevens Center subarea, with most of the dwelling units in this area also projected to be single-family homes. The multifamily housing growth within these two subareas is expected to account for over 80 percent of the planned multifamily housing growth within the city.

Employment Growth

Within Lake Stevens, the number of employees is forecast to grow from 5,531 (year 2023 data) to 9,055 employees by 2044. This represents an annual growth rate of 3.2 percent.

Approximately one-third of the expected employment growth within the city is expected to occur within the Industrial Center subarea along Old Hartford Road. The employment is expected to comprise a variety of industrial and commercial uses. Approximately 25 percent of the additional employment growth is expected in the 20th Street SE Corridor subarea and will primarily consist of commercial uses.

Planned Improvements

Adapted from the existing street network, the future street network includes various planned transportation improvements. For analysis purposes, only projects associated with vehicle operations and roadway capacity have been analyzed in the city's travel demand model.

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The future 2044 Baseline scenario includes only the projects that have been recently completed or are funded and will be completed in the future. This scenario provides a baseline for identifying future traffic operational deficiencies, which are used to establish a framework for developing the Transportation Systems Plan. The 2044 Baseline scenario includes the following recent and planned improvements in the city.

- Series of roundabouts at the SR 204/SR 9/ Vernon Road intersections (completed 2023)
- Roundabout at SR 9/Lake Stevens Road (completed 2022)
- Roundabout at Main Street/20th Street NE intersection (anticipated 2025)

Travel Forecasts

The results of the future 2044 analysis were used to develop the framework for the recommended transportation network and ultimately the transportation systems plan. A recommended transportation network model scenario was created to estimate forecast 2044 travel demand within the city. The resulting traffic forecasts were evaluated to identify the resulting levels of service (LOS).

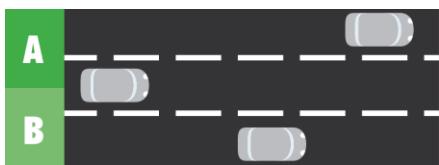
Level of Service Standards

Multimodal level of service standards are required for active transportation facilities, locally owned arterials, and transit routes that serve urban growth areas, to monitor system performance, and to help achieve the statewide goal of environmental justice. LOS standards establish the basis for the concurrency requirements in the GMA, while also being used to evaluate impacts as part of the State Environmental Protection Act (SEPA). Agencies are required to “adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with development” (RCW 36.70A.070(6)(b)). Therefore, setting the LOS standard is an essential component of regulating development and identifying planned improvements for inclusion in the Transportation Element.

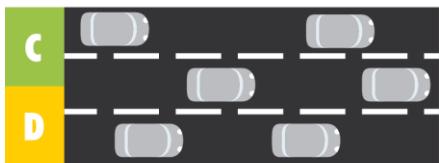
Vehicle Level of Service

Methodology

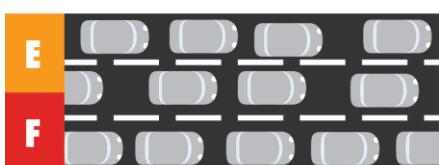
Level of service is both a qualitative and quantitative measure of roadway and intersection operations. Vehicle level of service uses an “A” to “F” scale to define the operation as follows:



LOS A: Primarily free flow traffic operations at average travel speeds. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delays at intersections are minimal.



LOS B: Reasonably unimpeded traffic flow operations at average travel speeds.



LOS C: Stable traffic flow operations. However, ability to maneuver and change lanes may be more restricted than in LOS B, and longer queues may contribute to lower-than-average travel speeds.

LOS D: Small increases in traffic flow may cause substantial increases in approach delays and decreases in speed.

LOS E: Significant delays in traffic flow operations and lower operating speeds.

LOS F: Traffic flows at extremely low speeds. Intersection congestion is likely, with high delays and extensive vehicle queuing.

Weekday PM peak-hour traffic operations were evaluated at major intersections using Synchro 11.0 software. Intersection traffic operations evaluate the performance of signalized and stop-controlled intersections according to the industry standards set by the Highway Capacity Manual (HCM). At signalized and all-way stop-controlled intersections, LOS is measured in average control delay per vehicle and is typically reported using the intersection delay. At stop-sign-controlled intersections, LOS is measured in delay per vehicle and is reported for the worst movement. Traffic operations for an intersection can be described with the same range of levels of service as roadways (LOS A through F).

State Highway Vehicle LOS Standards

The city of Lake Stevens is served by several state highways: US-2, SR-9, SR-92, and SR-204. SR-9 is classified as a Highway of Statewide Significance (HSS). Per WSDOT's Highway Systems Plan, the LOS standards for HSS facilities are set forth by State law. State law sets LOS D for HSS facilities in urban areas and LOS C for HSS facilities in rural areas. Since SR 9 is located within the Lake Stevens urban area, the LOS D standard applies. GMA concurrency requirements do not apply to HSS facilities, per State legislation.

SR-92 is a State Highway of Regional Significance, Tier 2 and SR-204 is a State Highway of Regional Significance, Tier 1. The level of service standard for regionally significant state highways in the central Puget Sound region is set by PSRC in consultation with WSDOT and the region's cities and counties. PSRC has established LOS D for SR-92 and LOS E Mitigated for SR-204. PSRC notes that it will measure the level of service for regionally significant state highways on a one-hour PM peak period basis. Furthermore, PSRC notes that local agencies will need to decide whether to apply concurrency to state highways of regional significance.

Lake Stevens Vehicle LOS Standards

The city of Lake Stevens has set a citywide standard of LOS E for major and minor arterials and collector roadways. Along the 20th Street SE corridor, LOS is determined as an average of all intersections from South Lake Stevens Roadway to Cavalero Road. On local access roadways the standard is LOS C.

Snohomish County Vehicle LOS Standards

The city is surrounded by county roads and there are county roads which traverse through the city. The county's LOS standards are based upon travel times on arterial segments, which form corridors throughout unincorporated Snohomish County. The LOS for urban areas is LOS E to maintain an average speed of 10 miles per hour.

Active Transportation Level of Service

Methodology

Active transportation LOS standards were developed to evaluate the quality and connectivity of pedestrian and bicycle facilities within the city. The planned active transportation network is presented in Figure 8.14 of the Transportation Systems Plan section of the Transportation Element. As shown in this figure, the planned active transportation network

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identifies the future vision for a comprehensive network of active transportation facilities. The city envisions an interconnected system of on-road and off-road facilities, that include sidewalks, pathways, shared-use trails, and key connections. The active transportation network contains a series of Primary or Secondary Routes, which are defined further in the Transportation Systems Plan section of the Transportation Element.

The active transportation LOS standards are presented in Table 8.2. These standards utilize a comprehensive approach to evaluating the active transportation system, emphasizing both the completeness and comfort-level of the system. Table 8.3 provides the evaluation criteria.

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LOS	Rating	Standard
	Good	Direct routes. Non-motorized facilities (including paths or sidewalks and bike lanes, as appropriate) are continuous, with infrequent gaps, and are the appropriate scale for the type of street. Frequent designated crossing opportunities, actuated signal controls, and design elements for accessible and complete streets.
	Acceptable	Routes may be less than direct, but they are often quieter and more scenic than direct routes. Network connectivity is satisfactory though the connections may be far apart. Facilities are present but are discontinuous or only available on one side of the street or may be somewhat undersized for the street type. Crossing opportunities are present but may lack actuated signal controls. Some travelers may have a less-than-comfortable travel experience some times of the day.
	Poor	Routes are indirect and offer no parallel alternate routes on quieter streets. There are no network connections, no practical alternate routes. Facilities are non-existent, or are grossly undersized for the street type, or are in such poor physical condition that they constitute a hazard. Travel is stressful for most people even during off-peak travel times.

Table 8.2 - Active Transportation LOS Overview

Generally, a green/good LOS indicates a roadway has pedestrian facilities (sidewalks and paths) which are direct and well connected to a variety of land uses with frequent crosswalks and sufficient separation from vehicular travel (based on the context of the roadway). Based on the road classification, bike lanes may be separated or within the travel lane. An orange/acceptable LOS indicates that a roadway's pedestrian facilities may provide infrequent crossing opportunities, discontinuous/indirect facilities, or may provide insufficient separation/protection from vehicular traffic based on the volumes/speed along the roadway. A red/poor LOS generally indicates a lack of facilities along the roadway, or facilities that have substantial barriers to convenient and connected pedestrian travel.

As shown in Table 8.2, roadways lacking the appropriate active transportation facilities would be assigned a red/poor LOS. For roadways with active transportation facilities, those roadways would be evaluated and assigned a LOS score based on three measures of the active transportation facilities: (1) completeness, (2) connectivity, and (3) comfort. Each of these network components are defined further below:

- **Completeness** relates to the area served by infrastructure. It addresses the degree of system continuity, and the extent of the area served by the non-motorized system.
- **Connectivity** refers to the ways that infrastructure is considered in development patterns – street connections and non-motorized pathways increase traveler route choices. Connectivity also includes the ability to make modal linkages such as pedestrian connections from residential neighborhoods to high-frequency transit corridors.

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- **Comfort** pertains to the sense of safety people might feel when walking or biking along a street, and the effects that traffic volumes and speeds might have on that experience given the available infrastructure and whether it is appropriate for the speed and volume of traffic.

To provide an objective evaluation of each roadway segment, criteria were identified for the three components of the active transportation network listed above. Table 8.3 below summarizes the evaluation criteria which are applied to determine the quality of the active transportation facilities based on the three system components. The LOS score (green/good, orange/acceptable, red/poor) for each roadway is determined based on a comprehensive review of the completeness, connectivity, and comfort of the active transportation facilities.

Network Component	Evaluation Criteria	Description
Completeness	Level of Network Completion	The city's Traffic Impact Zone (TIZ) areas can be used to measure the percent completion of the active transportation network within each zone.
Connectivity	Level of Network Connectivity	Gaps in the active transportation network can be reviewed to determine whether active transportation facilities provide direct, indirect, or no connectivity between residential neighborhoods and key destinations (schools, parks, transit facilities, etc.) in each TIZ
Comfort	Level of Traffic Stress (LTS)	Pedestrian/Bicycle LTS are measured on a scale from 1-4, with LTS 1-2 generally considered to be acceptable with LTS 3-4 indicating higher stress levels. Reference WSDOT Design Bulletin 2022-01 or city design guidelines for guidance on scoring LTS based on roadway speed, volume, and facility type.

Table 8.3 - Active Transportation Facility Evaluation Criteria

Active Transportation LOS Standards

The city has established LOS standards for its active transportation network based on the methodology presented in Table 8.2. The long-term vision for the city would be to have all roadways within the planned active transportation network achieve a green or good LOS; however, in the near-term, the objective would be to achieve, at minimum, an orange or acceptable LOS along all roadways. As the city grows and develops, the city plans to update the pedestrian LOS standard to require a green/good LOS along all roadways to accommodate increased pedestrian demand associated with land use growth. The city

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utilizes these standards to prioritize investments in the pedestrian network and identify where significant gaps in the system need to be addressed to serve the city's land use plan.

Transit Level of Service

Methodology

While Transit service is not under the city's control, it is an important component of the overall transportation system. As required by GMA, the city has adopted transit level of service standards that define the type of local amenities that the city can help provide to allow for safe and convenient access to transit stops, and comfortable facilities when transit riders reach a transit stop.

The future transit network assumes eventual implementation of Community Transit's Journey 2050 Long Range Plan that envisions increased service frequency and coverage throughout the County. In Lake Stevens, Regular Bus – Frequent (15-20 min service, fixed route) and Regular Bus – Base (30 min service, fixed route) transit service is planned to be provided at some point in the future.

The transit LOS standards shown in Table 8.4 emphasize improved access to transit stops, along with improved amenities. The LOS designations are shown in green, orange, and red and correspond to good, acceptable, and poor LOS, respectively. A green/good LOS indicates a transit stop that has high quality amenities, and sidewalks and crosswalks serving it. An orange/acceptable LOS indicates a transit stop is lacking some critical amenities or is missing sidewalk/crosswalk connections. Transit riders accessing transit stops with an orange LOS may be required to travel out of direction to utilize a crosswalk or walk for a short distance along a shoulder or gravel pathway. A red LOS indicates no designated facilities are provided at or around the transit stops and is considered unacceptable.

LOS	Rating	Amenities	Sidewalk Connectivity	Crosswalk Access
	Good	High-quality stop amenities (e.g., benches, shelters, bike parking)	Full sidewalk connectivity provided within ¼ mile of bus stop	Marked crosswalks provided within 250 feet of a bus stop
	Acceptable	Basic Stop amenities, (e.g., pole and bus stop sign)	Good sidewalk connectivity provided within ¼ mile of bus stop, with some gaps in the network	Marked crosswalks provided over 250 feet from a bus stop
	Poor	No facilities exist	No/limited pedestrian facilities connected to the bus stop	No facilities exist

Table 8.4 - Transit LOS Overview

Transit LOS Standards

The city has established LOS standards for transit based on the expected type of service being planned for in the Journey 2050 Long Range Plan. While the long-term vision for the city would be to achieve a green/good LOS for all transit stops, a green/good LOS is the standard for planned Regular Bus – Frequent service routes and an orange/acceptable LOS is the standard for existing and planned Regular Bus – Base service routes. The long-term project list identified in the Transportation Element would implement the orange LOS along existing and planned local routes.

Future Traffic Operations

The 2044 forecast traffic volumes for two transportation network conditions were analyzed: (1) baseline improvement projects only, and (2) with plan improvements. The results of the future baseline LOS analysis were used to develop the framework for the recommended transportation network, and ultimately, the long-term project list. The analysis provides a summary of future traffic operations with and without the long-term improvement projects, which are summarized in the transportation systems plan section of the Transportation Element.

The LOS analysis was conducted for the 2044 horizon year to analyze existing traffic conditions. Table 8.5 summarizes the forecast intersection operations for baseline and with improvement scenarios during the average weekday PM peak hour. Figure 8.12 illustrates the forecast intersection operations assuming all improvements on the long-term project list have been completed. With eventual implementation of the long-term project list, the intersections are expected to meet the city's established vehicle LOS standards.

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Intersection	2044 Baseline			2044 With Improvements		
	LOS ¹	Delay ² (WM) ³	Control ⁴	LOS	Delay (WM)	Control
Callow Rd/SR 92	C	24 (NB)	TWSC	C	24 (NB)	TWSC
Grade Rd/SR 92	F	706 (NB)	TWSC	A	17 (NB)	RAB
127th Dr NE/SR 92	C	25 (NB)	TWSC	C	25 (NB)	TWSC
127th Dr NE/36th St NE	B	13 (SB)	TWSC	B	13 (SB)	TWSC
Grade Rd/32nd St NE	A	10 (EB)	TWSC	A	10 (EB)	TWSC
Grade Rd/26th St NE	B	11 (EB)	TWSC	B	11 (EB)	TWSC
99th Ave NE/Lundeen Park Way	C	18 (NB)	TWSC	C	18 (NB)	TWSC
117th Ave NE/20th St NE	B	13 (SB)	TWSC	B	13 (SB)	TWSC
123rd Ave NE/20th St NE	B	10 (EB)	AWSC	B	10 (EB)	AWSC
Main St/20th St NE	A	6 (WB)	RAB	A	6 (WB)	RAB
Main St/N Lakeshore Dr	C	19 (EB)	TWSC	C	19 (EB)	TWSC
18th St NE/Main St	D	25 (SB)	TWSC	D	25 (SB)	TWSC
Main St/E Lake Stevens Rd	B	14 (EB)	AWSC	B	14 (EB)	AWSC
N Machias Rd/28th St NE	F	80 (NB)	AWSC	A	11 (WB)	RAB
N Machias Rd/20th St NE	E	49 (EB)	TWSC	E	49 (EB)	TWSC
N Machias Rd/16th St NE	E	37 (EB)	TWSC	E	37 (EB)	TWSC
91st Ave NE/Market Pl	C	27	Signal	C	27	Signal
99th Ave NE/Market Pl	C	17 (EB)	AWSC	C	17 (EB)	AWSC
Davies Rd/Chapel Hill Rd	B	11	Signal	B	11	Signal
91st Ave SE/4th St SE	D	29 (WB)	TWSC	D	29 (WB)	TWSC
91st Ave SE/8th St SE	E	42 (EB)	TWSC	E	42 (EB)	TWSC
SR 204/Everett Rd ⁵	F	84 (EB)	TWSC	B	12 (EB)	TWSC
SR 204/Sunnyside Blvd ⁵	F	738 (EB)	TWSC	E	44 (EB)	TWSC
79th Ave SE/20th St SE	C	29	Signal	C	29	Signal
83rd Ave SE/20th St SE	A	10	Signal	A	10	Signal
91st Ave SE/20th St SE	B	17	Signal	B	17	Signal
99th Ave SE/20th St SE	A	9	Signal	A	9	Signal
S Lake Stevens Rd/20th St SE	C	33	Signal	C	33	Signal
S Lake Stevens Rd/S Davies Rd	C	21 (NB)	AWSC	C	21 (NB)	AWSC
S Lake Stevens Rd/Machias Cut-Off	B	14 (SB)	TWSC	B	14 (SB)	TWSC
118th Ave SE/Machias Cut-Off	B	10 (SB)	TWSC	B	10 (SB)	TWSC
E Lake Stevens Rd/118th Ave NE	C	18 (WB)	TWSC	C	18 (WB)	TWSC

1. Level of Service, based on Highway Capacity Manual 6th Edition methodology.

2. Average delay in seconds per vehicle.

3. Worst movement reported for stop-controlled intersections.

4. Intersection traffic control: "Signal" is traffic signal; "TWSC" has stop signs on minor approach; "RAB" is a roundabout.

5. Future (2044) With Improvements intersection LOS based on analysis conducted as part of the *US 2/SR 204/20th Street SE Interchange Justification Report* (WSDOT, April 2018).

Table 8.5 - Future (2044) Weekday PM Peak Hour Intersection Levels of Service

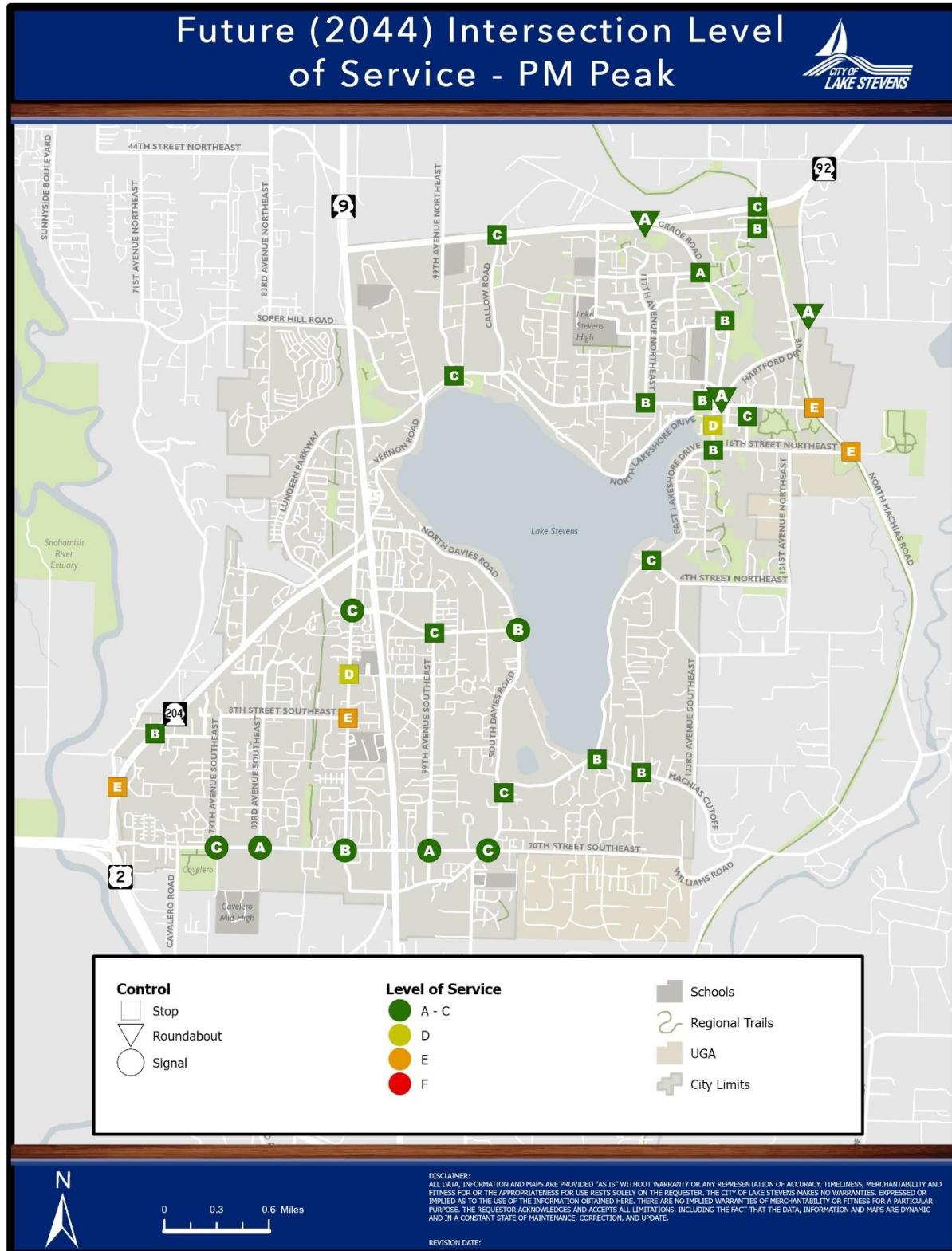


Figure 8.12 - Future (2044) Weekday PM Peak Hour Intersection LOS w/ Improvements

TRANSPORTATION SYSTEMS PLAN

The transportation systems plan provides the blueprint for improvement projects and programs to meet the multimodal transportation needs of the community. The transportation systems plan section of the Transportation Element provides a long-range strategy for the city of Lake Stevens to address current and forecast transportation issues and identified needs, implement transportation goals and policies, and realize the intent of the community's Vision. The plan is based upon an analysis of the existing transportation system, forecasts of future travel demand, the anticipated availability of resources, and the desire of the city to create an efficient transportation system that puts a priority on multimodal mobility and community livability. The plan builds upon the city's policies and standards and seeks to give specific shape to the city's transportation goals and vision.

The transportation systems plan focuses on three components of the transportation system:

- Streets and Highways.
- Public Transit and Travel Demand Management.
- Active Transportation Facilities

These are the basic elements of the transportation system upon which mobility within and through Lake Stevens depends. The core of the transportation systems plan covers street and highway improvements with a focus on the major corridors within the city. The street system serves the movement of all travel modes in the community, including transit, pedestrian, and bicycle modes.

Streets and Highways

Streets and state highways are the core of the transportation system serving the city of Lake Stevens and surrounding communities. They provide for the overall movement of people and goods, for a wide range of travel modes. Streets and highways serve automobile trips, trucks, transit, vanpools, carpools, and the majority of bicycle and pedestrian travel. The street and highway section identifies the functional roadway system, roadway design standards, designated truck routes, and general needs and strategies related to local streets and street maintenance.

Functional Classification

Roadway functional classification provides for a hierarchy of roadways. These classifications also act as a guide for future development of the overall street system. The purpose of the functional classification plan is to provide a hierarchy of arterial and local streets. Arterial streets serve higher traffic volumes and may have few access points. Local streets provide neighborhood circulation and access to individual parcels. Collector streets link arterials and local streets and may provide access to individual parcels. A well-connected system of streets enhances overall mobility and facilitates greater opportunities for pedestrian and bicycle travel. The roadway classifications shown in Figure 8.13 include principal arterials, minor arterials, collector streets, and local streets. The roadway functional classification descriptions are summarized in Table 8.6.

The specific alignments of new streets will be defined as part of the street design or during the review of new development proposals. The alignments will consider property ownership, topography, environmental impacts, site design, traffic studies, and other considerations. Some future street connections are needed in the southern areas of the city. These new connections will provide improved emergency response, access, and connectivity for pedestrians, bicyclists, and vehicles as the areas redevelop.

Functional Classification	Description
Principal Arterials	Regionally significant streets that link communities while also connecting important locations within the city. Principal arterials most often facilitate the system's largest traffic volumes. Access to local streets and driveways is discouraged.
Minor Arterials	Major streets that provide important intra-city connections but may also play a regional role. Access to local streets is encouraged while driveway access is discouraged.
Collector Streets	Intra-community streets connecting residential neighborhoods with commercial and activity centers or principal and minor arterials. Driveway access is often provided along these routes. The city has designated two types of collector roadways, Boulevard Collector and Neighborhood Collector. The key differentiator is primarily the design of the roadway, with Boulevard Collectors providing a landscaped median to separate each direction of travel.
Local Streets	Streets providing circulation within neighborhoods or commercial areas and direct access to abutting properties.

Table 8.6 - Functional Classification Definitions

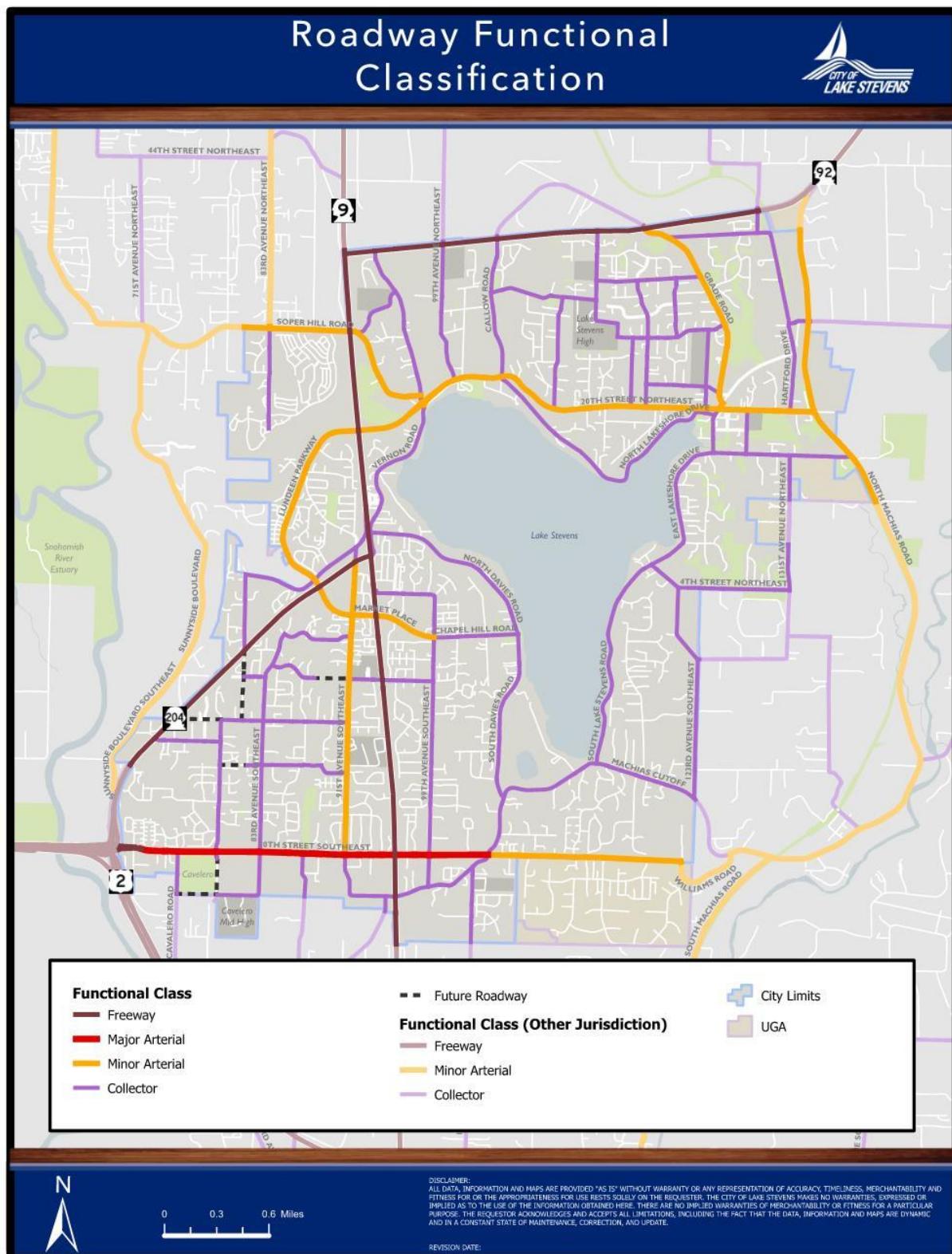


Figure 8.13 - Roadway Functional Classification

Roadway Design Standards

The city of Lake Stevens adopts Engineering Design and Development Standards as periodically updated which prescribe specific and consistent road design elements. The city has also adopted layered street networks within the subarea plans that also prescribe specific and consistent road design elements. The standards include items such as right-of-way needs, pavement width, type and width of pedestrian and bicycle facilities, and roadway and intersection radii. The standards also provide requirements for the location and installation of utilities within the right-of-way.

The standards support the city's goals in providing adequate facilities to meet the mobility and safety needs of the community, as well as complying with stormwater management, sensitive areas, and other regulations. The standards are intended to assist design professionals and developers for all new and reconstructed roadways and right-of-way facilities, both public and private, within the city.

Truck Routes

WSDOT's Freight and Goods Transportation System (FGTS) classifies state highways, county roads, and city arterials according to average annual gross truck tonnage. The following corridors in and around Lake Stevens are designated as part of a Strategic Freight Corridor: SR -9, SR-92, and US-2.

As mentioned in the Transportation System Inventory, the designated truck routes within the city (as adopted though Ordinance 863) are SR-92, SR -9, SR-204, and 20th Street SE between US 2 and the eastern city limits. These routes provide connections from the surrounding land uses to the regional transportation system. If trucks have an origin/destination within the city, they should limit travel on non-designated streets to the shortest practical travel route between the origin/destination and a designated truck route.

Local Streets

Improvement to or construction of new local streets are not explicitly defined in the Transportation Element and are assumed to be built through developer mitigation requirements. Local street system plans may be prepared as part of future neighborhood or subarea studies. For example, increased commercial and residential development within any of the four planning subareas within the city will need to be balanced with appropriate circulation roadways to allow alternate access routes and provide acceptable levels of vehicular and active transportation connectivity. The actual alignment of the future

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circulation roadways will be determined based on property boundaries, environmental impacts, and engineering considerations.

Street Maintenance Program

To maximize the use and efficiency of the existing and future transportation infrastructure, the city will continue with a comprehensive, systematic street maintenance program. The program will evaluate arterials and local roadways for pavement condition, signage, sight distance restrictions (such as vegetation blocking sight lines), and neighborhood safety impacts. Traffic control devices, including traffic signals, should be monitored and serviced regularly. As needed, the program will also be used to evaluate speed limits based on functional classification, design, and roadway conditions.

The Pavement Preservation Program sets aside money annually to evaluate pavement conditions throughout the city and identify the highest priority roadways for repaving/resurfacing. To assure that the existing and future transportation infrastructure is preserved in a cost-effective manner, the city will allocate annual budget resources to maintaining existing infrastructure.

Transit

To provide a comprehensive transportation system, the city of Lake Stevens recognizes the importance of transit and transportation demand management (TDM) programs. In general, these programs build on regional programs with some refinements to reflect the specific needs of the city.

Community Transit Long Range Plan

Journey 2050 is Community Transit's vision for providing more service, more choices, and one easy-to-use system through 2050. As the long-range service and capital vision, Journey 2050 details the service expansion and capital investments necessary to meet growing population and employment demands, while also providing a system that is equitable, efficient, and environmentally friendly. Community Transit envisions expanding bus service by 2050, reducing headways providing riders with more convenient options for traveling by transit and decreasing the time it will take to get there. Journey 2050 envisions the implementation of bus rapid transit (BRT) service throughout Snohomish County, supported by regular bus service with headways of 30 minutes or less along all lines as part of the long-range 2050 network. The improvements necessary to support the planned network are ambitious, integrated with the services of other agencies, and are not yet fully funded.

Transit Development Plan

The Transportation Element has been coordinated with Community Transit's 2024-2029 Transit Development Plan Journey 2050 Long-Range Plan. Currently, transit service in Lake Stevens is provided along several key corridors within the city: 20th Street NE, 91st Avenue SE, 99th Avenue SE, and 20th Street SE. These existing routes serve Lake Stevens Transit center located near the SR 9/4th Street NE intersection. Park & Ride lots are located within the city (see Figure 8.3). Community Transit regularly reviews its service plans and route structure to address possible improvements or reductions in service.

To support future development activity, the city encourages Community Transit to implement the recommendations in the Journey 2050 Plan to provide improved coverage and increased service frequency, especially on the weekends. Increased service frequency and coverage is desired by the city to make transit use more convenient and to meet growing local travel demands.

Regional Transit Routes

Fixed route bus service is projected to provide more frequent regional transit services between Lake Stevens, Marysville, Everett, and Seattle. Changes to future routes should be consistent with the Journey 2050 Plan and the needs of the Lake Stevens community, based on a collaborative planning process engaging local community members.

Carpooling and Vanpooling

Community Transit should continue to offer tools to encourage carpooling and vanpooling by city residents. The city will work with Community Transit to increase awareness that carpooling and vanpooling programs and resources are provided.

Transit Accessibility

The city will coordinate with Community Transit in the evaluation of accessibility to public transportation facilities. The city's road standards require sidewalks on all streets thereby supporting transit service accessibility. The sidewalk and active transportation projects identified as part of the Transportation Element seek to prioritize connection to key arterials along which transit buses operate. The city will continue to work with Community Transit to ensure high-quality transit services and facilities are maintained as the city continues to grow.

Transportation Demand Management Program

In addition to potential future increases in transit service, transportation demand management (TDM) programs can support the mobility needs of the community. TDM programs target travel behavior rather than transportation infrastructure. These programs should be coordinated with regional agencies such as Snohomish County, Community Transit and PSRC to provide a broader basis for reducing single-occupant vehicle travel and expanding alternative transportation choices.

Lake Stevens is a growing community with increased urban levels of development. TDM strategies are typically most effective in denser and larger urban settings. However, TDM program strategies coordinated with regional agencies can provide alternatives for residents and employees within Lake Stevens.

The Washington Commute Trip Reduction Law (RCW 70.94.521) requires TDM performance targets for firms with over 100 employees working at the same location. However, the Commute Trip Reduction program does not currently apply to Lake Stevens because the area does not have major employment sites meeting the above criteria. Potential TDM strategies for the city of Lake Stevens include the following options:

Flexible/Alternative Work Schedules

Flexible work schedules allow employees to adjust start/end times to accommodate carpools, vanpools, or transit options. Alternative work schedules may be used to reduce the number of days an employee commutes during peak travel periods. These programs help reduce the need for adding capacity to highways and arterials and reduce the levels of peak hour congestion.

Telecommuting

The use of telecommunications technology can allow some employees to work from home. This reduces the need for travel to/from a work site for some weekdays.

Site and Street Design

Sidewalks and/or other hard surface pathways that connect a development to adjacent pedestrian and bicycle facilities shall be provided when feasible. Pathways should incorporate pedestrian scale lighting and provide reasonably direct pedestrian access between arterials or collectors and existing or future transit stops. Transit shelters should

be considered along arterial streets where the number of transit riders or service frequency warrants them.

Active Transportation Facilities

Bicycle and pedestrian facilities play a vital role in the city's transportation environment. The city's active transportation system is comprised of facilities that promote mobility through walking, biking, or the use of other nonmotorized devices. A well-established system encourages healthy recreational activities, reduces vehicle demand on city roadways, and enhances safety within the community.

The city desires to have active mode connections to all parts of the city, unless special circumstances make it prohibitive. The city has an annual program to enhance active transportation and ADA facilities. The information provided within the ADA Transition Plan is used to identify and prioritize curb ramp and sidewalk repairs, maintenance, and reconstruction as part of the annual program. Where possible, segments of arterials and collectors that do not have sidewalks, bike lanes, or adequate walkways on both sides of the street are improved as part of the identified capital projects or through the annual active transportation facilities program.

The Future Active Transportation System, shown in Figure 8.14, identifies the future vision of a comprehensive network of active transportation facilities. The city envisions an interconnected system of on-road and off-road facilities, that include sidewalks, pathways, shared-use trails, and key connections.

The active transportation network contains a series of Primary or Secondary Routes. Corridors identified as Primary or Secondary Routes are not indicative of a hierarchy for future active transportation facility development, rather they are used to make a distinction between routes that are more regional or that extend completely through the community (primary), and those that serve to make the second leg of the journey to connect to destinations, extend into neighborhoods, or complete a loop (secondary). Table 8.7 further defines the functions of each tier within the Active Transportation Plan Network.

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Hierarchy	System Function
Primary Network	Backbone of the system. Offers direct connections to majority of important community destinations, usually on arterials or collectors. Primary Network routes are often the most attractive route in terms of convenience in urban areas.
Secondary Network	Supportive to the Primary Network, often providing system continuity by connecting segments of the primary network with on-street or off-street facilities. Secondary Network routes sometimes offer more comfortable routes on quieter streets, although the route may not be as direct as the Primary network.
Other Streets	This encompasses most city streets (including residential neighborhood streets). While not specifically identified within the Active Transportation Plan Network, many of these roadways provide pedestrian and/or bicycle facilities in line with roadway design standards. Other Streets provide access to the Primary and Secondary Networks.
Trails	Trails represent the off-street pedestrian and bicycle facilities within the city. Trails often provide the direct connectivity of Primary Network routes but are located along alignments away from roadways (creating a more comfortable pedestrian and bicycle environment).

Table 8.7 – Active Transportation Network Definitions

Waterborne, Rail, and Air Transportation

There are no airports in the immediate Lake Stevens planning area. Regional and national, air travel for the city is provided via Paine Field, located approximately 10 miles southwest of Lake Stevens in the city of Everett. The airport can be accessed via US-2 and I-5. Regional air service is also provided at Arlington Airport, approximately 12 miles north of the city via SR 9, and local air service is provided at Harvey Field, approximately 5 miles south of the city in Snohomish.

No railroad tracks run through the city of Lake Stevens. The nearest rail line to the city are the Burlington Northern Santa Fe (BNSF) railroad tracks in the city of Everett. Passenger rail service is also provided along this route by the Amtrak Cascades and Empire Builder lines. Additionally, Sound Transit operates the N Line with two northbound and two southbound trains daily between the Everett Station and Downtown Seattle.

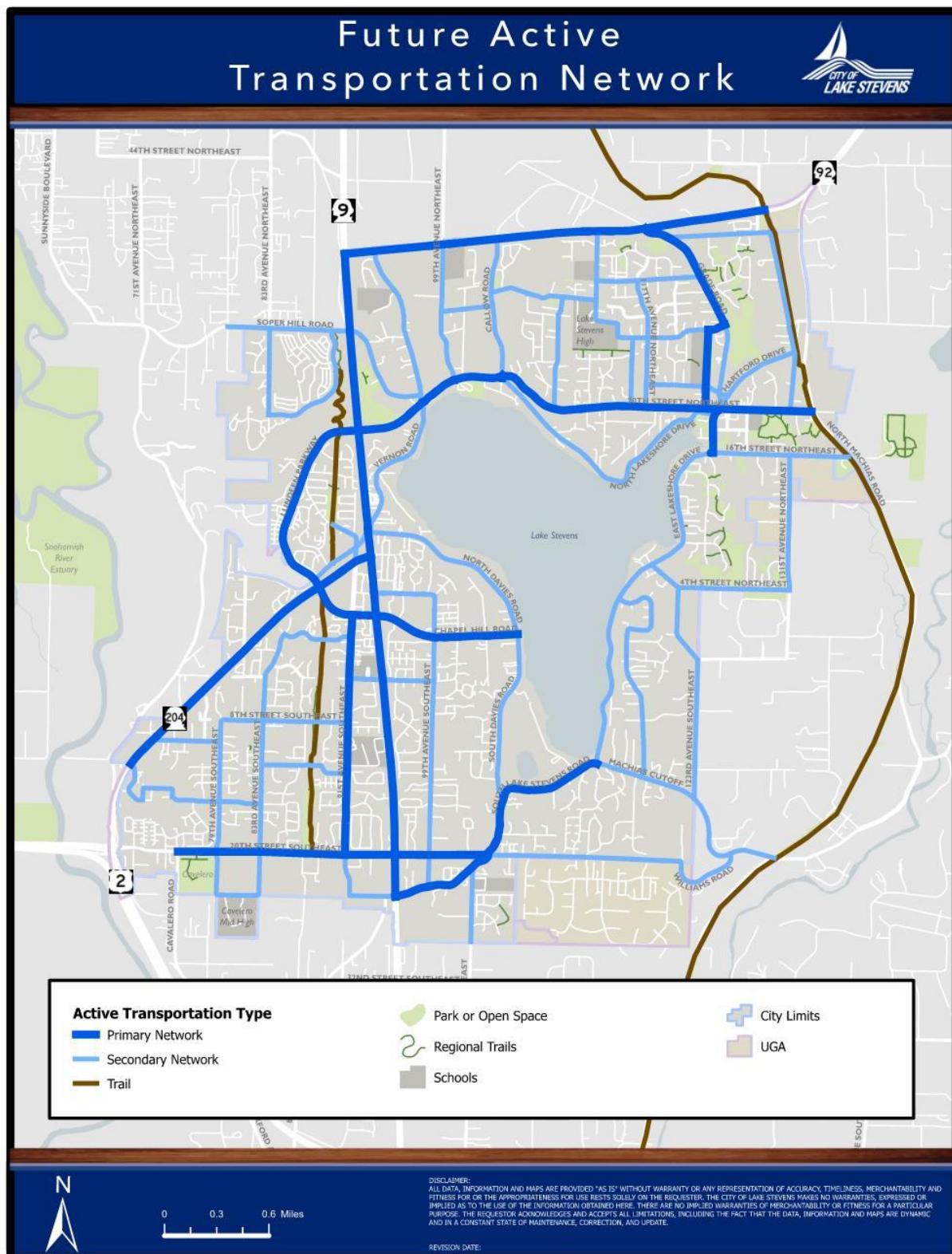


Figure 8.14 - Future Active Transportation Network

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There is no waterborne transportation serving Lake Stevens. The Transportation Element does not identify waterborne transportation as a component of the city's transportation system.

Transportation Improvement Projects

Based on the evaluation of existing and forecast traffic volumes, traffic operations, safety, and key gaps in the active transportation system, a recommended list of transportation improvement projects were defined. The improvements address safety, capacity, complete street amenities, trail connections, expanded active transportation facilities, and roadway preservation needs. They also cover upgrades to existing roads and construction of new roadways and interconnected street systems to support the forecast economic development and growth in the city and its UGA. All the roadway and intersection projects incorporate needs for pedestrians, bicyclists, and transit riders that will use the same corridors.

A brief description and cost estimate for each transportation improvement project is presented in Table 8.8, as well as within the 20-year Capital Facility Plan. Figure 8.15 shows the location and extents of the transportation improvements identified by each project. A map identification number is included on in Table 8.8 to assist in referencing the projects shown in Figure 8.15.

Planning level cost estimates were prepared for each project based on typical per-unit costs, by type of roadway and scope of the improvement. Where costs were calculated as part of ongoing design projects or projects listed in the capital facilities plan are used with inflation factors to account for year-over-year increases in construction costs. The cost estimates include allowances for right-of-way acquisition based on generalized needs to meet the city's street standards. Adjustments to construction costs were included, as needed, to reflect any specific implementation issues, such as environmental impacts or impacts on adjacent properties.

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TE #	City Project No.	Title and Location	Project Description	Transportation Impact Zone	2024 Project Cost
Citywide					
TE-60	RD-01	Wayfinding Signage	Procure and install wayfinding and welcome signs throughout City.	Citywide	\$10,000
TE-61	RD-202	ADA & Sidewalk Improvements	Curb ramp and sidewalk repair, maintenance, reconstruction in support of the ADA Transition Plan.	Citywide	\$600,000
TE-62	RD-203	Pavement Preservation Program	Annual pavement preservation activities including grind and overlay, crack sealing.	Citywide	\$5,400,000
TE-63	RD-214	Citywide Enhanced Striping Program	Install enhanced striping improvements (profiled double yellow centerlines, two-way left turn lane lanes, lane lines, and edge lines) along roadways identified in the LRSP.	Citywide	\$60,000
TE-64	RD-204	Local Road Safety Plan	Update LRSP with recent collision data, identify safety concerns and countermeasures, prep for grant opportunities, implement improvements.	Citywide	\$350,000
TE-65	RD-215	Active Transportation Plan	Develop an active Transportation Plan providing an analysis of the city's pedestrian/bicycle network and recommendations of how to incorporate active transportation improvements into roadways.	Citywide	\$400,000
TE-66	RD-205	Traffic Calming Program	Create Traffic Calming Program with stakeholder engagement, update code, notify public, implement.	Citywide	\$600,000
Miscellaneous Project Total					\$7,420,000

TE #	City Project No.	Title and Location	Project Description	Transportation Impact Zone	2024 Project Cost
TIZ 1 - East Lake Stevens					
TE-2	RD-113	20th St NE and Main St Roundabout	Construct roundabout and frontage improvements per the downtown subarea plan. Includes realignment improvements at Grade Rd/Hartford Dr.	TIZ 1 - East Lake Stevens	\$3,215,000
TE-3	RD-105	125th Ave NE Downtown Roadway Improvements	Upgrade 125th Ave N between 18th St NE and 20th St NE to include two travel lanes, parking, planters, bike lanes and sidewalks.	TIZ 1 - East Lake Stevens	\$5,530,000

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TE-4	RD-212	20th St NE - Neighborhood Connector	Upgrade road between Main St and Machias Rd to include two travel lanes, parking on one side, landscaping on both sides, a multiuse path on one side, and a sidewalk on one side.	TIZ 1 - East Lake Stevens	\$12,810,000
TE-5	TBD-01	16th St NE Multiuse Path	Construct a MUP to connect downtown Lake Stevens to the Centennial Trail.	TIZ 1 - East Lake Stevens	\$4,495,000
TE-6	RD-104	Grade Rd - Boulevard	Upgrade road to minor arterial road standard including multiuse path or sidewalk with bike lane, travel lanes, center lane with landscape islands.	TIZ 1 - East Lake Stevens	\$38,955,000
TE-7	CP-103	Hartford Dr - Neighborhood Connector	Install multiuse path adjacent to northbound travel lane between Grade Rd and 131st Ave NE.	TIZ 1 - East Lake Stevens	\$3,320,000
TE-8	TBD-06	N Lakeshore Dr Sidewalk	TBD sidewalk along one side of N Lakeshore Dr between Main St and 123rd Ave.	TIZ 1 - East Lake Stevens	\$215,000
TE-9	RD-206	SR 92 and Grade Rd Access Improvements	Improve the intersection of SR 92 / Grade Rd (roundabout) to reduce side St delay	TIZ 1 - East Lake Stevens	\$3,215,000
TE-24	RD-208	131st Ave NE/28th St NE Intersection Alignment	Realign the intersection of 131st Ave (Old Hartford Dr) / 28th St to improve sight distance and safety for turning movements. Install pedestrian curb ramp improvements.	TIZ 1 - East Lake Stevens	\$2,695,000
TE-25	RD-209	131st Ave NE/ Old Hartford Rd - Collector	Upgrade road between Main St and Machias Rd to include two travel lanes, landscaping on both sides, a multiuse path on one side, and a sidewalk on one side.	TIZ 1 - East Lake Stevens	\$23,730,000
TE-26	RD-213	Machias Rd/ 28th St Intersection	Improve the intersection of Machias Rd/28th St NE (potential roundabout or signal) to reduce delay and improve access to the Industrial Center.	TIZ 1 - East Lake Stevens	\$4,500,000
TE-29	RD-107	Madrona Dr	Convert half road to reduced standard local access road section including two travel lanes and a sidewalk on one side of the road.	TIZ 1 - East Lake Stevens	\$1,410,000
TE-30	RD-108	Alder Rd	Convert half road to reduced standard local access road section including two travel lanes and a sidewalk on one side of the road.	TIZ 1 - East Lake Stevens	\$2,100,000
TE-31	RD-109	101st Ave NE	Convert half road to reduced standard local access road section including two travel lanes and a sidewalk on one side of the road.	TIZ 1 - East Lake Stevens	\$6,295,000
TE-32	TBD-04	117th Ave NE Sidewalk	TBD sidewalk along one side of 117th Ave NE between 20th St and 26th St, including frontage and stormwater improvements.	TIZ 1 - East Lake Stevens	\$1,665,000

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TE-33	CP-158	116th Ave NE Sidewalk	Sidewalk / curb ramp improvements along one side of 116th Ave NE between 20th St and 26th St	TIZ 1 - East Lake Stevens	\$1,335,000
TE-37	CP-102	123rd Ave NE Sidewalk	Construct sidewalk and curb ramp improvements along 123rd Ave between 22nd St NE and North Lakeshore Dr.	TIZ 1 - East Lake Stevens	\$1,015,000
TE-38	CP-108	Lake View Dr Sidewalk	construct a sidewalk and curb ramp improvements along Lake View Dr between 112th Dr and Callow Rd.	TIZ 1 - East Lake Stevens	\$4,390,000
TE-40	CP-121	32nd St NE Sidewalk	Construct a sidewalk and curb ramp improvements along 32nd St NE between Grade Rd and 118th Dr NE.	TIZ 1 - East Lake Stevens	\$665,000
TE-45	CP-135S	99th Ave NE Sidewalk	Construct a sidewalk and curb ramp improvements along 99th Ave NE between Sunnycrest Elementary School and 30th St NE.	TIZ 1 - East Lake Stevens	\$1,890,000
TE-46	CP-137S	30th St NE Sidewalk	Construct a sidewalk and curb ramp improvements along 30th St NE between 99th Ave NE and Callow Rd, including 2 RRFB crosswalk improvements.	TIZ 1 - East Lake Stevens	\$1,830,000
TE-47	CP-138S	Cedar Rd Sidewalk	Construct a sidewalk and curb ramp improvements along Cedar Rd between 20th St NE and 30th St NE, including 2 RRFB crosswalk improvements.	TIZ 1 - East Lake Stevens	\$5,020,000
TE-48	CP-142S	Lakeshore Dr Sidewalk	Construct multiuse path / curb ramps along N Lakeshore Dr between 123rd Ave NE and N Lakeshore Swim Beach, including two RRFB crosswalk improvements	TIZ 1 - East Lake Stevens	\$1,815,000
TE-49	CP-143S	N Lakeshore Dr Sidewalk	Construct sidewalk and curb ramp improvements along N Lakeshore Dr between Mitchell Rd and 114th Dr NE.	TIZ 1 - East Lake Stevens	\$2,340,000
TE-52	CP-149S	E Lake Stevens Multiuse Path	Construct a multiuse path along E Lake Stevens Rd between Main St and Sunset Beach.	TIZ 1 - East Lake Stevens	\$5,575,000
TE-54	CP-151S	Vernon Rd/Lakeshore Dr Non-Motorized Improvements	Add sharrows markings along Vernon Rd/ North Lakeshore Dr; extend/connect existing sections of side path between Lakeview Dr and 123rd Ave NE and add traffic calming measures as well.	TIZ 1 - East Lake Stevens	\$1,490,000
TE-59	CP-156S	4th St NE/Purple Pennant Rd Sidewalk	Construct sidewalk / curb ramp improvements along 4th St NE and Purple Pennant Rd between Lake Stevens Rd and 5th Place NE.	TIZ 1 - East Lake Stevens	\$940,000
TIZ 1 Project Subtotal					\$142,455,000

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TE #	City Project No.	Title and Location	Project Description	Transportation Impact Zone	2024 Project Cost
TIZ 2 - West Lake Stevens					
TE-10	RD-102-I	91st Ave NE Commercial Revitalization Phase I	Market Place to SR 204, upgrade road to minor arterial road standard between Market Place to SR 204.	TIZ 2 - West Lake Stevens	\$3,870,000
TE-11a	RD-102-II	91st Ave NE Commercial Revitalization Phase II	SR 204 to Frontier Circle, upgrade road to minor arterial road standard between SR 204 to Frontier Circle.	TIZ 2 - West Lake Stevens	\$1,105,000
TE-11b	RD-102-III	91st Ave NE Commercial Revitalization Phase III	Custom road profile along Frontier Circle East to 113th Ave NE to support multimodal transit, parking and vehicles	TIZ 2 - West Lake Stevens	\$3,870,000
TE-12	RD-210	Vernon Rd Commercial Corridor Improvements	Widen/restripe roadway to provide one travel lane in each direction with a center TWLTL and sidewalks/landscaping (Minor Arterial standard).	TIZ 2 - West Lake Stevens	\$8,990,000
TE-13	CP-116	4th St NE Sidewalk	Construct sidewalk /curb ramps along 4th St between 97th Dr NE and 98th Dr NE.	TIZ 2 - West Lake Stevens	\$665,000
TE-14	CP-117	99th Ave Pedestrian/ Bicycle Improvements	Install sidewalks, curb ramps, and bicycle lanes/wide shoulders between 4th St NE and Market Place.	TIZ 2 - West Lake Stevens	\$1,055,000
TE-15	RD-103	99th Ave NE - Boulevard	Upgrade 99th Ave NE between Market Place & 4th St SE to a minor arterial road standard including multiuse path or sidewalk with bike lanes, travel lanes, center lane with landscape islands.	TIZ 2 - West Lake Stevens	\$7,790,000
TE-34	TBD-07	Soper Hill Multiuse Path	TBD sidewalk along one side of Soper Hill Rd between Lake Dr and SR9. Includes ROW and typical frontage improvements including stormwater.	TIZ 2 - West Lake Stevens	\$2,595,000
TE-39	CP-111	Lake Dr Sidewalk	Construct sidewalk and curb ramp improvements along Lake Dr between Lundein Pkwy to 28th St.	TIZ 2 - West Lake Stevens	\$2,180,000
TE-43	CP-125	Vernon Rd Sidewalk	Construct sidewalk and curb ramp improvements along Vernon Rd between 12th Pl NE and 15th St NE.	TIZ 2 - West Lake Stevens	\$895,000
TE-46	CP-146S	Frontier Circle Sidewalk	Construct sidewalk and curb ramp improvements along Frontier Circle between Frontier Circle E and 11th St NE.	TIZ 2 - West Lake Stevens	\$1,475,000

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TE-53	CP-150S	Lundeen Pkwy Non-Motorized Improvements	Install a multiuse trail along Lundeen Pkwy between Lake Dr and 101st Ave NE.	TIZ 2 - West Lake Stevens	\$ 460,000
TE-55	CP125S	Davies Rd Non-Motorized Improvements	Implement sharrows along Davies Rd between Vernon and Lake Stevens Rd and extend/connect existing sections of the side path along the roadway.	TIZ 2 - West Lake Stevens &	\$1,670,000
TE-56	CP-153S	Vernon Rd Non-Motorized Improvements	Implement sharrows along the Vernon Rd between 15th St NE and Lundeen Pkwy and extend/connect existing sections of the existing side path along the roadway.	TIZ 2 - West Lake Stevens	\$470,000
TE-70	CP-157S	Marysville Connector	Construct multiuse path along 10th St NE west of Lundeen Parkway, connecting with an off-St trail along the existing utility corridor west of 83rd Ave NE extending to the city of Marysville.	TIZ 2 - West Lake Stevens	\$1,085,000
TIZ 2 Project Subtotal					\$38,175,000

TE #	City Project No.	Title and Location	Project Description	Transportation Impact Zone	2024 Project Cost
TIZ 3 - South Lake Stevens					
TE-1	RD-211	US-2 Trestle Replacement	WSDOT project to replace the US-2 westbound trestle, including improvements to the US-2 / SR 204 / 20th St SE interchange to address peak hour congestion. No city contribution identified	TIZ 3 - South Lake Stevens	
TE-16	CP-120-I	99th Ave SE Pedestrian/ Bicycle Improvements - Phase 1	Install sidewalks, curb ramps, and bicycle lanes/wide shoulders between 4th St SE and 11th Place SE.	TIZ 3 - South Lake Stevens	\$3,655,000
TE-17	TBD-05	91st Ave SE Pedestrian/ Bicycle Improvements	Install sidewalks, curb ramps, and bicycle lanes/wide shoulders between 12th St SE and 20th St SE.	TIZ 3 - South Lake Stevens	\$3,955,000
TE-18	CP-120-II	99th Ave SE Pedestrian/ Bicycle Improvements - Phase 2	Install sidewalks, curb ramps, and bicycle lanes/wide shoulders between 11th Pl SE and S Lake Stevens Rd.	TIZ 3 - South Lake Stevens	\$4,280,000

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TE-19	RD-100	79th Ave SE Access Rd	Construct new roadway including bike lane, two travel lanes, landscape strips and sidewalks for through road to Cavalero Mid-High School.	TIZ 3 - South Lake Stevens	\$3,180,000
TE-20	RD-211	20th St SE Corridor Improvements	Widen roadway west of 83rd Ave SE to provide an additional eastbound travel lane. Install a sidewalk along the south side of the roadway and bike lanes/wide shoulders in both directions.	TIZ 3 - South Lake Stevens	\$10,615,000
TE-21	RD-110	99th Ave SE /20th St SE U-turn Channelization	Re-channelize 20th St SE to allow for U-turns at the intersection of 20th St SE/99th Ave SE.	TIZ 3 - South Lake Stevens	\$35,000
TE-22	CP-126S	20th St SE Sidewalk	Construct a sidewalk and curb ramp improvements along 20th St SE between S Lake Stevens Rd and 122nd Ave SE, including 8 RRFB crosswalk improvements.	TIZ 3 - South Lake Stevens	\$4,820,000
TE-23	CP-140S	South Lake Stevens Rd Multiuse Path Phase II	Install a multiuse path along S Lake Stevens Dr between SR 9 and 100th Dr SE.	TIZ 3 - South Lake Stevens	\$3,670,000
TE-27	RD-216	79th Ave SE & 8th St SE Intersection	Improve the intersection at 79th Ave SE and 8th St SE. Implement safety improvements at adjacent intersections along corridor.	TIZ 3 - South Lake Stevens	\$655,000
TE-28	RD-111	12th St. SE/87th Ave SE Rd Realignment	Re-align intersection at 87th St SE/12th St SE to provide adequate sight distances for vehicles and construct additional roadway surface.	TIZ 3 - South Lake Stevens	\$520,000
TE-35	TBD-18	South Lake Stevens Multiuse Path Phase III	Construct a multiuse path to connect pedestrian generators to the existing trail along Machias Cutoff (Lake Stevens Rd to 123rd Ave SE)	TIZ 3 - South Lake Stevens	\$3,500,000
TE-36	CP-155-II	Machias Cutoff Multiuse Path	Install a multiuse path along Machias Cutoff between 123rd Ave SE to the Centennial Trail.	TIZ 3 - South Lake Stevens	\$655,000
TE-41	CP-136S	8th St SE Sidewalk	Construct a sidewalk and curb ramp improvements along 8th St SE between 79th Ave SE and 91st Ave SE, including 2 RRFB crosswalk improvements.	TIZ 3 - South Lake Stevens	\$3,705,000
TE-42	CP-123	79th Ave SE Sidewalk	Construct a sidewalk and curb ramp improvements along 79th Ave SE between 8th St SE and 16th St SE, including six RRFB crosswalk improvements.	TIZ 3 - South Lake Stevens	\$4,205,000
TE-44	CP-129S	83rd Ave SE Sidewalk	Construct sidewalk improvements along 83rd Ave SE between 20th St SE and 17th St SE.	TIZ 3 - South Lake Stevens	\$1,225,000
TE-51	CP-148S	118th Ave SE Sidewalk	Construct a sidewalk and curb ramp improvements along 118th Ave SE between 2nd St SE and 9th Place SE.	TIZ 3 - South Lake Stevens	\$6,265,000

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TE-57	CP-154	10th St SE Sidewalk Everett Rd Sidewalk	Construct sidewalk and curb ramp improvements along 10th Street SE between SR204 and 79th Ave SE.	TIZ 3 - South Lake Stevens	\$445,000
TE-58	CP-155-I	123rd Ave SE Sidewalk	Construct sidewalk and curb ramp improvements along 123rd Ave SE between 2nd St SE to Machias Cutoff.	TIZ 3 - South Lake Stevens	\$3,685,000
TIZ 3 Project Subtotal					\$59,070,000

<i>Combined Citywide Transportation Projects</i>	
	<i>TIZ 1 Street and Sidewalk Project Subtotal</i>
	<i>TIZ 2 Street and Sidewalk Project Subtotal</i>
	<i>TIZ 3 Street and Sidewalk Project Subtotal</i>
	<i>Total Street and Sidewalk Projects</i>

Table 8.8 - Transportation Improvement Project List

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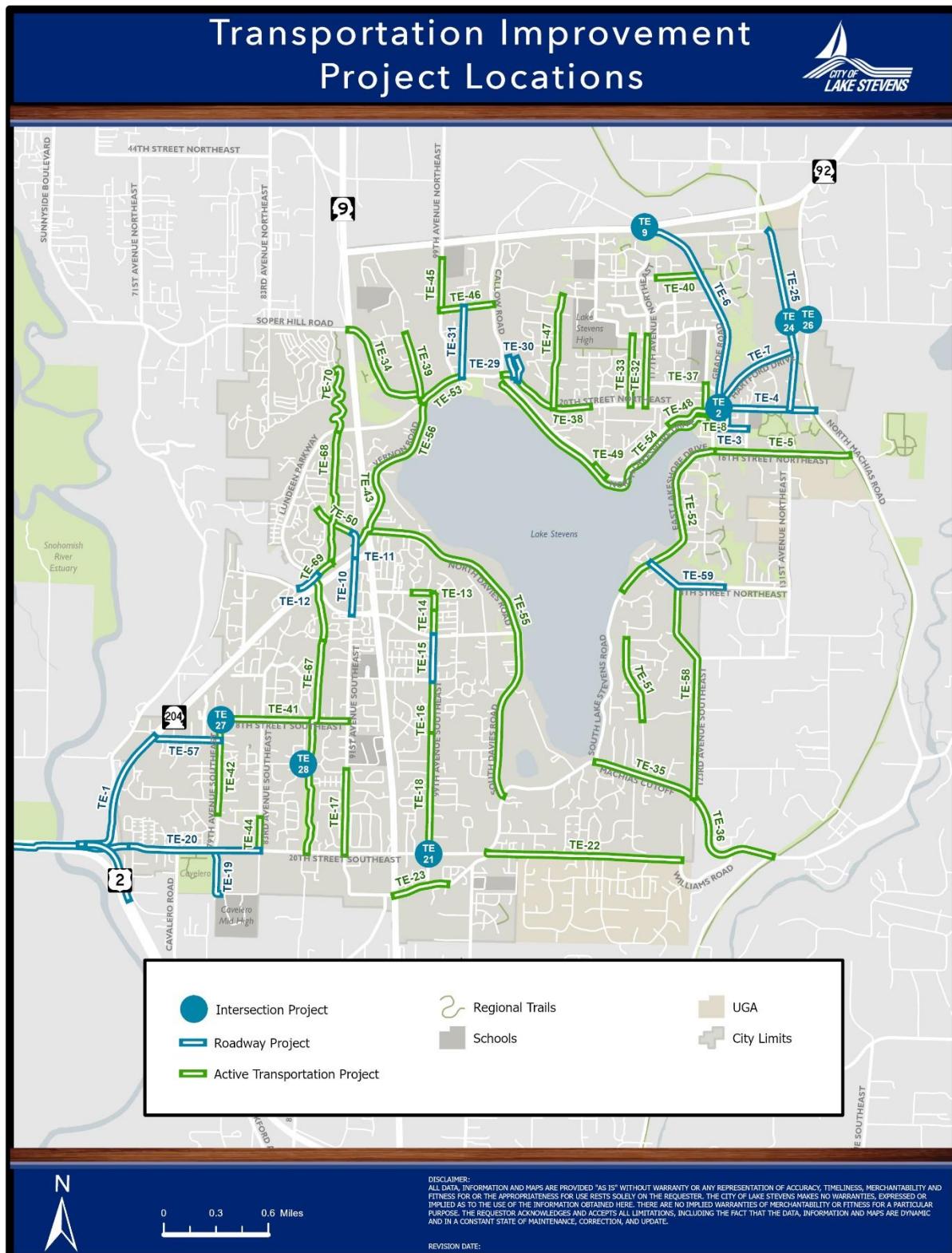


Figure 8.15 - Transportation Improvement Project Locations

FINANCE AND IMPLEMENTATION PROGRAM

The transportation improvement projects must be funded and implemented to meet existing and future travel demands in and around the city of Lake Stevens. A summary of transportation project costs and a strategy for funding the projects over the life of the plan are presented in this section. Like many other communities in the region, the costs of the desired transportation system improvements and programs will exceed the available revenues. The financing program presented in this section is intended to provide a framework for decision-making to determine the prioritization and allocation of funding for transportation improvements.

In addition, implementation strategies are discussed, including continuing coordination with WSDOT and other agencies to prioritize and fund improvements along key regional corridors serving Snohomish County (SR 9, SR 204, SR 92). Other strategies call for monitoring and refining city development regulations, such as the concurrency and transportation impact fee programs to ensure development addresses multimodal needs and does not out pace transportation system investments. The implementation plan also includes a framework for the city to prioritize and fund the improvements identified in the transportation systems plan.

Financing Program

The GMA requires the Transportation Element of the Comprehensive Plan to include a multi-year financing plan based on the identified needs in the transportation systems plan. The financing plan for the Transportation Element provides a basis for the city's annual Six-Year Transportation Improvement Program (TIP). As required by the GMA, the financing program also includes a discussion of how additional funding will be raised and/or level of service standards will be reassessed to assure that the Transportation Element can adequately support the Land Use Element. Alternatively, the city may reassess its Land Use Element.

The transportation financing program becomes a subset of the Capital Facilities Plan (CFP) Element. The GMA requires the CFP Element to include at least a six-year plan that finances capital facilities and identifies the sources of public money for the projects.

Project Cost Summary

Planning-level project cost estimates have been prepared to determine the magnitude of transportation investments needed over the life of the plan. Table 8.8 summarizes the list of

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capital transportation improvement projects based on the analyses of existing conditions and travel forecasts along with the citywide transportation programs (including the annual street maintenance program). Table 8.9 summarizes the planning level project cost estimates into three groups based on the project location and corresponding Traffic Impact Zone (TIZ)¹, as established by the city's Traffic Impact Fee (TIF) program. The project costs assume that right-of-way will be needed for some projects to match the city street design standards.

A total of \$247,120,000 (2024 dollars) will be needed to fully fund the capital improvements, transportation programs, and street maintenance over the 20-year horizon of the Transportation Element (not accounting for the \$1.6 billion WSDOT-led US-2 Trestle Replacement project). Of these costs, over \$142.5 million are related to improvements within the East Lake Stevens traffic impact zone. Most of these improvements are associated with necessary roadway improvements to accommodate anticipated growth associated with the Downtown Lake Stevens or Industrial Center subareas. Approximately \$38.2 million of transportation improvement costs are associated with projects in the West Lake Stevens traffic impact zone, including improvements associated with the Lake Stevens Center Specific Plan. Another \$59.1 million is associated with improvements in the South Lake Stevens traffic impact zone and includes improvements in and around the 20th Street SE Corridor subarea. The remaining project costs include citywide projects and programs to plan for and implement improved roadway infrastructure, including \$400,000 spent annually on street maintenance.

Improvement Category	Estimated Costs¹
Traffic Impact Zone 1 – East Lake Stevens	\$142,455,000
Traffic Impact Zone 2 – West Lake Stevens	\$38,175,000
Traffic Impact Zone 3 – South Lake Stevens	\$59,070,000
Citywide Programs including Annual Street Maintenance	\$7,420,000
Total Project Costs	\$247,120,000

1. Planning-level costs in 2024 dollars – actual costs will vary over the planning horizon based on inflation.

Table 8.9 - Transportation Project Cost Summary

¹ Costs for transportation projects spanning more than one TIZ were split evenly between the corresponding TIZs.

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Revenue Projections

The city of Lake Stevens utilizes a variety of fees and tax revenues to construct and maintain their transportation facilities. Funding sources include local tax revenues, grants, partnerships with other agencies, and developer mitigation. Primary city revenues directed toward transportation improvement projects include the Real Estate Excise Tax (REET), Transportation Benefit Program (TBP) funds, and Surface Water Management (SWM) funds. The city also uses funding from its Street Fund and General Fund to fund transportation system maintenance and balance its Six-Year Transportation Improvement Program (TIP), as needed.

Development contributions could be in the form of transportation impact fees, SEPA mitigation, or construction of frontage improvements. In addition, other agencies such as WSDOT are expected to share in the cost of state highway improvements to meet regional transportation needs. This includes the US-2 Trestle Replacement project which is being led by WSDOT. Although these improvements will improve operations along the city's roadways, improvements to these facilities are expected to be largely funded by WSDOT, as they will be located along state-owned facilities.

Table 8.10 summarizes the anticipated sources of revenue available to fund the identified transportation improvements.

Funding Element	2024 to 2044 Revenues (2024 \$)
City Funding	
Street Fund	\$8,000,000
Real Estate Excise Tax (REET) ¹	\$17,100,000
Storm Water Management Fund (SWM)	\$30,399,000
Transportation Benefit Program	\$57,537,000
	<i>Subtotal</i> \$113,036,000
Grants and Other Agency Funding	
Federal, State, or Other Grants/ Funding Partnership	\$30,500,000
	<i>Subtotal</i> \$30,500,000
Lake Stevens Development Contributions	
Transportation Impact Fees ²	\$18,000,000
	<i>Subtotal</i> \$18,000,000
Total Estimated Revenues	\$161,536,000³

1. Real Estate Excise Tax (REET) funding accounts only for revenue available for expenditure on capital projects. Remaining REET funds are allocated to debt commitments. REET funds account for beginning fund balances of \$7.6 million and \$6.5 million for REET I and REET II funds, respectively.
2. Transportation impact fee revenues based on historical revenues.
3. Planning level revenue estimates in 2024 dollars – actual revenues will vary over the planning horizon.

Table 8.10 - Financing Strategy Summary

City Revenues

The city of Lake Stevens can direct revenues from its Real Estate Excise Taxes (REET) to fund transportation improvement projects, however most REET revenues have been allocated to fulfill various debt commitments. No additional REET I funds are expected to be allocated for expenditure on capital improvements through 2053 as annual debt service and revenues are expected to be equal during this period. Similarly, no REET II funds are expected to be allocated to capital improvements until 2040, after which annual revenue of \$600,000 will be available.

Additionally, the city also allocates some revenues from its Storm Water Management (SWM) program to help fund transportation projects. Drainage and retention of storm water is part of most roadway and intersection expansion projects making SWM revenue an appropriate part of the transportation funding program. Revenue from the city's Transportation Benefit Program (TBP) is targeted towards sidewalk expansion, roadway maintenance, and congestion relief projects throughout the city. Annual revenues from the program are expected to increase by between 4 and 6 percent annually through the life of the plan (assuming that the program is extended beyond the current 10-year funding approval).

Together, these funds are expected to generate over \$113 million in revenue for transportation projects through the life of the plan.

Grants and Other Agency Funding

The city has historically been successful in acquiring grant funding to assist in the development and implementation of transportation projects within the city. Based on the recent grant awards, the city has secured an average of \$3,320 million in funding annually for transportation improvements. To be conservative, the revenue analysis assumes that the city will only receive grant funding at a rate of approximately 50 percent of the recent historical rate (or approximately \$1.5 million per year on average). This forecast results in approximately \$30.5 million in grant funding revenue through the full life of the plan.

Funding through grants is tied to specific programs and types of projects. Several grant programs target transportation projects that support regional economic growth, mobility, and other travel models. Some of the projects identified in the transportation project list support regional needs (especially projects along or directly connecting to regional corridors like SR 9, SR 204, and SR 92) and would likely be eligible for some grant funding.

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The Surface Transportation Block Grant (STBG) Program is one of the most flexible federal grant programs. STBG funding can be used for highway and bridge projects, transit capital projects, and funding for bicycle, pedestrian, and recreational trail improvements. They also can be used for public transportation capital improvements, car and vanpool projects, fringe and corridor parking facilities, and inter-city or intra-city bus terminals and bus facilities. STP funds also can be applied to surface transportation planning activities, wetland mitigation, transit research and development, and environmental analysis. STBG funds also can be used for transportation control measures.

The Congestion Mitigation and Air Quality (CMAQ) program is a federally funded program administered through the Puget Sound Regional Council (PSRC). CMAQ funds projects and programs in air quality non-attainment and maintenance areas, which reduce transportation related emission. CMAQ grants cannot be used to fund general purpose roadway projects.

The State Transportation Improvement Board (TIB) currently provides funding for urban areas in Washington through three grant programs:

- Urban Arterial Program (UAP) – funds projects that address safety, growth & development, physical condition and mobility.
- Urban Active Transportation Program (ATP) - provides funding for projects improving the safety, mobility, and/or connectivity of pedestrian and bicycle facilities.
- Arterial Preservation Program (APP) - helps with roadway paving/overlays for cities/agencies with less than \$3 billion assessed valuation. Lake Stevens exceeds the maximum assed valuation criteria and therefore, is not eligible for this program.
- Complete Streets (CS) Award – allocates funding to local governments that have adopted a complete streets ordinance and have demonstrated success at planning and constructing streets designed to accommodate all roadway users.

The TIB projects are selected on a competitive basis. Each of the four programs has distinct criteria to rank the projects for funding. Once selected, TIB staff stays involved through grant oversight and helping bring projects to completion.

WSDOT administers various grants which fund non-motorized transportation improvements. The Safe Routes to Schools Program funds projects which are targeted at reducing collisions between vehicular and non-motorized road users and improving the accessibilities of schools to children on foot or bike. The WSDOT Pedestrian and Bicycle Program funds projects which promote healthy living through active transportation, improves non-motorized user safety, reduces vehicular travel, and has community support.

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The Highway Safety Improvement Program (HSIP) provides funding to implement safety projects along roadways with the goal of reducing the number of fatal and serious injury collisions.

Transportation Impact Fees

The GMA allows agencies to develop and implement a transportation impact fee (TIF) program to help fund some of the costs of transportation facilities needed to accommodate growth. State law (Chapter 82.02 RCW) requires that TIFs are:

- Related to improvements to serve new developments and not existing deficiencies.
- Assess proportional to the impacts of new developments.
- Allocated for improvements that reasonably benefit new development.
- Spent on facilities identified in the CFP.

TIFs can only be used to help fund improvements that are needed to serve new growth. The projects can include recently completed projects to the extent that they serve future growth and did not solely resolve existing deficiencies. The cost of projects needed to resolve existing deficiencies cannot be included.

The city began collecting impact fees for transportation projects in the 1990's. The program is defined in Chapter 14.112 of the Lake Stevens Municipal Code.

The funding strategy assumes the transportation impact fee program is based on the updated 20-year list of improvement projects, as identified in Capital Facilities Element. A full evaluation and update of the impact fee rates should be conducted after the Transportation Element is adopted to reflect changes in land use plans, funding, level of service standards, and new state legislation that allows funding be directed towards active transportation projects.

Based on TIF generated by the city's program, an annual average impact fee revenue of \$900,000 was assumed for the revenue analysis. The transportation impact fees are estimated to account for approximately \$18 million in revenues through the life of the plan.

Other development contributions may be used in lieu of or in addition to the impact fee payments to address transportation deficiencies or improve the roadway adjacent to a proposed development site. New developments can be required to dedicate right-of-way and/or construct at least part of some of the improvements listed in Table 8.8 but would

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likely receive transportation impact fee credit. Developer mitigation could include frontage improvements that are not impact fee related and other improvements to mitigate capacity or safety deficiencies caused by the development. As part of the funding program, no developer mitigation beyond the identified transportation impact fees was assumed to contribute to funding the transportation projects. The city may, however, require developer mitigation at other locations identified in the Transportation Element or at other locations, as determined during the development application and review process, which has not been accounted for in the financing program.

Funding Strategy

As noted in Table 8.9, for the city to fully fund the transportation improvement projects and programs, it would need approximately \$247.1 million (in 2024 dollars) through the life of the plan to fully implement all identified transportation improvements. The revenue projections forecast approximately \$161.5 million in funding for transportation projects for the same period, respectively. This would be a shortfall of approximately \$85.6 million (in 2024 dollars) over the life of the plan.

Constrained Transportation Project List

Due to the likely lack of funding needed to fully implement all projects within the unconstrained transportation project list, the projects in the list were reviewed and prioritized to identify those that are of higher need and are more necessary to be implemented with limited funding resources. This prioritization process resulted in a list of constrained projects as indicated in Table 8.8 identifying those high priority projects which can be implemented within the revenue forecasts identified in Table 8.10. These projects are of greatest importance to maintain the city's LOS standards.

Reassessment Strategy

Although the financing strategy recognizes the likely potential for an approximately \$86 million shortfall over the life of the plan, the city is committed to reassessing their transportation needs and funding sources each year as part of the annual Six-Year Transportation Improvement Program (TIP). This allows the city to match the financing program with the shorter-term improvement projects and funding. The plan also includes goals and policies to periodically review land use growth, adopted level of service standards, and funding sources to ensure they support one another and meet concurrency requirements.

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To maintain the vitality of the city's transportation system, the city should adhere to the following principles in its funding program:

- As part of the development of the annual Six-Year Transportation Improvement Program, the city will balance improvement costs with available revenues.
- Review project design during the development review process to determine whether costs could be reduced through reasonable changes in scope or deviations from design standards.
- Require developer improvements as they become necessary to maintain LOS standards to meet concurrency;
- Coordinate and partner with WSDOT and other agencies to vigorously pursue grants from state, federal, and regional agencies to help fund and implement improvements along regional corridors (SR 9, SR 204, SR 92)
- Work with regional and local agencies to develop multi-agency grant applications for projects that serve regional travel.
- Review transportation impact fee revenues each year to determine whether the impact fees should be adjusted to account for project cost increases and/or decreases in grants or WSDOT cost sharing.
- If the actions above are not sufficient, consider changes in the level of service standards and/or limit the rate of growth.
- Lower priority projects in the Transportation Element may be slid to beyond 2044 or deleted from the program.

Implementation Program

Implementation of the Transportation Element involves several strategies. These include coordination with developers and partnering with other agencies to construct the transportation improvement projects and expand transit service to the city. Partnering with other agencies and use of grants will be especially critical in the implementation of safety, capacity, and operational improvements along regional corridors (SR 9, SR 204, SR 92). This may include re-prioritizing roadway projects as new funding sources become available or by focusing on areas most impacted by new development. The city will also continue to review strategies to phase improvements to allow funding to be spread over a longer period. In addition, the city will need to review, maintain, and update its Concurrency Management Program, Transportation Impact Fee, and other development review processes to account

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for the revised multimodal LOS standards and assure that the impacts of growth are mitigated, and transportation improvements are completed concurrent with new development.

Partnering with Other Agencies

PSRC's Vision 2050 describes the investments and policies needed to create a safe, clean and efficient transportation system essential to supporting the region's quality of life, health and economy as the region continues to grow. The Transportation Element supports the city's role in the regional transportation strategy through its policies to support and expand use of transit, transportation demand management, and active travel to reduce the number of vehicle trips generated by development in the city. Lake Stevens will need to coordinate with Community Transit and other nearby cities to implement facilities and services to meet those objectives. Coordination will also help assure consistency in plans and implementation programs between agencies to meet the goals of the regional plan.

The city will continue to partner with WSDOT to implement improvements to regional corridors consistent with the Transportation Element project list, including as part of the US-2 Trestle Replacement project. Without WSDOT as a partner, the city is unable to address key congestion and complete streets issues along state-owned facilities which result in operational and safety issues along city roadways. Partnering with WSDOT will be critical in the implementation of the Transportation Element project list.

Other agency partnering opportunities involve Community Transit, the city of Marysville, and Snohomish County. Coordination with these agencies could lead to cost-sharing of improvements to construct pedestrian and bicycle facilities around schools or transit routes.

Project Priorities and Timing

The city of Lake Stevens will use the annual update of the Six-Year TIP to re-evaluate priorities and timing of projects. Throughout the planning period, projects will be completed and priorities will be revised. The development of the TIP will also be used to identify potential phasing options to fit within available revenues during that six-year time horizon. The city will monitor traffic volumes and the location and intensity of land use growth in the city and its UGA. Based on this information, the city will then be able to direct funding to areas that are most impacted by growth or may fall below the city's level of service standard. The development of the TIP will be an ongoing process over the life of the plan and will be reviewed and amended annually.

Concurrency Management and Development Review

Concurrency refers to the ongoing process of coordinating infrastructure needs with community development. This concept was formalized in the GMA to ensure that adequate public facilities are provided in concert with population and employment growth. For transportation facilities, the GMA requirement is fulfilled if its level of service standards will continue to be met including the additional travel demand generated by each development.

Concurrency determinations for the roadway network are closely linked with development review decisions. In addition, the city reviews development applications pursuant to the State Environmental Policy Act (SEPA). Concurrency and SEPA are primarily focused on a shorter-term time frame. The city requires payment of transportation impact fees to help fund growth related improvements, both long-term and short-term needs. Projects that result in adverse transportation impacts are required to fund or implement mitigation measures that reduce the impact below a level of significance and/or meet the level of service standard. The city provides credits where developers are required to construct improvements whose costs are included in the transportation impact fee program.

The city will need to regularly monitor the level of service of its transportation system as part of its concurrency program. The city will use information from its concurrency program in updating its Six-Year Transportation Improvement Program, grant applications, and coordination with WSDOT and other agencies.

As each development application is reviewed, the city will determine if concurrency has been met. If concurrency is not met, then the city will establish conditions of approval. Since SR 9 and SR 204 are Highways of Statewide Significance, the city cannot use concurrency to deny the development application if the proposal impacts either of these corridors; therefore, conditions of approval will be established through SEPA and in coordination with WSDOT (as applicable) to mitigate any potential impacts of the development.

The city will monitor the performance of the transportation system throughout the city. The city will apply its multimodal LOS standards and the city's road standards to evaluate and identify appropriate improvements for mitigating impacts of developments in the city. The city also will conduct its own studies and work with other agencies to define needed improvements to be incorporated into its Six-Year Transportation Improvement Program, which is updated annually.

If expected funding for improvements to meet future transportation needs is found to be inadequate and the city will not be able to meet their adopted level of service standards, then the city will need to pursue options as laid out under the Reassessment Strategy, presented previously.

CONSISTENCY WITH OTHER AGENCIES

Lake Steven's transportation system is part of, and connected to, a broader regional highway and arterial system. The GMA works to increase coordination and compatibility between the various agencies that are responsible for the overall transportation system. Since transportation improvements need to be coordinated across jurisdictional boundaries, the Transportation Element needs to be consistent with and supportive of the objectives identified in the Washington State Transportation Plan, PSRC's Vision 2050, and the transportation plans or capital improvement plans of the surrounding agencies. Developing the Transportation Element is primarily a bottoms-up approach to planning, with the city exploring its needs based on the land use plan. Eventually, local projects are incorporated into regional and state plans. A schematic of this approach is shown below.



The Lake Stevens Transportation Element considers the impacts of planned improvements, along with the priorities and policies of the WSDOT, PSRC, Snohomish County, and the city of Marysville. The following summarizes how the Transportation Element relates and is consistent to these other state, regional, and neighboring agency plans.

WSDOT

The Washington Transportation Plan (WTP) 2040 and Beyond, and the associated Highway System Plan (HSP), updated in 2023, provide the umbrella for all metropolitan and regional transportation plans. The updated WTP focuses on key policies and strategies for the State, while the HSP still maintains the most recent long-term statewide project list.

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The Highway System Plan is an element of the WTP. The HSP identifies highway system improvement projects and programs consistent with the WTP priorities. The HSP is constrained by available funding forecast for the next 20 years. Policies and improvement projects listed in the WTP and HSP were reviewed for consistency with the strategies and projects recommended in the Transportation Element.

As required by the GMA, the Transportation Element addresses the existing and future conditions of the state facilities serving the city (SR 9, SR 204, and SR 92). The transportation inventory describes existing traffic volumes, levels of service, and safety along these highways. The Transportation Element also identifies forecast conditions, and improvement needs to resolve capacity, operations, safety, complete street, and multimodal transportation needs along both corridors. SR 9 is classified as a Highway of Statewide Significance (HSS). According to the HSP, the LOS standards are set forth by State law, which sets LOS D for HSS facilities in urban areas. Since the city is a designated urban area, the LOS D standard applies for the segment of SR 9 within the city. GMA concurrency requirements do not apply to HSS facilities. While the city will monitor SR 9 as part of its concurrency program, any conditions of development approval will be established through SEPA and projects would not be denied based on concurrency, thereby maintaining consistency with the state statutes and regional plans.

SR 204 is classified as a Tier 1 State Highway of Regional Significance (HRS) and SR 92 is classified as a Tier 2 State HRS. PSRC and the local agencies have adopted an LOS E Mitigated and LOS D standard for SR 204 and SR 92 within Lake Stevens, respectively. Concurrency will be applied along this corridor based on the standards summarized previously in the Transportation Element.

The city has worked with WSDOT in past years to coordinate and implement roadway and intersection improvements along the state-owned facilities, including the recently completed roundabout improvements at the intersection of SR 9 / SR 204. The city will continue to work with WSDOT to aggressively pursue grants or other funding to implement the improvements along the state highways as identified in the Transportation Element.

PSRC

The Puget Sound Regional Council (PSRC) adopted VISION 2050 and Transportation 2040 and Beyond to guide transportation policies, priorities and investments for the Puget Sound region. The update of the Lake Stevens Transportation Element included a review of the policies and projects that were important to consider and build from to provide regional and local consistency. The appropriate policy and project updates were incorporated into the city's Transportation Element so that it is consistent and supportive of both VISION 2050 and Transportation 2040 and Beyond (the Region's Metropolitan Transportation Plan). Several

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policies were added to the city's Transportation Element to address important regional priorities such as multimodal connectivity, complete streets, green streets, low impact design, sustainability, electric vehicles, alternative fuel, environmental impacts, air quality, and travel demand management.

The PSRC travel demand model was used as the basis in constructing the Lake Stevens travel demand model. The travel forecasts for areas outside the city's immediate study area were directly integrated from the PSRC model. Therefore, the travel forecasts and subsequent operations and safety analysis for the city considered and incorporated regional growth, consistent with PSRC land use and travel forecasts.

Snohomish County

Snohomish County transportation and capital improvement plans were reviewed as part of the Lake Stevens Transportation Element update. County road classifications were also reviewed and determined to be compatible. The city's functional classification map notes the classification of County roadways. Roadway construction projects within the Snohomish County Transportation Needs Report 2022 (TNR) were reviewed to ensure the analysis accounted for any projects which could affect operations or traffic flow along city roadways. Several projects in the TNR identify roadways in proximity to the city for minor widening and installation of pedestrian/bicycle facilities (including 20th Street SE and Machias Cutoff). Future plans for improvements to these roadways are indicated by the inclusion of these roadways within the Functional Classification Map in Figure 8.13 and the Future Active Transportation Network in Figure 8.14. Overall, the Transportation Element is consistent with and accounts for travel forecasts from the unincorporated areas of Snohomish County.

Community Transit

Community Transit provides transit service for Lake Stevens. The Lake Stevens Transportation Element acknowledges the need for coordination between the city and Community Transit to work together to identify service improvements and strategies to serve Lake Stevens. The city has also developed policies and road standards to provide adequate streets and active mode facilities to support connectivity to transit facilities. Community Transit's six-year Transit Development Plan and long-range Journey 2050 Plan were reviewed as part of the Transportation Element update. Long-term transit service changes to the city include the removal of Route 280 (between Lake Stevens and Granite Falls) and expansions of service frequency between the city and Everett. The Transportation Element supports the desired transit service enhancements identified in Journey 2050 to provide alternative mobility options and support growth identified in the Land Use Element.

City of Marysville

The city of Marysville is located immediately northwest of Lake Stevens. The primary transportation interface is along the SR 9 and Soper Hill Road corridors. To improve multimodal connectivity through the Snohomish County region, the Cities of Lake Stevens and Marysville are working together to plan off-street trail connections between the two cities along existing utility easements. The planned trails will provide an additional north-south pedestrian and bicycle trail through the region and will link up to the existing Centennial Trail.

The travel demand model used to forecast future traffic volumes incorporates Marysville's existing and future land use projections and encompasses the entirety of Marysville's transportation network. In addition, the model transportation analysis zones (TAZs) are consistent between the two cities to easily integrate and evaluate future changes in land use within the study area.

GOALS AND POLICIES

GOAL 8.1 WORK WITH PUGET SOUND REGIONAL COUNCIL ON THE PLANNING, FUNDING AND IMPLEMENTATION OF VISION 2050 - THE REGIONAL TRANSPORTATION PLAN

Policies

- 8.1.1 Coordinate with the PSRC Regional Transportation Planning Organization to support the Regional Growth Strategy and ensure consistency and compatibility between city, county, and regional transportation plans.
- 8.1.2 Provide a safe, convenient and efficient transportation system for all users and the movement of freight and goods.
- 8.1.3 Reduce the need for new capital improvements through investments in operations, demand management strategies and system management activities that maximize transportation options and improve the efficiency of the current system.
- 8.1.4 Encourage, plan for, and invest in "pedestrian-scale" neighborhoods and centers to enhance access and mobility for all users.
- 8.1.5 Plan for increased resilience of the transportation system to major disasters and disruptions by developing prevention and recovery strategies and planning for coordinated responses with state, regional, and local agencies.
- 8.1.6 Explore Intelligent Transportation System (ITS) technologies for potential implementation within the city's transportation network.

- 8.1.7 Prepare the city's transportation systems and infrastructure for emerging trends and technologies such as electric vehicle charging stations, automated and connected vehicles, on-demand smart signals, etc.

GOAL 8.2 PROVIDE A TRANSPORTATION SYSTEM THAT SUPPORTS EXISTING AND FUTURE LAND USES AND ACCOMMODATES THE REGIONAL GROWTH STRATEGY

Policies

- 8.2.1 Prioritize investments for both motorized and non-motorized transportation in activity centers.
- 8.2.2 Prioritize multimodal investments in local centers and connections to regional employment centers.
- 8.2.3 Encourage compact and mixed-use development to reduce vehicle trips and encourage transit use.
- 8.2.4 Coordinate multimodal transportation facilities and development densities near areas served by transit.
- 8.2.5 Promote pedestrian and bicycle access to public facilities and centers.
- 8.2.6 Prioritize construction of sidewalks, walkways, and trails to provide alternative routes to employment centers, shopping areas, transit stops, schools and public and recreational facilities.
- 8.2.7 Support land use and street patterns that promote walking, biking, and transit use while reducing the quantity and length of trips by single occupant vehicles.
- 8.2.8 Support land use patterns that reduce the quantity and length of trips by single occupant vehicles; pursue the use of Traffic Demand Management (TDM) strategies to reduce traffic congestion and as an alternative or supplement to roadway capacity improvements; and work with Community Transit to implement employer outreach programs to promote the use of alternative transportation modes and other worksite-based strategies such as alternative work schedules.
- 8.2.9 Implement and periodically update the city's Complete Streets Ordinance in support of developing a complete active transportation network across city, county and state facilities.

GOAL 8.3 ENCOURAGE AND SOLICIT EQUITABLE PUBLIC PARTICIPATION IN THE PLANNING, DESIGN, AND IMPLEMENTATION OF A MULTIMODAL TRANSPORTATION SYSTEM

Policies

- 8.3.1 Consider equity and equal access when planning for transportation improvements, programs, and services, including for historically underserved neighborhoods and vulnerable populations.
- 8.3.2 Ensure mobility choices for people with special transportation needs, including persons with disabilities, the elderly, the young and low-income populations when considering new projects, maintenance and modification to the street network.

GOAL 8.4 ADAPT TO AND MITIGATE THE TRANSPORTATION-RELATED IMPACTS OF CLIMATE CHANGE THROUGH IMPLEMENTATION OF THE CITY'S CLIMATE SUSTAINABILITY PLAN AND UTILIZATION OF EMERGING TECHNOLOGIES AND BEST AVAILABLE SCIENCE

Policies

- 8.4.1 Evaluate and seek to minimize greenhouse gas emissions, vehicle miles travelled and climate change impacts when considering new and improved transportation infrastructure.
- 8.4.2 Electrify the city's vehicle fleet as vehicles reach the end of their life cycle and work to expand vehicle charging infrastructure, including the development of an EV Infrastructure Plan.
- 8.4.3 Educate residents on the benefits, incentives, and other information regarding electric vehicles.
- 8.4.4 Evaluate stormwater management, street tree canopy coverage, shading, urban heat island effect and future air quality when designing city streets.
- 8.4.5 Utilize climate-resilient or native street trees and other vegetation such as Low Impact Development design.
- 8.4.6 Develop strategies, programs and partnerships that serve to increase and incentivize carpooling and transit use by residents and employees.

GOAL 8.5 DEVELOP THE CITY'S TRANSPORTATION SYSTEM TO SERVE AND PROMOTE ECONOMIC GROWTH

Policies

- 8.5.1 Maintain and operate transportation systems to provide safe, efficient and reliable movement of people, goods and services.
- 8.5.2 Manage local freight truck traffic with the Truck Route Ordinance and appropriate signage while maintaining and improving the regional freight system.
- 8.5.3 Coordinate with the railroads and trucking industry to improve the safety and efficiency of freight movement and reduce the impacts on other travel modes.

GOAL 8.6 MINIMIZE ADVERSE IMPACTS OF TRANSPORTATION FACILITY IMPROVEMENTS ON THE NATURAL ENVIRONMENT

Policies

- 8.6.1 Commit to meeting federal and state air quality requirements and work with state, regional, and local agencies to develop emissions reduction programs to attain or maintain air quality requirements.
- 8.6.2 Encourage transportation project designs that improve fish passage, consider wildlife corridors, use low impact development techniques, consider climate change impacts, reduce flooding and other stormwater impacts and prevent measurable harm to streams, lakes, wetlands and other natural aquatic systems.
- 8.6.3 Develop a transportation system that protects the natural environment, human health and safety, and promotes a healthy community.
- 8.6.4 Consider alternative transportation options when considering land use decisions and designations to support increased use of walking, biking, carpooling and bus riding.
- 8.6.5 Encourage low impact development projects and low impact development techniques on non-LID projects to conserve and use existing natural site features, integrate distributed, small-scale stormwater controls and prevent measurable harm to streams, lakes, wetlands and other natural aquatic systems from commercial, residential or industrial development sites by maintaining a more hydrologically functional landscape.

GOAL 8.7 MAINTAIN, PRESERVE, AND OPERATE THE TRANSPORTATION SYSTEM IN A SAFE AND USABLE WAY, AND REGULARLY MONITOR AND INVENTORY THE CONDITIONS AND PERFORMANCE

Policies

- 8.7.1 Maintain an inventory of the existing multimodal system and update as the system changes.
- 8.7.2 For traffic levels of service (LOS), the city adopts intersection LOS C or better at peak hour traffic for residential areas and intersection LOS E along arterials and collectors in other areas.
- 8.7.3 The city shall adopt the same (LOS) D standards for Highways of Statewide Significance (HSS) and Highways of Regional Significance (HRS) as adopted by Puget Sound Regional Council (PSRC) and the Washington State Department of Transportation (WSDOT).
- 8.7.4 Establish the following level of service standards for transit routes to emphasize improved access and amenities at transit stops. The LOS standard for transit is based on the methodology in Table 8.4 and incorporates the expected type of service being planned for in the Community Transit Journey 2050 Long-range Plan. Green LOS is the standard for Regular Bus - Frequent transit routes, while orange LOS is the standard for Regular Bus - Base service routes.
- 8.7.5 Establish the following level of service standards for the active transportation network to gauge the completion and comfort of the network and prioritize needs. The LOS standard for the active transportation network is based on the methodology in Table 8.2 and criteria outlined in Table 8.12. An orange LOS is the standard for all roadways in the active transportation network.
- 8.7.6 Ensure that the transportation system is adequate to serve existing and future land uses by developing a multimodal transportation concurrency management system.
- 8.7.7 Modeling of the city's transportation system shall be at an arterial and collector level and used to identify system needs to improve public safety and human health.
- 8.7.8 Protect the investment in the existing system and lower overall life-cycle costs through effective maintenance and preservation programs.
- 8.7.9 Improve safety of the transportation system and, in the long term, work towards zero deaths and disabling injuries by 2044.

GOAL 8.8 COORDINATE INFRASTRUCTURE PLANNING AND FINANCING WITH OTHER AGENCIES TO ENSURE IMPLEMENTATION OF A SYSTEM THAT SUPPORTS REGIONAL MOBILITY GOALS AND LAND USE PLANS

Policies

- 8.8.1 Develop an annual Six Year Transportation Improvement Program (TIP) that is financially feasible, leverages available city funding, and is consistent with the Comprehensive Plan.
- 8.8.2 Investigate alternative methods of obtaining financing for transportation improvements, including local option taxes, bonding, Local Improvement Districts, combining efforts with other agencies, grant and loan opportunities such as the Public Works Trust Fund, and interlocal agreements for mitigation costs with Snohomish County.
- 8.8.3 Develop a 20-year finance plan that balances transportation improvement needs, costs, and revenues available for all modes to assist in updating the Transportation Impact Fee (TIF) program and the annual adoption of the Six-Year Transportation Improvement Program (TIP).
- 8.8.4 Ensure that the transportation system is adequate to serve all existing and future land uses by administering a concurrency management system, exploring alternatives for demand management, and securing adequate financing for transportation. If the adopted LOS cannot be maintained, then the city will not issue development permits until:
 - a.) Mitigation restores LOS to adopted standard;
 - b.) Improvements to restore LOS are funded;
 - c.) Land use element growth capacity is reduced; or
 - d.) The adopted LOS in the Comprehensive Plan is amended to allow the proposed development.
- 8.8.5 Coordinate on a regular basis with neighboring jurisdictions, regional transportation agencies and the Washington State Department of Transportation to identify shared transportation needs and concerns.
- 8.8.6 Work with Snohomish County and neighboring cities to ensure that projects outside of the city do not adversely impact the city's transportation system and do not result in a diversion of traffic through city neighborhoods.

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- 8.8.7 Continue coordination with the Washington State Department of Transportation on State Route corridor improvements with an emphasis on US-2, SR-9, SR-92 and SR-204 vicinity safety and capacity improvements.