



City of Sammamish

TRANSPORTATION MASTER PLAN

DECEMBER 2024

ACKNOWLEDGMENTS

CITY OF SAMMAMISH

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EXECUTIVE SUMMARY

The City of Sammamish envisions a future transportation system that serves all users and modes of travel by offering a safe and welcoming transportation network that optimizes connectivity and efficiency, aligns with the Climate Action Plan and sustainability goals of the city, maintains fiscal sustainability, and enhances the community.

To achieve Sammamish’s vision, the transportation goals and policies in the Transportation Element of the City’s Comprehensive Plan serve as the foundation for the City’s first Transportation Master Plan (TMP). The TMP is adopted by reference into Volume 2 of the City’s Comprehensive Plan and provides the strategic framework for developing a multi-modal transportation network that will enhance connectivity within the City and to the region. Based on substantial technical analysis and community involvement, the TMP guides transportation decisions and investments for the next 20 years in support of the long-term vision for the city.

Since its incorporation from King County in 1999, Sammamish has grown to a population of 65,845 according to the 2022 United States Census Bureau. Current challenges faced by communities include a relatively unconnected street system, limited transit service, and significant grade changes to the topography that makes active modes of transportation difficult for many users. The TMP reflects the City’s need for a better transportation system. Beginning with the transportation goals and policies, a better transportation system is one that is accessible, prioritizes connectivity, and accommodates equitable access to various modes of travel, including walking, biking, public transit, and driving. This TMP provides the opportunity for Sammamish to proactively shape its transportation vision and goals as described in the City’s Comprehensive Plan. The TMP proposes a prioritized list of projects, programs, and strategies that advance the transportation vision and goals, meet Growth Management Act (GMA) requirements, and reflect input from the Sammamish community.

STRATEGIC FRAMEWORK FOR TRANSPORTATION GOALS, POLICIES, AND STRATEGIES

Envision Sammamish 2044 – the Comprehensive Plan update for the City of Sammamish – reflects the community’s values and aspirations for the future through a Community Vision Framework and Vision Strategies. Envision 2044 provides a roadmap for the City over the next 20 years that reflects the Vision Strategies throughout various elements (chapters), including Transportation. The Transportation Element of Envision Sammamish 2044 provides goals and policies related to transportation, as well as connections to related elements.

There are four (4) transportation goals in the Transportation Element of Envision Sammamish 2044; each goal contains numerous policies, which are topic-specific statements designed to

address a specific goal. Policies are an extension of a goal, and they provide guidelines for current and future decision-making, identifying a clear commitment of the local legislative body.

The four (4) goals in the Transportation Element are outlined in Table 1, below.

TABLE 1. TRANSPORTATION GOALS

SUPPORT GROWTH	GREATER OPTIONS & MOBILITY	PUBLIC SAFETY	SUSTAINABILITY
Support the City’s and region’s growth strategy by focusing on moving people and goods within the City and beyond with a highly efficient multi-modal transportation network.	Invest in transportation systems that offer greater options, mobility, and access in support of the City’s growth strategy.	As a high priority, preserve, maintain, and operate the City’s transportation system in a safe and functional state.	Design and manage the City’s transportation system to minimize the negative impacts of transportation on the natural environment.

Figure 1 depicts the TMP’s connection to the City’s Comprehensive Plan (Envision Sammamish 2044), as well as how the TMP guides transportation strategies, operations, programs, and projects.



FIGURE 1. TRANSPORTATION POLICY FLOW CHART

These principles are fundamental considerations for the implementation activities and strategies that are identified in the TMP necessary to achieve the 2044 transportation vision. The projects, programs, and activities described in the TMP provide implementation strategies to reach the City’s transportation goals.

TMP ORGANIZATION:

The Transportation Master Plan (TMP) will shape the City for years to come by providing guidance on transportation project priorities. This document provides background information about Sammamish’s transportation context, the goals of the City and vision for transportation, community outreach conducted, priority projects to ensure community mobility and strategy for sustainable implementation. The TMP is organized into six chapters, as described below.

CHAPTER 1: INTRODUCTION

This chapter describes the planning context for Sammamish’s TMP, in terms of regional setting, and consistency with the State of Washington Growth Management Act and Regional Transportation Plan, and other related planning efforts, and trends that shape existing and future mobility needs.

CHAPTER 2: INVENTORY & EXISTING CONDITIONS

This chapter provides an assessment of existing traffic conditions within and adjacent to Sammamish communities. To identify existing traffic conditions, a comprehensive data collection process has been undertaken. The data was primarily collected from the City of Sammamish, King County, and Washington State Department of Transportation provides an evaluation of future transportation needs and forecasts future travel demand. This chapter describes the methodology for developing traffic forecasts for existing streets based on future land use which allows the adequacy of the street system to be evaluated.

CHAPTER 3: FUTURE CONDITIONS

This chapter provides a summary of Sammamish’s future transportation conditions in 2044. The chapter provides analysis results for 2044 intersection level of service (LOS) for the baseline scenario and three alternatives. This chapter also reviews expected changes to transit and the non-motorized network.

CHAPTER 4: PUBLIC OUTREACH

This chapter summarizes the community outreach processes used to obtain public input on the Comprehensive Plan update, Transit Plan and TMP. It describes who we heard from and what we heard, providing a framework for the issues and opportunities to be considered by this TMP.

CHAPTER 5: TRANSPORTATION VISION

This chapter describes Sammamish’s vision for its future transportation network, as well as provide a strategic framework to accomplish each Transportation goal and policy. The future transportation vision is based on the goals developed in concert with the community and the goals and policies

described in the Comprehensive Plan. This chapter seeks to provide the framework to guide transportation investments over the next 20 years in accordance with the community's vision and goals. To achieve Sammamish's vision, the Transportation Goals and Policies in the Transportation Element of the Comprehensive Plan serve as the foundation for strategies outlined in this chapter.

CHAPTER 6: PLAN IMPLEMENTATION

This chapter describes the TMP's path to implementation considering reasonably anticipated funding options to achieve Sammamish's vision for its transportation system. The chapter includes the TMP's priority projects, which span vehicular capacity and complete streets enhancements to multimodal improvements, all of which expand travel options within the City and to regional destinations.

GROWTH MANAGEMENT ACT REQUIREMENTS & UPDATES TO THE TRANSPORTATION MASTER PLAN

The TMP consists of GMA requirements as well as other strategies that are significant to implementation of a holistic approach to transportation. As shown in Figure 1 above, there is a desire in the community to have one all-inclusive plan that guides transportation decisions. The TMP includes both GMA requirements as well as other strategies crucial for the City to achieve its transportation vision. Table 2 below references specific chapters and sections within the TMP that achieve compliance with GMA requirements. In addition, Table 3 serves as a reference guide for how Puget Sound Regional Council (PSRC)'s VISION Consistency Tool is incorporated into various chapters and sections of the TMP.

The TMP is meant to evolve over time and reflect changes communities are experiencing. Should the content of the TMP sections listed below need to be amended, they must be amended through the City's annual docket process and can only be amended once per year. Sections not listed below may be amended at any time and numerous times, through a Public Hearing and City Council adoption of an amended TMP. Updates of the TMP shall be documented in the Executive Summary. The first update to the TMP is expected in 2025. This update will tie in the Bicycle and Pedestrian Mobility Plan to the TMP, including future conditions Level of Service analysis and potentially new bike and pedestrian projects.

TABLE 2. GMA REQUIREMENTS CHECKLIST

GMA REQUIREMENT (RCW 36.70A.070 AND WAC 365-196-430)	TMP CHAPTER, PAGE NUMBERS
<p>RCW 36.70A.070(6)(a)(i) and WAC 365-196-430(a), WAC 365-196-430(2)(a)(i)</p> <p>Land Use Assumptions used in estimating travel</p>	<p>Chapter 2 Chapter 3 Chapter 5</p>
<p>RCW 36.70(6)(a)(ii) and WAC 365-196-430(1)(b)</p> <p>Estimated multimodal level of service impacts to state-owned transportation facilities resulting from land use assumptions to assist in monitoring the performance of state facilities, to plan improvements for the facilities, and to assess the impact of land-use decisions on state-owned transportation facilities</p>	<p>Chapter 2 Chapter 3</p>
<p><u>RCW 36.70A.070(6)(a)(iii)(A)</u> and</p> <p>An inventory of air, water, and ground transportation facilities and services, including transit alignments, active transportation facilities, and general aviation airport facilities, to define existing capital facilities and travel levels to inform future planning. This inventory must include state-owned transportation facilities within the city jurisdictional boundaries</p> <p>Inventory and analysis of transportation facilities and services. The inventory should include facilities for active transportation such as bicycle and pedestrian travel. The inventory defines existing capital facilities and travel levels as a basis for future planning. The inventory must include state-owned transportation facilities within the city's jurisdictional boundaries. Cities should identify transportation facilities which are owned or operated by others. For those facilities operated by others, cities should refer to the responsible agencies for information concerning current and projected plans for transportation facilities and services. Counties, cities, and agencies responsible for transportation facilities and services should cooperate in identifying and resolving land use and transportation compatibility issues.</p> <p>Roadways. Cities must include a map of roadways owned or operated by city, county, and state governments.</p> <p>Cities may describe the general travel market (i.e., commuter, tourist, farm to market, etc.) served by the transportation network. The inventory may include information such as: Traffic volumes, truck volumes and classification, functional classification, strategic freight corridor designation, preferred freight routes, scenic and recreational highway designation, high occupancy vehicle lanes, business access and transit lanes, transit queue jumps, other transit priority features, bicycle facilities, sidewalks, and ownership.</p> <p>Where applicable, cities must inventory existing public transportation facilities and services. This section should reference transit development plans that provide local services. The inventory should contain a description of regional and intercity rail, and local, regional, and intercity bus service, paratransit, or other services. Cities should include a map of local transit routes. The map should categorize routes by frequency and span of service. The inventory should also identify locations of passenger rail stations and major public transit transfer stations for appropriate land use.</p>	<p>Chapter 2</p>

<p>RCW 36.70A.070(6)(a)(iii)(B) and WAC (1)(c)(ii), WAC 365-196-430(2)(a)(ii), (2)(B)(e)(i), (ii), (iv), (v),</p> <p>Multimodal level of service standards for all locally owned arterials, locally and regionally operated transit routes that serve urban growth areas, state-owned or operated transit routes that serve urban areas if the department of transportation has prepared such standards, and active transportation facilities to serve as a gauge to judge performance of the system and success in helping to achieve the goals of this chapter consistent with environmental justice. These standards should be regionally coordinated</p>	Chapter 2
<p>RCW 36.70(6)(a)(iii)(C) and WAC 365-196-430(1)(c)(iii)</p> <p>For state-owned transportation facilities, multimodal level of service standards for highways, as prescribed in chapters 47.0647.06 and 47.8047.80 RCW, to gauge the performance of the system. The purposes of reflecting multimodal level of service standards for state highways in the local comprehensive plan are to monitor the performance of the system, to evaluate improvement strategies, and to facilitate coordination between the county's or city's six-year street, road, active transportation, or transit program and the office of financial management's ten-year investment program. The concurrency requirements of and(b) of this subsection do not apply to transportation facilities and services of statewide significance except for counties consisting of islands whose only connection to the mainland are state highways or ferry routes. In these island counties, state highways and ferry route capacity must be a factor in meeting the concurrency requirements in (b) of this subsection</p>	n/a
<p>RCW 36.70(6)(a)(iii)(D) and WAC 365-196-430(1)(c)(iv)</p> <p>Specific actions and requirements for bringing into compliance transportation facilities or services that are below established multimodal level of service standard</p>	Chapter 5
<p>RCW 36.70(6)(a)(iii)(E) and WAC 365-196-430(1)(c)(v)</p> <p>Forecasts of multimodal transportation demand and needs within cities and urban growth areas, and forecasts of multimodal transportation demand and needs outside of cities and urban growth areas, for at least ten years based on the adopted land use plan to inform the development of a transportation element that balances transportation system safety and convenience to accommodate all users of the transportation system to safely, reliably and efficiently provide access and mobility to people and goods. Priority must be given to inclusion of transportation facilities and services providing the greatest multimodal safety benefit to each category of roadway users for the context and speed of the facility</p>	Chapter 3
<p>RCW 36.70(6)(a)(iii)(F) and WAC 365-196-430(1)(c)(vi)</p> <p>Identification of state and local system needs to equitably meet current and future demands. Identified needs on state-owned transportation facilities must be consistent with the statewide multimodal transportation plan required under chapter transportation 47.0647.06 RCW. Local system needs should reflect the regional transportation system and local goals, and strive to equitably implement the multimodal network.</p>	Chapter 2 Chapter 5
<p>RCW 36.70(6)(a)(iii)(G)(I)(II)(III)(IV) and WAC 365-196-430(1)(c)(vi)</p> <p>A transition plan for transportation as required in Title II of the Americans with disabilities act of 1990 (ADA). As a necessary step to a program access plan to provide accessibility under ADA, state, and local government, public entities, and public agencies are required to perform self-evaluations of their current facilities, relative to accessibility requirements of the ADA. The agencies are then required to develop a program access plan, which can be called a transition plan, to address any deficiencies. The plan is intended to achieve the following:</p>	Chapter 5

<ul style="list-style-type: none"> • Identify physical obstacles that limit the accessibility of facilities to individuals with disabilities; • Describe the methods to be used to make the facilities accessible; • Provide a schedule for making the access modifications; and • Identify the public officials responsible for implementation of the transition plan 	
<p>RCW 36.70(6)(a)(iv)(A)(B)(C) and WAC 365-196-430(c)(vi), WAC 365-196-430(d)(i)(ii)(iii), WAC 365-196-430(2)(k),(l), (m)</p> <p>An analysis of funding capability to judge needs against probable funding resources</p> <p>A multiyear financing plan based on the needs identified in the comprehensive plan, the appropriate parts of which shall serve as the basis for the six-year street, road, or transit program required by RCW 35.77.010 for cities. The multiyear financing plan should be coordination with the ten-year investment program developed by the office of financial management as required by RCW 47.05.030</p> <p>If probably funding falls short of meeting the identified needs of the transportation system including state transportation facilities, a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that level of service standards are met</p>	Chapter 6
<p>RCW 36.70(6)(a)(v) and WAC 365-196-430(e)</p> <p>Intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions of the transportation systems of adjacent jurisdictions</p>	Chapter 5 Chapter 6
<p>RCW 36.70(6)(a)(vi) and WAC 365-196-430(f), WAC 365-196-430(2)(b)(i),(ii),(iii),(iv), (2)(b)(vii), WAC 365-196-430(2)(e)(vi), (vii),(f)</p> <p>Demand-management strategies</p> <p>The goals and policies should be consistent with statewide and regional goals and policies. Goals and policies should address the following:</p> <p>(i) Roadways and roadway design that provides safe access and travel for all users, including pedestrians, bicyclists, transit vehicles and riders, and motorists;</p> <p>(ii) Public transportation, including public transit and passenger rail, intermodal transfers, and access to transit stations and stops by people walking, bicycling, or transferring from another vehicle;</p> <p>(iii) Bicycle and pedestrian travel including measures of facility quality such as level of traffic stress (an indicator used to quantify the stress experienced by a cyclist or pedestrian on the segments of a road network), route directness, and network completeness;</p> <p>(iv) Transportation demand management, including education, encouragement and law enforcement strategies</p> <p>Policies to preserve the functionality of state highways within the local jurisdiction such as policies to provide an adequate local network of streets, paths, and transit service so that local short-range trips do not require single-occupant vehicle travel on the state highway system</p>	Chapter 2 Chapter 5

<p>RCW 36.70(6)(a)(vii) and WAC 365-196-430(g),(A), WAC 365-196-430(2)(j)</p> <p>Active transportation component to include collaborative efforts to identify and designate planned improvements for active transportation facilities and corridors that address and encourages enhanced community access and promote healthy lifestyles</p>	<p>Chapter 5</p>
<p>RCW 36.70(6)(b)(c) and WAC 365-196-430(h), WAC 365-196-430(2)(a)(v),(b)(vi)</p> <p>The transportation element, and the six-year plan required by RCW 35.77.010 for cities, and the 10-year plan required must be consistent.</p> <p>Cities should refer to the six-year transit plans developed by municipalities or regional transit authorities pursuant to RCW 35.58.279 to ensure their transportation element is consistent with transit development plans.</p> <p>Transportation finance including strategies for addressing impacts of development through concurrency, impact fees, and other mitigation</p>	<p>Chapter 1 Chapter 2 Chapter 3 Chapter 5 Chapter 6</p>
<p>RCW 36.70(9)(a)(d)(i)(A)</p> <p>Result in reductions in overall greenhouse gas emissions generated by transportation and land use within the jurisdiction but without increasing greenhouse gas emissions elsewhere in the state</p>	<p>Chapter 5</p>
<p>RCW 36.70(9)(a)(d)(i)(B)(C) and WAC 365-196-430(2)(a)(vi)</p> <p>Result in reductions in per capita vehicle miles traveled within the jurisdiction but without increasing greenhouse gas emissions elsewhere in the state: and Prioritize reductions that benefit overburdened communities in order to maximize the cobenefits of reduced air pollution and environmental justice</p>	<p>Chapter 5</p>
<p>RCW 36.70(9)(C)(ii)(A)(B)</p> <p>Actions not specifically identified in the guidelines developed by the department pursuant to RCW 70A.45.120 may be considered consistent with these guidelines only if:</p> <p>(A) They are projected to achieve greenhouse gas emissions reductions or per capita vehicle miles traveled reductions equivalent to what would be required of the jurisdiction under the guidelines adopted by the department; and</p> <p>(B) They are supported by scientifically credible projections and scenarios that indicate their adoption is likely to result in reductions of greenhouse gas emissions or per capita vehicle miles traveled.</p>	

TABLE 3. PSRC CHECKLIST

IMPLEMENT THE REGIONAL TRANSPORTATION PLAN	PAGE/POLICY REFERENCE
✓ Promote the development of an efficient, multimodal transportation system that supports the Regional Growth Strategy in collaboration with other jurisdictions and agencies (MPP-T-7)	T 1.2 - T 1.4 T 4.1
✓ Work to develop and operate a safe and convenient system for all users and the movement of freight and goods (MPP-T-11)	T 1.4 T 3.1 - T 3.4
✓ Reduce the need for new capital improvements through investments in operations, pricing programs, demand management strategies, and system management activities that improve the efficiency of the current system (RCW 36.70A.070(6)(a)(vi), MPP-T-3)	T 2.3 T 3.3 T 4.1 T 4.4
✓ Emphasize transportation investments that provide alternatives to single occupancy vehicle travel, increase travel options, especially to and within centers, and support compact, pedestrian- and transit-oriented densities and development (MPP-T-12-13, T-15)	T 2.1 T 4.1 T 4.7 - T 4.9
✓ Increase the resilience of the transportation system and support security and emergency management (MPP-T-31)	T 4.3
✓ Prepare for changes in transportation technologies and mobility patterns (MPP-T-33-34)	T 3.3
SUPPORT THE REGIONAL GROWTH STRATEGY	PAGE/POLICY REFERENCE
✓ Focus system improvements to connect centers and support existing and planned development as allocated by the Regional Growth Strategy (MPP-RC-7-9, T-7-8, T-15)	T 1.2 T 1.4
✓ Prioritize multimodal investments in centers and high-capacity station areas (MPP-RC-7-10, T-12-13, T-19)	T 1.2 T 1.5
✓ Promote the design of transportation facilities that support local and regional growth centers and high-capacity transit station areas and fit the community in which they are located (MPP-T-19-21)	T 1.2 T 1.4
✓ Support a safe and welcoming environment for walking and bicycling (MPP-DP-15): <ul style="list-style-type: none"> • Include a pedestrian and bicycle component and collaborative efforts to identify planned improvements for pedestrian and bicycle facilities and corridors (RCW 36.70A.070(6)(a)(vii)) • Improve local street patterns and design to promote walking and biking (MPP-T-16-17) 	T 1.2 T 2.1 T 3.4 T 4.2 T 4.3
✓ Support alternatives to driving alone, including walking, biking, and transit use, through design of local streets, land use development tools, and other practices (MPP-T-16-18)	T 1.2 T 1.6

SUPPORT PEOPLE	PAGE/POLICY REFERENCE
✓ Identify racial and social equity as a core objective when planning and implementing transportation improvements, programs, and services (MPP-T-9)	T 3.2
✓ Ensure mobility choices for people with special needs (MPP-T-10)	T 1.6
SUPPORT THE ECONOMY	PAGE/POLICY REFERENCE
✓ Recognize the critical role of safe, reliable, and efficient movement of people and goods (MPP-Ec-6, T-1, T-23)	T 2.1 T 3.1 T 3.2
✓ Identify and support key facilities and improvements that connect the region to major transportation hubs such as ports, airports, and designated freight routes (MPP-T-24-25)	T 4.1
✓ Promote coordination with providers of major regional infrastructure, such as freight rail and commercial aviation (MPP-Ec-4-5, T-27-28)	T 1.4
PROTECT THE ENVIRONMENT	PAGE/POLICY REFERENCE
✓ Promote clean transportation programs and facilities, including actions to reduce air pollution and greenhouse gas emissions from transportation (MPP-CC-3, CC-12, T-29-30)	T 4.2 T 4.7 - T 4.9
✓ Reduce stormwater pollution from transportation facilities and improve fish passage (MPP-T-32)	T 4.3
✓ Incorporate environmental factors into transportation decision-making, including attention to human health and safety (MPP-DP-44, T-4-5, T-29-32)	T 2.1 T 4.1 - T 4.9
PROVIDE FACILITIES INVENTORIES AND IDENTIFY SERVICE NEEDS	PAGE/POLICY REFERENCE
✓ Include mapped inventories for each element of the transportation system, including roadways, transit, cycling, walking, freight, airports, and ferries (RCW 36.70A.070, RCW 36.70A.108, MPP-T-7, T-15-17)	
✓ Include state facilities and reflect related (regional/state) level-of-service standards (RCW 36.70A.070, RCW 36.70A.108)	
✓ Develop a comprehensive concurrency program that addresses level-of-service standards for multimodal types of transportation and include implementation strategies (RCW 36.70A.070, RCW 36.70A.108, MPP-DP-52-54)	
✓ Provide travel demand forecasts and identify state and local system projects, programs, and management necessary to meet current and future demands and to improve safety and human health (RCW 36.70A.070, MPP-T-4-5)	
✓ Identify maintenance and system preservation projects and programs necessary to maintain the ability of the transportation system to provide safe, efficient, and reliable movement of people, goods, and services (RCW 36.70A.070, MPP-T-1-2, T-4)	

FINANCE TRANSPORTATION INVESTMENTS	PAGE/POLICY REFERENCE
✓ Identify stable and predictable funding sources for maintaining and preserving existing transportation facilities and services (MPP-RC-11-12, T-6)	
✓ Pursue alternative transportation financing methods, such as user fees, tolls, and other pricing mechanisms (MPP-T-6)	
✓ Include a 20-year financing plan, as well as an analysis of funding capability for all transportation modes (RCW 36.70A.070(3), RCW 36.70A.070(6)(a)(iv), WAC 365-196-415, WAC 365-196-430, MPP-RC-11-12, T-6, T-15)	
✓ Include a reassessment strategy to address the event of a funding shortfall (RCW 36.70A.070(3), RCW 36.70A.070(6)(a)(iv), WAC 365-196-415, WAC 365-196-430, MPP-RC-11-12, T-6)	
ADDRESS LAND USES ADJACENT TO AIRPORTS	PAGE/POLICY REFERENCE
✓ Airport-adjacent communities: Identify and address any airports within or adjacent to the jurisdiction (RCW 36.70.547, 36.70A.070(6)(a)(iii)(A), MPP-DP-48)	
✓ Airport-adjacent communities: Describe existing and planned uses near the airport, as well as policies and regulations that discourage incompatible uses (RCW 36.70.547, 36.70A.070(6)(a)(iii)(A), MPP-DP-48)	
✓ Airport-adjacent communities: Promote coordinated planning and effective management to optimize the region’s aviation system in a manner that minimizes health, air quality, and noise impacts to communities, including historically marginalized communities (MPP-T-28)	

ACKNOWLEDGEMENTS

The City would like to acknowledge the following City Departments, other agencies, and consultants that contributed to the City’s first Transportation Master Plan:

- The Sammamish Community
- Sammamish City Council
- Sammamish Planning Commission
- City of Sammamish Department of Public Works
- City of Sammamish Department of Community Development
- City of Sammamish Department of Finance
- Fehr & Peers (initial draft of TMP in 2020; was not finalized or adopted)
- DKS Associates (Current City on-call engineering services consultant)
- Framework (City’s 2024 Comprehensive Plan Update consultant and assisted in assembling/formatting the TMP document)

CHAPTER 1.

INTRODUCTION



1.1 BACKGROUND

The City of Sammamish envisions a future transportation system that serves all users and modes of travel by offering a safe and welcoming transportation network that optimizes connectivity and efficiency, aligns with the Climate Action Plan and sustainability goals of the city, maintains fiscal sustainability, and enhances the community.

To achieve Sammamish’s vision, the transportation goals and policies in the Transportation Element of the City’s Comprehensive Plan serve as the foundation for the City’s first Transportation Master Plan (TMP). The TMP is adopted by reference into Volume 2 of the City’s Comprehensive Plan and provides the strategic framework for developing a multi-modal transportation network that will enhance greater connectivity within the City and to the region. Based on substantial technical analysis and community involvement, the TMP guides transportation decisions and investments for the next 20 years in support of the long-term vision for the city.

Since its incorporation from King County in 1999, Sammamish has grown to a population of 65,845.¹ Current challenges faced by the City include a relatively unconnected street system, limited transit service, and significant grade changes in the topography that make active modes of transportation difficult for many users. The TMP reflects the City’s need for a better transportation system. Beginning with the transportation goals and policies, a better transportation system is one that is accessible, prioritizes connectivity, and accommodates equitable access to various modes of travel, including walking, biking, public transit, and driving. This TMP provides the opportunity for Sammamish to proactively shape its transportation vision and goals as described in the City’s Comprehensive Plan. The TMP proposes a prioritized list of projects, programs, and strategies that advances the transportation vision and goals, meets the Washington State Growth Management Act (GMA) requirements, and reflects input gathered from Sammamish community members.

1.2 PLANNING CONTEXT

The City’s Comprehensive Plan and this TMP have been developed to be consistent with transportation policy and plans that have been adopted at the State and local levels, providing prioritized projects to be included into the City’s Capital Improvements Plan and Transportation Improvement Plan. Each state, regional, and local plan are described in the following sections. Not all of the plans apply directly to Sammamish, but are provided here to give a broader background of regional transportation planning efforts. Table 2 and Table 3 in the Executive Summary cover requirements from the GMA and PSRC.

¹ According to the 2022 United States Census Bureau

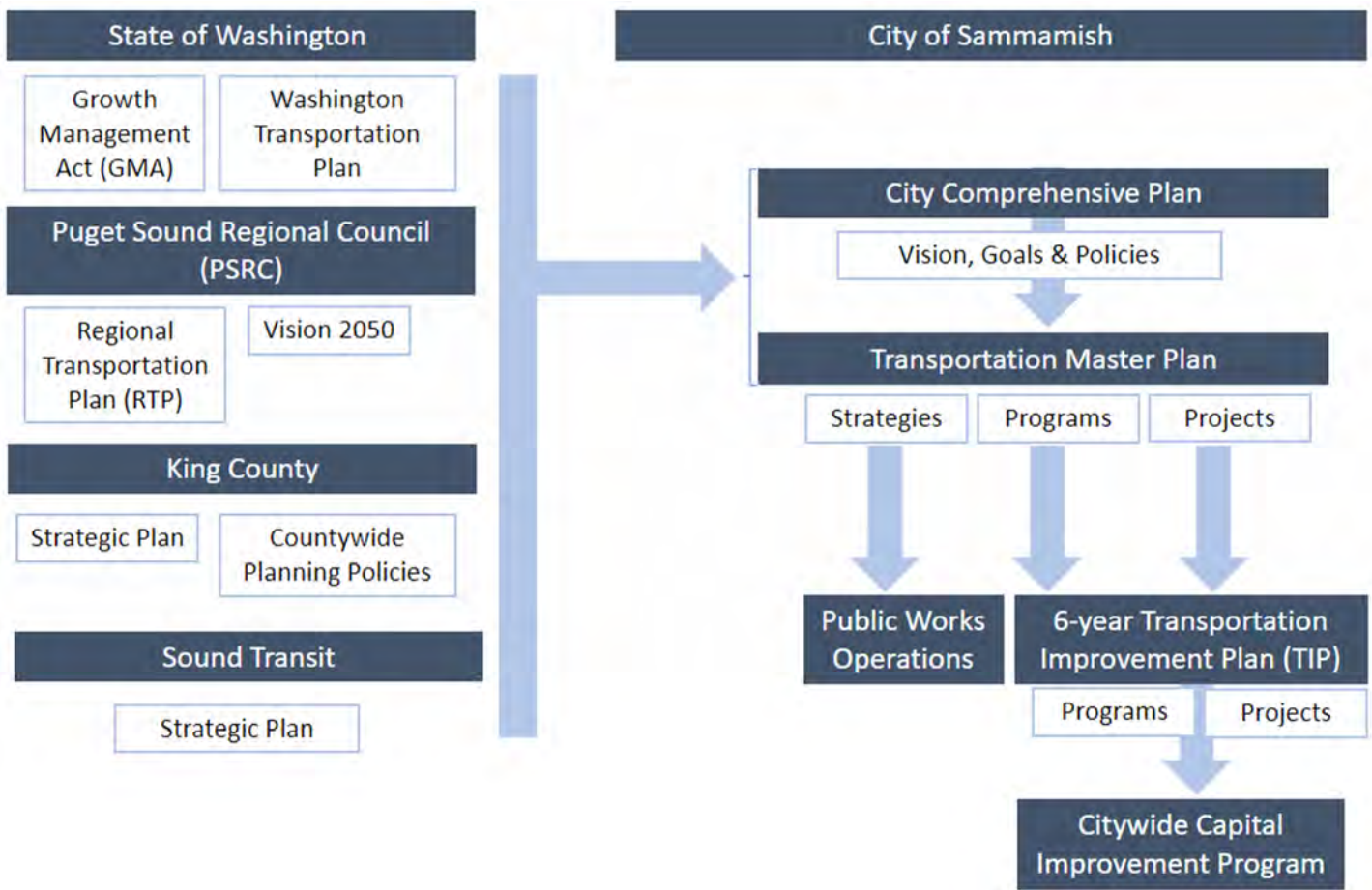


FIGURE 2. STATE, REGIONAL, AND LOCAL PLANS

1.2.1 STATE OF WASHINGTON

GROWTH MANAGEMENT ACT

- Transportation planning at the State, County and local levels is mandated by the State of Washington’s Growth Management Act (GMA) [RCW 36.70A]. The GMA requires transportation planning and system development to support the broader, long-range goals of community development. In turn providing a comprehensive framework to provide coordination and direction to manage growth and change. The GMA contains specific requirements for the preparation of a Comprehensive Plan’s Transportation Element. In addition to requiring consistency with the Land Use Element, specific GMA requirements for a Transportation Element include [RCW 36.70A.070(6)]: Land use assumptions used in estimating travel
- Inventory of facilities by mode of transport including multimodal
- Multimodal level-of-service standards to aid in determining the existing and future operating conditions of the facilities.
- Encourage development in urban areas where adequate public facilities, and services exist or can be provided in an efficient manner

- Encourage efficient multimodal transportation systems that will reduce greenhouse gas emissions and per capita vehicle miles traveled and are based on regional priorities.
- Proposed actions to bring deficient facilities into compliance with adopted level-of-service standards.
- Forecasts of multimodal transportation demand, based upon land use.
- Identification of transportation infrastructure needs to equitably meet current and future demands.
- Funding analysis for needed improvements, as well as possible additional funding sources.
- A multi-year finance plan based on identified needs.
- Identification of intergovernmental coordination efforts.
- Identification of transportation demand management strategies as available.
- Identification of improvements for pedestrian and bicycle facilities and corridors.
- An ADA transition plan for transportation consistent with American Disabilities Act.

In addition to these elements, GMA mandates that development cannot occur that causes the level of service to decline below the adopted standards unless, infrastructure improvements or strategies are concurrent with development, or a financial commitment is in place to complete the improvements or strategies within six years. In addition to construction of new capital facilities, infrastructure may be mitigated through active transportation facility improvements, increased or enhanced public transportation services, ride share programs, transportation demand management (TDM) strategies, or transportation system management (TSM) strategies.

Washington Transportation Plan

The “Washington Transportation Policy Plan (WTP) 2040 and Beyond” provides the overarching framework for state and local transportation departments to deliver an integrated, multimodal system that meets the travel needs for all. The plan presents the State of Washington’s strategy for implementation programs and budget development over a 20-year planning horizon. The WTP contains an overview of the current conditions of the statewide transportation system, as well as an assessment of the State’s future transportation investment needs. The WTP policy framework sets the course for meeting those future needs. The WTP is based on the following six transportation policy goals:

- **Economic Vitality:** To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.
- **Preservation:** To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services.
- **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system.
- **Mobility:** To improve the predictable movement of goods and people throughout Washington state, including congestion relief and improved freight mobility.
- **Environment and Health:** To enhance Washington’s quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment; and
- **Stewardship:** To continuously improve the quality, effectiveness, and efficiency of the transportation system.

The WTP addresses the essential and interconnected roles of the Regional Planning Organizations and their local jurisdictions, and the important transportation issues of tribal governments in Washington State. It highlights the role of the Washington State Department of Transportation (WSDOT) to maintain, preserve and improve the transportation system while meeting the other societal goals defined above. The WTP provides a good foundation for ensuring consistency between statewide policy objectives and the day-to-day decisions and investments carried out.

1.2.2 PUGET SOUND REGIONAL COUNCIL

VISION 2050

Puget Sound Regional Council's (PSRC) *VISION 2050* is a 30-year shared regional plan for moving toward a sustainable, more equitable, safe and efficient future in the central Puget Sound Region (King, Pierce, Snohomish, and Kitsap Counties). The plan establishes the long-range regional policy direction for meeting the region's vision and desired outcomes. The plan identifies investments to support growth and improve a multimodal transportation system for people and businesses, provides a financing plan for funding transportation improvements, and proposes strategies for reducing environmental impacts.

The Vision 2050 plan is grounded in the public's commitment to environmental stability, social equity, and efficient growth management that maximizes economic strength and mobility. The plan encourages decision-makers to make wise use of existing resources and planned transit investments while achieving the region's shared vision. Vision 2050 has set forth a transportation goal to provide the framework for long range transportation planning in the region.

Vision 2050 recognizes Sammamish as one of 42 Cities and Towns in the Puget Sound region. Cities and Towns provide important housing, jobs, commerce, and services in their downtowns and local centers. The region's 42 Cities and Towns are expected to accommodate relatively less growth than historical trends and remain relatively stable for the long term.

Transportation Goal: The region has a sustainable, equitable, affordable, safe and efficient multimodal transportation system, with specific emphasis on an integrated regional transit network that supports the Regional Growth Strategy and promotes vitality of the economy, environment, and health.

As the region continues to grow and the travel needs of people change over time, improving mobility will be key in achieving the communities desired transportation needs.

REGIONAL TRANSPORTATION PLAN (RTP)

The RTP lays out a set of steps that are designed to support VISION 2050 (adopted May 2022), implementing multicounty planning policies, and create a world-class transportation system. The plan helps to move people and goods, improve the quality of air and water, achieve greenhouse gas reduction goals, and strengthen the region's economy. The plan's ambitious programs will advance equity, help grow economic opportunity for everyone, invest in neighborhoods, and foster the innovation that is the region's hallmark. The plan was evaluated across several key performance measures and with a racial equity lens. Some key findings. By 2050:

- **Climate** - Four-Part Greenhouse Gas Strategy supports the VISION 2050 goal to reduce greenhouse gases that contribute to climate change. It identifies how the plan performs to reduce emissions and action steps to achieve the greenhouse gas reduction goals adopted by the Puget Sound Clean Air Agency.
- **Access to Transit** - Supports regional growth strategy and planning for vibrant, attractive neighborhoods with access to jobs, schools, and services.
- **Equity** - Builds goals and policies for racial and social equity, applying an equity focus to all aspects of the plan, including the evaluation of existing and future conditions and the analysis of performance measures and regional outcomes.
- **Safety** - Emphasizes achieving the state’s goal of zero deaths and serious injuries through safety in the design, planning and funding of projects
- **Mobility** - improves transportation choices across all transportation modes, providing more reliability and addressing bottlenecks and congestion through completion of key transportation corridors.
- **Local Needs and Future Visioning** – looks ahead to address future challenges with potential new investments, such as in rail, aviation, and passenger-only ferries.

Supporting the Regional Growth Strategy

The Regional Growth Strategy is built around the concept that additional transportation infrastructure and services will be prioritized for areas expected to accommodate the most growth. This includes investments to support continued growth in local and regional centers and around high-capacity transit station areas.

Supporting People

Continued growth in the region increases the need for accessible, affordable, and convenient mobility for all people in the region. Everyone should have equitable access to goods, services, and jobs.

Mobility and Accessibility

As the region continues to grow and becomes more congested, transportation investments that improve mobility are key. These include completing a regional high-capacity transit network with seamless connections to local transit systems and creating robust multimodal access to the overall transit network. It also includes continued mobility for freight and goods movement, as well as improvements to bicycle and pedestrian infrastructure, multimodal and passenger-only ferries, aviation and intercity rail systems that connect to other states and countries, and critical highway links.

Supporting the Economy

The region’s economy depends on a robust, resilient transportation system that efficiently connects people to jobs, schools, and services, and moves freight and goods.

A Sustainable Transportation System

A sustainable transportation system will address the important task of preserving and maintaining existing transportation assets and making the current system work more efficiently and safely. To build a sustainable transportation system, the RTP focuses on providing a greener transportation system, maintaining and preserving the region’s existing system, and safety and equity for all.

Protecting the Environment

The regional transportation system should be planned and designed to keep the region’s air and water healthy, sustain the region’s overall environment, assist in coordinated efforts to protect and restore the health of the region’s watersheds, and reduce overall greenhouse gas emissions to address climate change.

Innovation and Transformation

Rapidly developing technological innovations have the potential to disrupt and transform the way we think about transportation systems. These changes range from improvements to existing technologies, including Intelligent Transportation Systems, to shared mobility, improved traveler information tools, and connected or autonomous vehicles. These innovations could have an enormous influence on how and where people live, shop, work, and play, and how the region develops and designs roadways and other transportation infrastructure.

1.2.3 KING COUNTY

KING COUNTY COUNTYWIDE PLANNING POLICIES

The King County Countywide Planning Policies (CPPs) create a shared and consistent framework for growth management planning for all jurisdictions in King County in accordance with RCW 36.70A.210. The comprehensive plan for King County and the comprehensive plans for cities and towns in King County are developed from the framework that the CPPs establish.²Supporting Growth

Goal Statement: Local and regional development of the transportation system is consistent with and furthers realization of the Regional Growth Strategy³.

Mobility

Goal Statement: A well-integrated, multi-modal transportation system transports people and goods effectively and efficiently to destinations within the region and beyond⁴.

System Operations

Goal Statement: A transportation system that is well-designed and managed to protect public investments, promote equitable access, provide mobility, promote public health and safety, and achieve optimum efficiency⁵.

KING COUNTY METRO STRATEGIC PLAN FOR PUBLIC TRANSPORTATION

2 King County Countywide Planning Policies, page 6

3 King County Countywide Planning Policies, page 58

4 King County Countywide Planning Policies, page 60

5 King County Countywide Planning Policies, page 62

The King County Metro Strategic Plan for Public Transportation 2021– 2031 describes a vision for the county’s future transportation system and sets objectives, goals, and strategies consistent with other regional and countywide policies and plans, such as *Vision 2050*. King County Metro’s 10 goals are as follows:

- Invest upstream and where needs are greatest.
- Address the climate crisis and environmental justice.
- Innovate to improve mobility, complement transit, and advance equity and sustainability.
- Keep passengers, employees, and communities safe.
- Support thriving, equitable, transit-oriented communities that foster economic development.
- Improve access to mobility options.
- Provide fast, reliable, and integrated mobility services.
- Build a skilled, diverse, and well-supported workforce that has growth opportunities.
- Be responsible stewards of financial resources and invest in line with values and goals.
- Conduct deliberate and transparent community engagement.

The guiding principles to implement the King County Metro Strategic Plan goals are:

- **Equitable and fair:** Address the root causes of inequities to provide equal access to opportunities for all.
- **Financially sustainable:** Align funding, policy, and operational goals of King County government.
- **Regionally collaborative:** Engage with partners, stakeholders, and public and private organizations to achieve goals.
- **Quality local government:** Provide effective, efficient local governance and services to unincorporated areas.

1.2.4. SOUND TRANSIT

STRATEGIC PLAN

Sound Transit’s five-year Strategic Plan (2023 – 2027) outlines the agency’s vision, mission and two strategic priorities.

Vision: Enthusiastically transforming the map of Central Puget Sound. Making our transit service as iconic to our region as the Space Needle, Mount Rainer, and ferries.

Mission: Connecting more people to more places to make life better and create equitable opportunities for all.

Strategic Priorities:

Great Ride – Deliver a safe, welcoming an equitable passenger experience

One ST – Transform culture to enable unity and focus

2024 Service Plan

Sound Transit’s Annual Service Plan continuously evaluates services and proposes changes to improve passenger experience and make the most of the available resources. The plan typically outlines proposed changes to ST Express, Sounder and Link in response to changes in ridership, operating conditions, and any major high-capacity transit openings. The plan is also used to approve an “major services change” as defined by Sound Transit adopted policy and informs Sound Transit’s operating budget.

The 2024 Service Plan was adopted in two phases:

- **Phase One** Rail Service Plan approved by the Board in October 2023, with the adoption of Resolution R2023-31 authorizing changes to Link and Sounder rail service for implementation in March and August 2024.
- **Phase Two** ST Express Service Plan is now proposed to adopt major service changes to ST Express routes serving Snohomish County when the 1 Line service extends to Lynnwood in Fall 2024.

1.2.5 CITY OF SAMMAMISH

ENVISION SAMMAMISH 2044 – COMPREHENSIVE PLAN – TRANSPORTATION ELEMENT

The Transportation Element ensures that Sammamish’s transportation system supports land uses, environmental goals, and community goals envisioned by the Comprehensive Plan. To achieve Sammamish’s vision, the Transportation Goals and Policies serve as the foundation for the City’s TMP. The TMP is adopted by reference into Volume 2 of the City’s Comprehensive Plan and provides the strategic framework for developing a multi-modal transportation network that will enhance greater connectivity within the City and to the region. Based on substantial technical analysis and community involvement, the TMP guides transportation decisions and investments for the next 20 years in support of the long-term vision for the city. The TMP reflects the city’s need for a better transportation system. Beginning with the Transportation Goals and Policies, a better transportation system is one that is accessible, prioritizes connectivity, and accommodates many modes of travel, including walking, biking, public transit, and driving.

Sammamish Citywide Transit Plan

The Sammamish Transit Plan evaluates the existing and future transit system in Sammamish, taking into consideration access to transit, transit speed and reliability, and transit-related safety. The result is a list of capital projects which the City can further develop and implement to improve the transit experience in Sammamish. The Transit Plan is a result of extensive public involvement and feedback, ensuring that the voices of the community were not only heard but actively integrated into the decision-making process.

The 2024 Citywide Transit Plan identifies Transit Level of Service guidelines which are intended to guide City plans and policies. These measures are intended to align with the City’s Comprehensive Plan, and in turn assist in the foundation of the TMP.

Transportation Improvement Plan (TIP)

The TIP is a six-year planning document that consists of prioritized programs and projects that fall in the following categories: Traffic, Safety, & Non-Motorized Improvement Projects, Connection Projects, and

Corridor Improvement Projects. Each project is scored on weighted criteria presented in **Appendix C**. Projects outlined within the TMP are added to the list of projects to be scored, assisting in the guidance in decision making and investment spending.

Neighborhood Traffic Management Program

The Neighborhood Traffic Management Program (NTMP) represents the City's commitment to the safety and livability of residential neighborhoods. It is a joint effort between the community, the Public Works Department, and Sammamish City Police. The TMP's goals, policies and strategies to achieve safety, connectivity, and a more livable environment act as the foundation to the NTMP.

CHAPTER 2.

TRANSPORTATION INVENTORY & EXISTING CONDITIONS



2.1 INTRODUCTION

The primary objective of this chapter is to identify and assess existing transportation infrastructure and traffic conditions within and adjacent to the City of Sammamish. A comprehensive data collection process was completed and collected from the City of Sammamish, King County, and Washington State Department of Transportation (WSDOT). This assessment evaluates and set a baseline of performance measures, assisting policy makers, engineers and planners in transportation safety, current and future transportation infrastructure needs, and land use designations.

2.2 ROADWAY FUNCTION CLASSIFICATION

2.2.1 ROADWAY FUNCTIONAL CLASSIFICATION

The US DOT Federal Highway Administration classifies urban and rural roadways by road function. Each functional class is based on the type of service the road provides to the motoring public, and the designation is used for data and planning purposes. Land use policies and design standards can also be tied to the function class. Each class has a range of allowable lane widths, shoulder widths, curve radii, and other design features set by City of Sammamish Public Works Standards.

Based on state law, cities and counties are required to adopt a street classification system consistent with state and federal guidelines. In the State of Washington, these requirements are codified in RCW 35.78.010 and RCW 47.26.090. Each local jurisdiction is responsible for defining its transportation system into the following functional classifications: Freeway, Principal Arterial, Minor Arterial, and Collector; other community roadways are assumed to be Local Access streets. Definitions of each functional classification are provided below. **Figure 3** shows the existing functional classification of roadways in the City of Sammamish.

- **Freeways/Interstates** are multi-lane, high-speed, high-capacity roadways intended exclusively for motorized traffic. All access is controlled by interchanges and bridges separate road crossings. While I-90 to the south and SR 520 to the northwest are classified as freeways, no roadways of this designation exist within the city limits.
- **Principal Arterials** are roadways connections between major community centers and facilities that are often constructed with limited direct access to abutting land uses. Principal arterials serve high-volume corridors, carrying the greatest portion of through or long-distance traffic within a city. The selected routes should provide an integrated system for complete circulation of traffic, including ties to the major rural highways entering the urban area.
- **Minor Arterials** are roadways connecting centers and facilities within the community and serving some through traffic, while providing a greater level of access to abutting properties. Minor arterials connect with other arterial and collector roads extending into the urban area, and serve less concentrated traffic-generating areas, such as neighborhood shopping centers and schools. These roads also serve as boundaries to neighborhoods and collect traffic from collector streets. Although the

predominant function of minor arterial streets is the movement of through traffic, they also provide for considerable local traffic with origins or destinations at points along the corridor.

- **Collector Arterials** are roadways that connect two or more neighborhoods or commercial areas, while also providing a high degree of property access within a localized area. These roadways “collect” traffic from local neighborhoods and carry it to the arterial roadways. Additionally, collector arterials provide direct access to services and residential areas, local parks, churches and areas with similar uses of the land. Collector arterials may be separated into principal and minor designations according to the degree of travel between areas and the expected traffic volumes.

The Federal Highway Administration (FHWA) *Highway Functional Classification: Concepts, Criteria and Procedures – 2023 Edition*⁶ offers typical ranges for the proportion of each functional classification in an urban street network. The proportion of City of Sammamish roadway classifications relative to FHWA guidance is summarized in **Table 4**.

TABLE 4. CENTERLINE MILES OF ROADWAY BY FUNCTIONAL CLASSIFICATION

FUNCTIONAL CLASSIFICATION	EXISTING MILES (%)	FHWA TYPICAL RANGE MILES (%)
Freeway & Principal Arterial	11.8 (6%)	11-21 (5-10%)
Minor Arterial	15.5 (7%)	15-29 (7-14%)
Collector Arterial	20.4 (10%)	29-63 (14-30%)
Local Street	162.9 (77%)	97-156 (46-74%)
Total	210.6 (100%)	

The topography and development patterns within the City of Sammamish can pose limitations to adding principal or minor arterial routes. Some additional collector mileage could be added to more closely align the City functional classification system with FHWA guidelines.

⁶ <https://www.fhwa.dot.gov/planning/processes/statewide/related/hwy-functional-classification-2023.pdf>

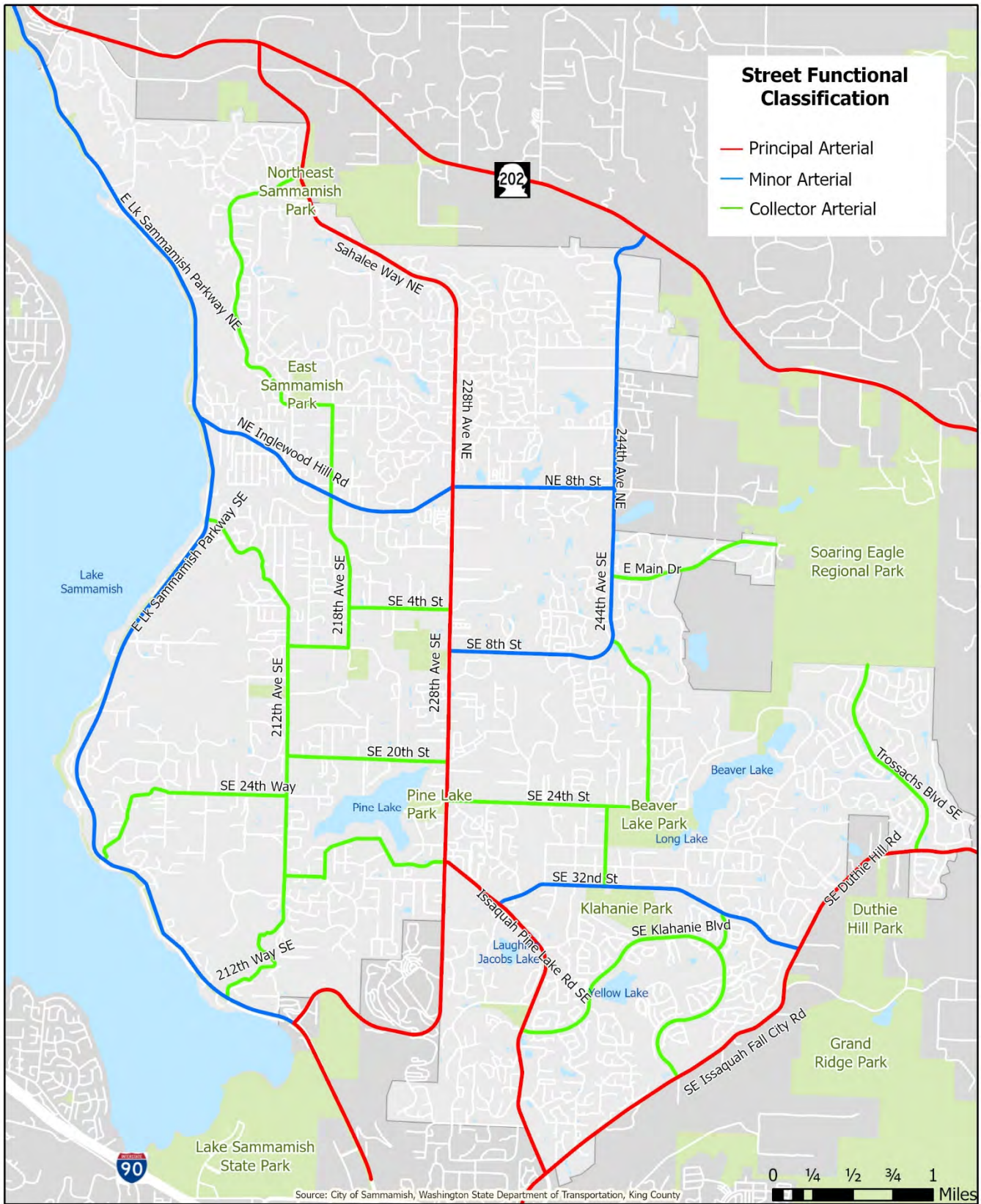


FIGURE 3. 2023 STREET FUNCTIONAL CLASSIFICATION

2.2.2 TRAFFIC VOLUMES

In order to better understand changing traffic patterns and concurrency needs, the City collects traffic counts at key locations annually. Seven-day traffic counts were collected in March 2023 at 80 locations throughout the City. Average Daily Traffic (ADT) volumes were calculated as the seven-day average counted volume. The locations and results of the ADT data collection are summarized in **Table 5** and **Figure 4**.

TABLE 5. 2023 AVERAGE DAILY TRAFFIC (ADT) VOLUME

LOCATION	2023 ADT	LOCATION	2023 ADT
<i>Principal Arterial Streets</i>			
Sahalee Way NE north of NE 50 th St	17,200	Issaquah-Pine Lk Rd east of 228 th Ave SE	11,300
Sahalee Way NE south of 37 th Way	16,100	Issaquah-Pine Lk Rd south of SE 32 nd St	11,700
Sahalee Way NE north of Sahalee Dr	14,700	Issaquah-Pine Lk Rd south of SE 44 th St	15,500
Sahalee Way NE north of NE 25 th Way	15,000	Issaquah-Pine Lk Rd south of 238 th Way SE	14,400
228 th Ave NE north of NE 12 th Pl	15,700	Issaquah-Pine Lk Rd south of SE 48 th St	17,000
228 th Ave NE north of NE 8 th St	16,500	Issaquah-Fall City Rd east of Iss.-Pine Lk Rd	19,700
228 th Ave SE south of NE 8 th St	19,800	Issaquah-Fall City Rd west of Klahanie Dr SE	17,600
228 th Ave SE south of SE 4 th St	20,100	Issaquah-Fall City Rd east of Klahanie Dr SE	11,600
228 th Ave SE south of SE 8 th St	20,600	Issaquah-Fall City Rd south of Duthie Hill Rd	10,400
228 th Ave SE south of SE 10 th St	23,100	SE Duthie Hill Rd north of Issaquah-FC Rd	10,100
228 th Ave SE south of SE 20 th St	24,400	Duthie Hill Rd north of SE Iss.-Beaver Lk Rd	11,500
228 th Ave SE south of Issaquah-Pine Lk Rd SE	13,900	SE Duthie Hill Rd west of 270 th Ave SE	10,800
228 th Ave SE south of SE 32 nd St	14,400	SE 43 rd Way NE north of E Lk Samm. Pkwy	15,000
<i>Minor Arterial Streets</i>		<i>Minor Arterial Streets</i>	

LOCATION	2023 ADT	LOCATION	2023 ADT
E Lk Sammamish Pkwy south of 187 th Ave NE	15,300	NE Inglewood Hill Rd west of 222 nd PI NE	9,000
E Lake Sammamish Pkwy north of NE 33 rd PI	15,000	NE 8 th St east of 228 th Ave NE	9,500
E Lake Sammamish Pkwy south of NE 30 th Ct	14,700	NE 8 th St west of 244 th Ave NE	7,600
E Lake Sammamish Pkwy north of NE 18 th PI	15,000	SE 8 th St east of 228 th Ave SE	7,400
E Lk Samm. Pkwy south of Inglewood Hill Rd	10,200	244 th Ave NE south of SR 202	7,000
E Lk Samm. Pkwy south of Louis Thompson Rd	7,300	244 th Ave NE north of NE 8 th St	8,000
E Lake Sammamish Pkwy north of SE 24 th Way	7,400	244 th Ave NE north of NE 3 rd PI	7,000
E Lake Sammamish Pkwy south of SE 32 nd St	8,400	244 th Ave SE north of SE Windsor Blvd	5,500
E Lake Sammamish Pkwy south of SE 33 rd St	8,200	SE 32 nd St east of Issaquah-Pine Lk Rd SE	5,700
E Lk Sammamish Pkwy south of 212 th Ave SE	12,900	SE 32 nd St west of 244 th Ave SE	4,700
E Lake Sammamish Pkwy south of 43 rd Way	26,200	SE 32 nd St west of 244 th Ave SE	6,200
NE Inglewood Hill Rd east of E Lk Samm. Pkwy	8,500	Iss.-Beaver Lake Rd west of SE Duthie Hill Rd	4,800
<i>Collector Arterial Streets</i>		<i>Collector Arterial Streets</i>	
205 th PI NE south of NE 37 th Way	2,500	SE 20 th St east of 212 th Ave SE	4,400
216 th Ave NE south of NE 16 th St	3,700	SE 28 th St east of 218 th Ave SE	1,600
217 th Ave NE north of NE 1 st St	2,400	E Main Dr east of 244 th Ave NE	2,500
218 th Ave SE south of SE 4 th St	2,400	SE Windsor Blvd east of 244 th Ave SE	2,800
SE 8 th St east of 214 th Ave SE	2,400	248 th Ave SE north of SE 14 th St	2,900

LOCATION	2023 ADT	LOCATION	2023 ADT
212 th Ave SE south of SE 8 th St	4,700	248 th Ave SE north of SE 24 th St	3,000
212 th Ave SE north of NE 20 th St	4,900	SE 24 th St east of 228 th Ave SE	6,300
212 th Ave SE south of SE 20 th St	4,800	SE 24 th St west of 244 th Ave SE	5,200
SE 20 th St east of 212 th Ave SE	4,400	SE 24 th St east of 244 th Ave SE	4,000
SE 24 th St west of 212 th Ave SE	1,700	244 th Ave SE north of SE 32 nd St	5,500
SE 24 th Way east of E Lake Sammamish Pkwy	1,000	256 th Ave SE south of Issaquah-Beaver Lk Rd	4,000
212 th Ave SE south of SE 32 nd St	4,200	SE Klahanie Blvd east of Issaquah-Pine Lk Rd	3,800
212 th Way SE east of E Lake Sammamish Pkwy	4,200	SE Klahanie Blvd east of SE 37 th St	2,300
SE 32 nd St west of 228 th Ave SE	1,000	SE Klahanie Blvd west of 256 th Ave SE	2,800
Louis Thompson Rd east of E Lk Samm. Pkwy	3,900	Klahanie Dr SE north of Issaquah-Fall City Rd	10,200

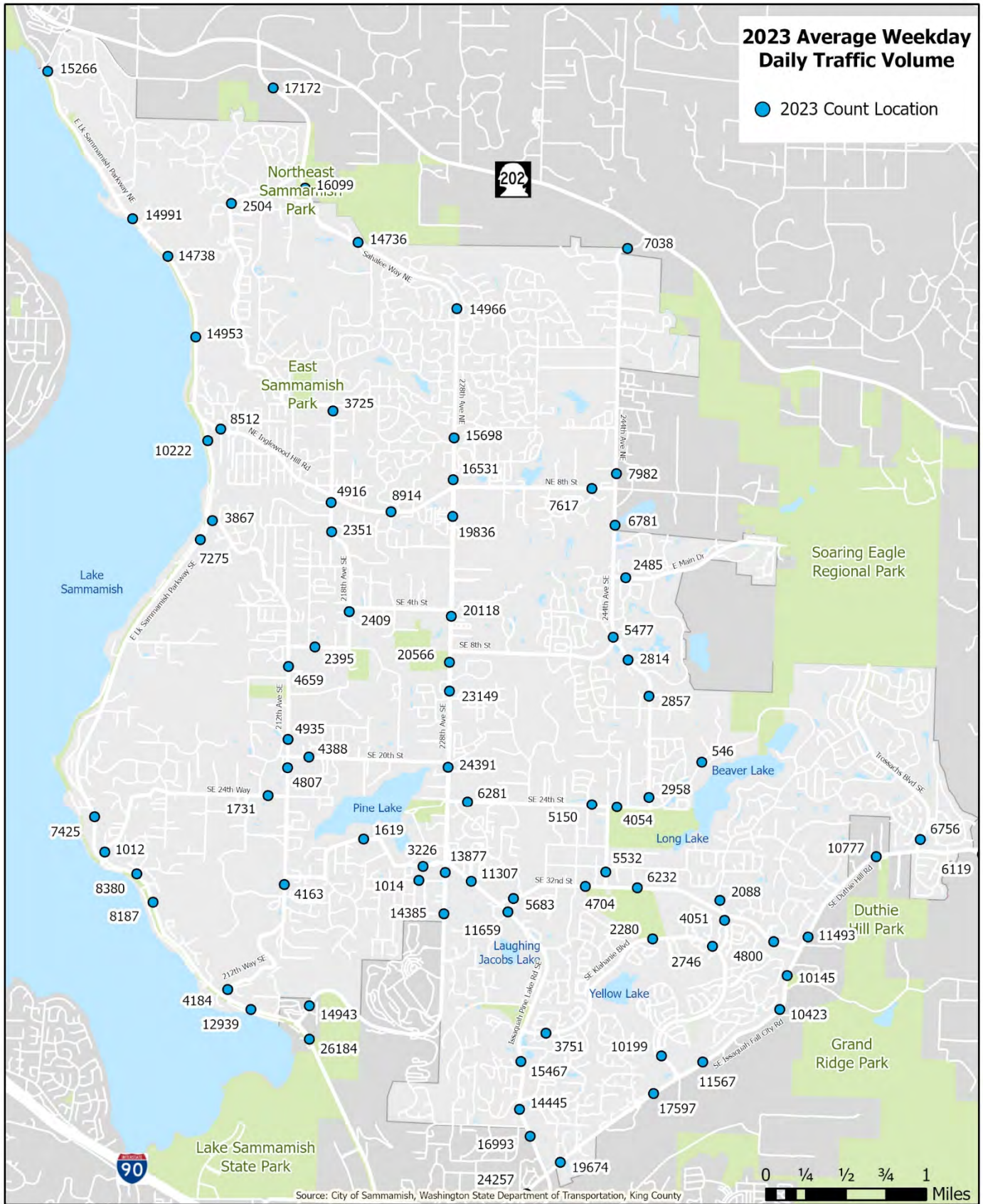


FIGURE 4. 2023 AVERAGE DAILY TRAFFIC VOLUME

2.3 ROADWAYS IN AND AROUND THE CITY – MANAGEMENT, DEFINITIONS, AND VOLUMES

Sammamish has adopted standards for development of City streets, as documented in the *2016 Public Works Standards* (December 31, 2016). The Goals and Policies of the City’s Comprehensive Plan Transportation Element relate street design to the desires of the community and advise that design be at a scale commensurate with the function that the street serves. Guidelines are therefore important to provide designers with essential elements of street design as desired by the community, allowing the City street network to provide mobility and accessibility for travelers of all modes.

2.3.1. PAVEMENT MANAGEMENT PROGRAM

PURPOSE

Roadways deteriorate overtime due to vehicle loading, traffic volume, and environmental effects. Poor pavement conditions can lead to traffic collisions; increased noise pollution; and higher maintenance/preservation costs. Sammamish strives to maintain the public roadway network at good condition by utilizing a Pavement Management System (PMS) by monitoring conditions and planning and completing preservation projects.

A PMS, originally developed by the Army Corps of Engineers, is a methodology for maintaining road surfaces by systematically analyzing pavement life cycles and pavement ratings. This information is beneficial in determining appropriate preservation treatment methods, application timing, and future funding needs to meet a level of service acceptable to the community.

PAVEMENT MANAGEMENT SYSTEM

Sammamish developed its pavement management system soon after incorporation, performing the first network pavement condition survey in 2003. Subsequent total network surveys have been performed on average every four years. Sammamish utilizes computer software to calculate and store the pavement distress data, calculate condition values, and run funding and treatment scenarios to budget and plan for future projects.

The City follows similar pavement management guidelines as other transportation departments. Doing so by evaluating pavement conditions based on type, pavement quantity, and severity of distresses. Pavement distress types vary and are summarized in **Table 6**. When reviewing pavement conditions, the distress type is used to calculate a Pavement Condition Index (PCI). The PCI is a rating score ranging from 1 to 100 (failure to excellent). PCI values are further grouped into condition categories relating to the level of effort needed, cost benefit analysis and treatment type, to restore the pavement to a like new condition. This information is then used to forecast funding needs and determine maintenance projects with the greatest impact to the network’s overall targeted level of service.

TABLE 6. ASPHALT PAVEMENT DISTRESS TYPES

Alligator Cracking	Potholes
Block Cracking	Rutting
Bleeding	Weathering
Edge Cracking	Raveling
Transverse and Longitudinal Cracking	Bumps and Sags, Corrugations and Depressions
Patching and Utility Cut Patching	

Condition categories correlate to the amount of work or treatment type needed and can be described as follows:

- I. **Maintenance** – streets in good condition with a PCI range of 100-70. Typical treatment measures include localized areas of pavement repair, pavement sealing (crack seal, slurry seals), ultra-thin HMA overlays.
- II. **Resurfacing** – streets in fair condition with a PCI range of 70-50. Typical treatment measures include thin HMA overlays to provide some improvement to structural integrity and may include minor amounts of local pavement repair.
- III. **Restoration** – streets in poor condition with a PCI range of 50-25. Typical treatment measures include thick HMA overlays to restore structural integrity and may include localized pavement repairs, minor safety improvements, and minor shoulder widening to provide section continuity.
- IV. **Rehabilitation** – streets in very poor condition with a PCI range of 25 to 1. Typical treatment measures include removing and replace existing pavement and base materials or adding enough new pavement to match or exceed the existing pavement thickness and may include the widening and improvement of shoulders, subsurface repairs, and drainage improvements.

The condition categories are general in nature. All streets need to be evaluated closely to determine the correct treatment. Figure 5 shows general limits and overlapping of treatment types based on pavement condition and age.

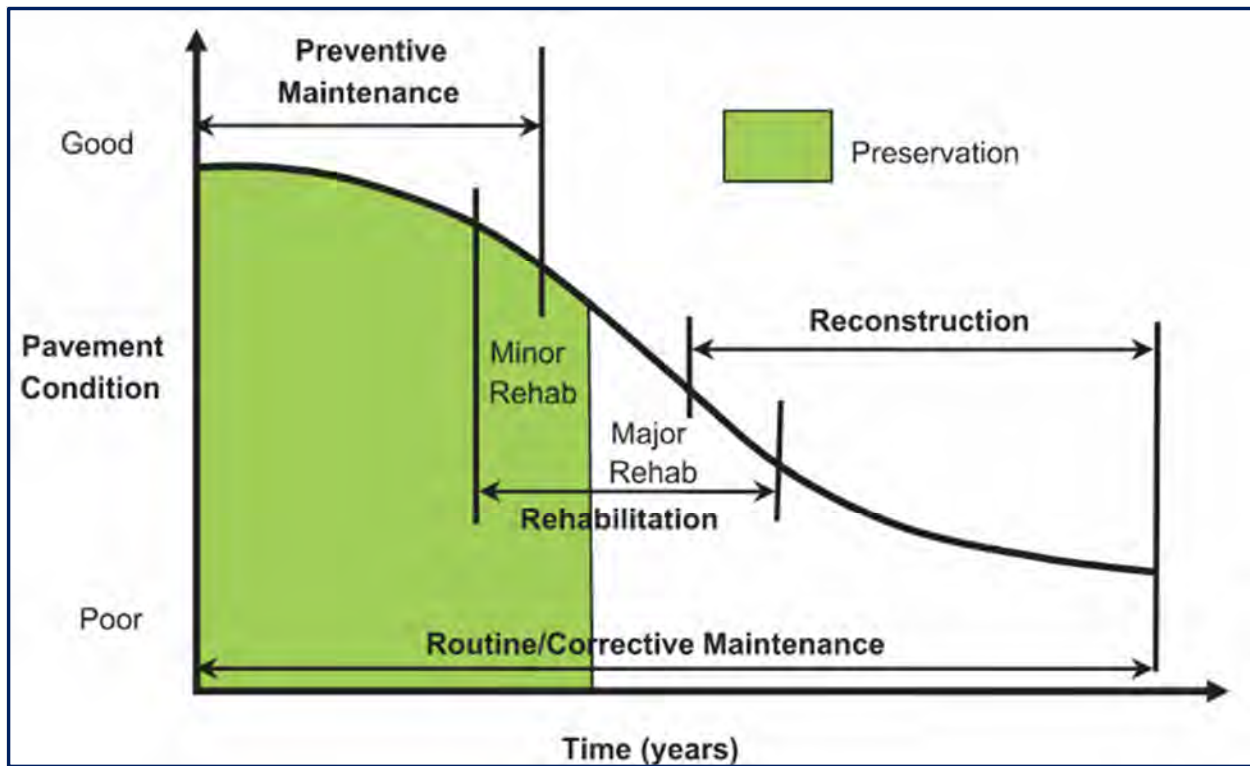


FIGURE 5. PRESERVATION ACTIVITIES BY CONDITION AND AGE

PAVEMENT NETWORK

Sammamish currently has just over 200 miles of hot-mix-asphalt (HMA) paved roadway; seven miles of composite roadway (HMA over concrete); less than one-half mile of gravel roadway, and zero miles of concrete roadway. The most recent pavement network condition assessment was performed in 2021. **Table 7** is from the 2021 condition assessment and lists pavement information and PCI values by functional classification.

TABLE 7. PAVEMENT INFORMATION BY STREET CLASSIFICATION

FUNCTIONAL CLASS / PAVER DESIGNATION	NO. OF SECTIONS	NO. OF CENTERLINE MILES	PAVED AREA		WEIGHTED AVERAGE PCI
			SQUARE YARDS	SHARE (%)	
Primary Arterial (A)	82	11.8	272,000	8%	77
Minor Arterial (B)	155	15.5	414,000	12%	83
Collector Arterial (C)	101	20.4	221,000	6%	83
Local Street (E)	2,202	162.9	2,518,000	74%	87
Total	2,540	210.6	3,425,000	100%	86

The weighted average PCI has varied since tracking began, ranging from 68 to 86. **Figure 6** shows the network PCI of past assessments. Sammamish’s pavement condition is currently at optimum. This can be primarily attributed to consistent funding for the past decade and better constructed roads in the past 30 years (much of Sammamish’s local road network was built post-1970s). **Figure 6** also shows the potential PCI trends looking to 2025 and beyond.

Street pavement widths vary based on the number of through lanes, auxiliary lanes, and shoulders. Because of this variability, pavement areas are often shown by Equivalent Lane Miles (LM) which is the square yard area of pavement divided by an 11-foot-wide lane. The network’s total amount of LM is approximately 531 miles. **Figure 7** is a map of the City streets colored by condition category, based on the 2021 Pavement Condition Assessment. There have been no major changes to the City’s pavement conditions since 2021.

Pavement Condition Index (PCI) Trends

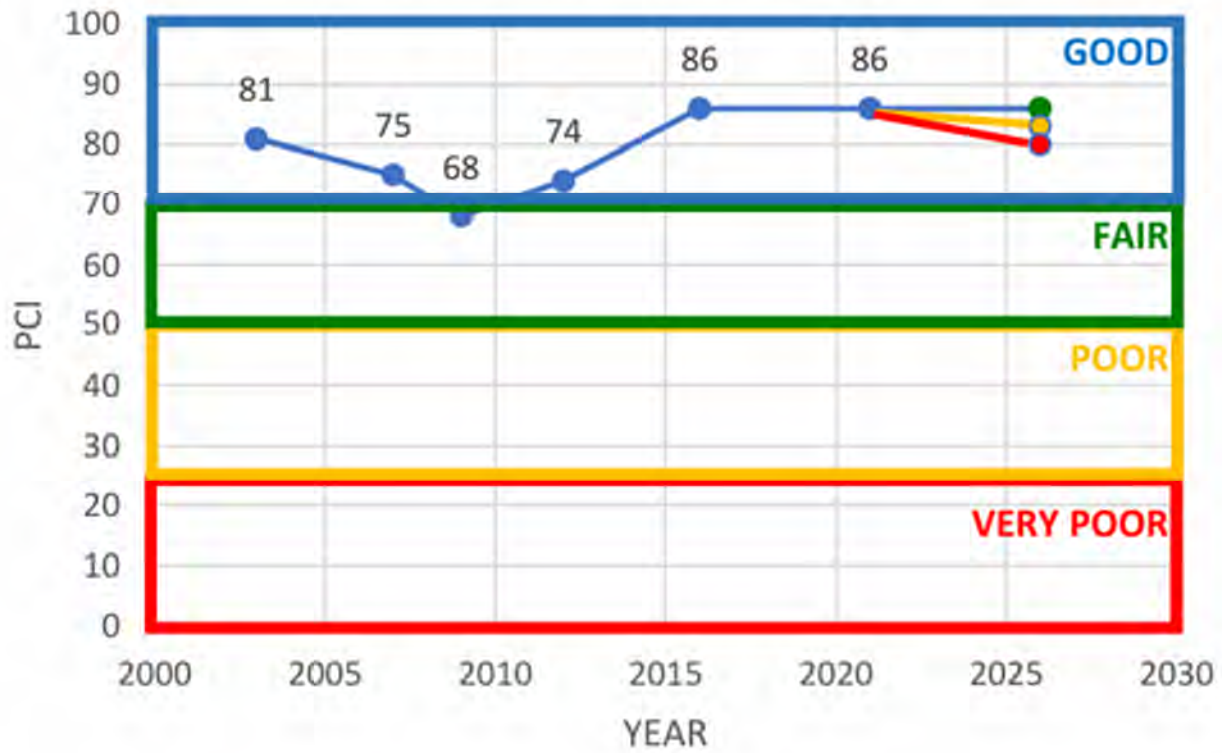


FIGURE 6. PAVEMENT CONDITION TRENDS BY YEAR

2.3.2 FREIGHT ROUTES

In Washington State, the highway and roadway system are rated according to the amount of freight and goods that are carried by truck on the system. The Washington State Freight and Goods Transportation System (FGTS) is a ranking of roads in Washington State by annual gross freight tonnage carried. The FGTS classification system is as follows:

- T-1: Over 10 million tons per year
- T-2: Between 4 and 10 million tons per year
- T-3: Between 300,000 and 4 million tons per year
- T-4: Between 100,000 and 300,000 tons per year
- T-5: At least 20,000 tons carried in a 60-day period and less than 100,000 tons per year

The FGTS system is affected by changes in the economy, international trade, and the transportation industry such as changes in truck travel patterns, cargoes, and tonnages. Revisions to the FGTS routes and tonnage classifications are developed by the agency having jurisdiction over the roadway segment.

Freight travel within the City of Sammamish is limited, with the primary movement of goods being retail oriented in commercial developments. There are no significant industrial, manufacturing or import/export freight generators in the city, however, there are existing sorting facilities in nearby cities, FedEx in the City of Issaquah and UPS in the City of Redmond. Freight traffic uses the arterial corridors 228th Ave/Sahalee Way, East Lake Sammamish Parkway, Issaquah-Pine Lake Road, and Issaquah-Fall City Road. Each of the above routes carries over 2 million tons of truck freight annually. The current Washington FGTS system identifies a total of 14 freight routes in the city, each of which are classified T-3 freight routes. Freight routes and their corresponding FGTS classification are summarized in **Table 8** and shown graphically in **Figure 8**.

TABLE 8. 2023 FREIGHT AND GOODS TRANSPORTATION SYSTEM (FGTS) ROUTES

ROUTE	FGTS CLASS	AVERAGE DAILY TRUCK TRAFFIC	ANNUAL FREIGHT TONNAGE
228 th Ave/Sahalee Way (N City limit to SE 40 th St)	T-3	1,203	3,531,000
E Lake Sammamish Pkwy (N City limit to S City limit)	T-3	859	2,588,750
Issaquah-Pine Lake Rd (228 th Ave to I-FC Rd)	T-3	813	2,874,750

ROUTE	FGTS CLASS	AVERAGE DAILY TRUCK TRAFFIC	ANNUAL FREIGHT TONNAGE
Issaquah-Fall City Rd (I-PL Rd to Duthie Hill Rd)	T-3	797	2,629,000
SE 40 th St (E Lk Samm Pkwy to 228 th Ave)	T-3	616	1,778,700
Duthie Hill Rd (I-FC Rd to City limit)	T-3	543	1,698,000
244 th Ave NE (N City limit to NE 8 th St)	T-3	494	1,753,000
Inglewood Hill Rd (E Lk Samm Pkwy to 228 th Ave)	T-3	371	1,117,750
NE 8 th St (228 th Ave NE to 244 th Ave NE)	T-3	396	1,377,000
SE 20 th St (212 th Ave SE to 218 th Ave SE)	T-3	241	731,750
SE 32 nd Way (I-PI Rd to Duthie Hill Rd)	T-3	268	698,000
212 th Ave NE (Louis Thompson Rd to 212 th Way)	T-3	223	590,000
Louis Thompson Rd (E Lk Samm Pkwy to 212 th Ave)	T-3	176	489,250
216 th Ave NE (Inglewood Hill Rd to NE 20 th Way)	T-3	124	353,750

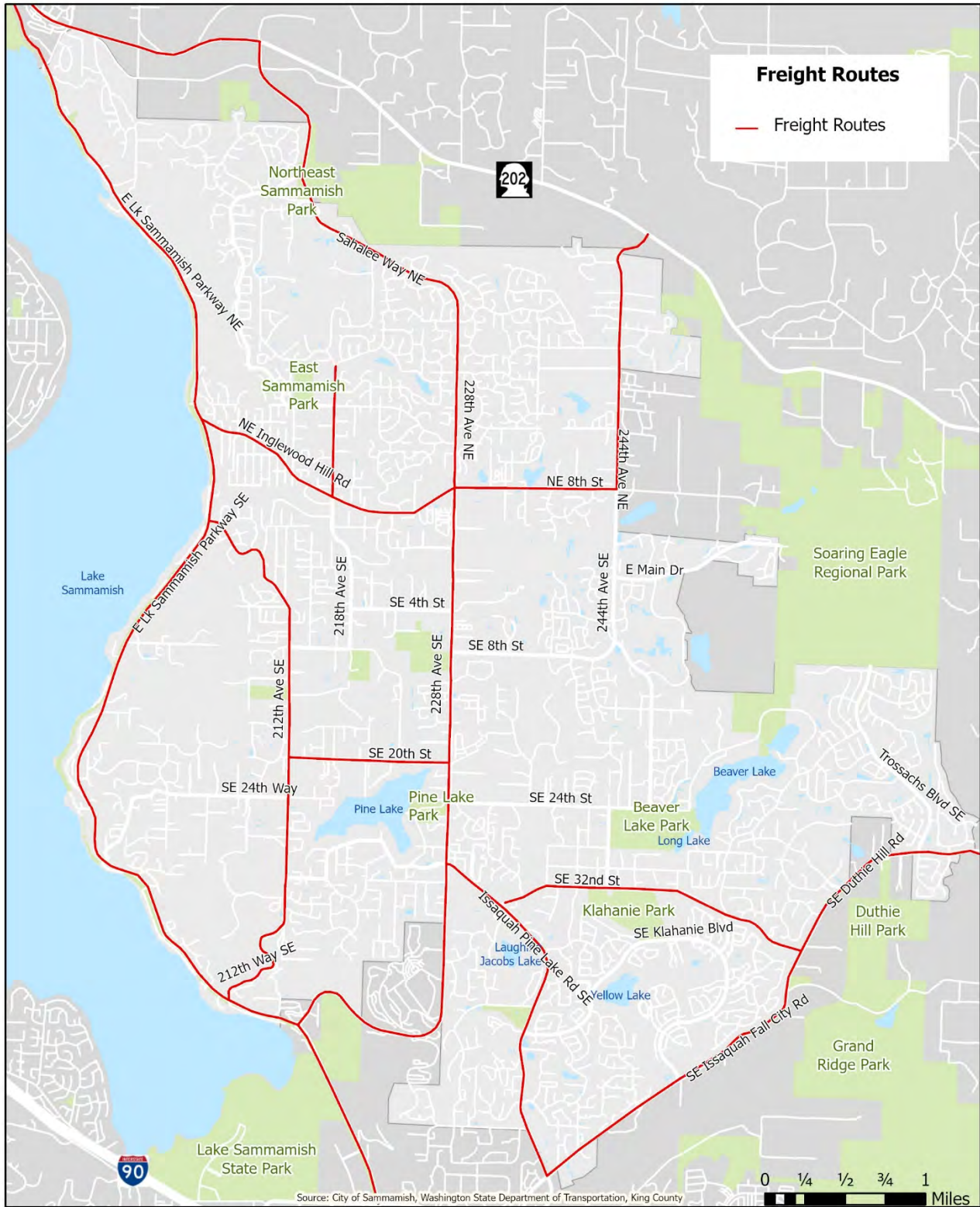


FIGURE 8. 2023 FREIGHT ROUTES

2.3.3 STATE HIGHWAYS

IDENTIFICATION OF STATE HIGHWAYS

No state highways are located within Sammamish City limits. However, three State-controlled highways, Interstate 90 (I-90), State Route 520 (SR 520), and State Route 202 (SR 202), run near or adjacent to Sammamish, these routes act as the primary means of accessing into and out of the city. Improvements to these facilities will highly impact traffic conditions in Sammamish and in turn, conditions on the highways will be impacted by transportation conditions and improvements in Sammamish.

I-90 is a limited-access freeway that consists of three lanes in each direction and runs east-west, approximately one mile south of the southern Sammamish City limits serving as the primary east-west freeway for regional travel within and beyond western Washington.

SR 520 is a limited access freeway that consists primarily of two to three lanes in each direction and runs east west between the Cities of Redmond, Bellevue and Seattle. There are HOV lanes present along various stretches of this highway, but these lanes are not continuous.

SR 202, which runs adjacent to the northern Sammamish City limits, connects to SR 520 west of the city, consisting of one lane in each direction, widening to two lanes in each direction west of Sahalee Way. This transportation facility serves as the primary east-west highway alternative to I-90; providing direct connection to the Cities of Redmond, Bellevue, Kirkland, and Seattle to the west, and to the Cities of Snoqualmie and North Bend to the east.

Both I-90 and SR 520 connect directly to Interstate 405 (I-405) and Interstate 5 (I-5) to the west.

HIGHWAYS OF STATEWIDE SIGNIFICANCE

In 1998, Highways of Statewide Significance (HSS) legislation was passed by the Washington State Legislature and codified as RCW 47.06.140. Highways of Statewide Significance are those facilities deemed to provide and support transportation functions that promote and maintain significant statewide travel and economic linkages. The legislation emphasizes that these significant facilities should be planned from a statewide perspective (WSDOT 2004). Thus, level-of-service requirements for HSS highways are established by WSDOT, not by local standards.

Both I-90 and SR 520 have been designated HSS and thus is controlled by Washington State LOS requirements.

2.4 EXISTING TRANSPORTATION FACILITIES INVENTORY

2.4.1 CONNECTIVITY

Transportation system connectivity is one of several concepts commonly used in system performance measurement to describe the ease with which people can travel across the region. At its simplest level, network connectivity addresses the question, "Can I get where I want to go easily and can I do so safely?" Transportation systems lack of connection can hinder mobility for all modes of transportation, increase the length of time to travel, increase pollution, slow important emergency response and increase equitable disparities.

Connecting routes from other areas of the City can be challenging when there is a lack of infrastructure due to a disconnected street network, and in some cases topography challenges. The City of Sammamish inherited its street and sidewalk network from King County when the City incorporated in 1999. Though many upgrades throughout Sammamish communities have occurred since incorporation, many barriers and gaps still exist. Dense areas with commercial land uses and streets that serve schools are particularly important for safe and efficient movement of people and goods.

2.4.2 SAMMAMISH STREET NETWORK CHALLENGES

With the incorporation of Sammamish in August 1999, the City inherited a roadway network that was semi-rural in nature that lacked connectivity to facilitate movement within and out of the city. Current challenges faced by communities include a relatively unconnected street system, roads that were built to rural standards, and significant grade changes to the topography that makes active modes of transportation difficult for many users.

REGIONAL CONNECTIVITY

Only a few streets provide meaningful connections to the regional network. These include:

- 228th Avenue SE/Sahalee Way NE/Issaquah Pine Lake Road, which provides the north-south connection through central Sammamish to Redmond and State Route (SR) 202 to the north and Issaquah, Interstate 90 (I-90) via SE 43rd Way, and Issaquah-Pine Lake Road/Issaquah-Fall City Road to the south.
- East Lake Sammamish Parkway provides a scenic north-south alternative connecting to Redmond and Issaquah. The Parkway skirts the far west side of the City along the lake and off the plateau.
- 244th Avenue NE, which connects to SR 202 in the northeast portion of the city. Both Sammamish and unincorporated King County abut 244th Avenue NE.

- SE Issaquah-Fall City Road/SE Duthie Road, which connects to East Lake Sammamish Parkway just north of the I-90 Front Street interchange in Issaquah and SR 202 to the east in unincorporated King County.

Furthermore, the full extent of these connections is not within the City’s jurisdiction. For example, the north ends of Sahalee Way NE and 244th Avenue NE are in unincorporated King County yet the traffic signals at those two intersections are under the Washington State Department of Transportation’s control. Portions of East Lake Sammamish Parkway are in Redmond and Issaquah, portions of SE 43rd Way are in Issaquah, and SE Issaquah Fall City Road is in Issaquah and unincorporated King County. Thus, many of the most critical bottlenecks that impact Sammamish residents’ ability to “get off the plateau” are not within the City’s direct control.

LOCAL CONNECTIVITY

In-town circulation is impacted by a disconnected roadway system that results in traffic funneling onto just a few streets. In addition to the limited regional connections described above, there are a limited number of continuous east-west and north-south options within Sammamish. This is attributed to a roadway network that was built incrementally over time by private development, usually in the form of subdivisions centered on cul-de-sacs and dead-end streets, as seen in Figure 9. In other cases, streets are blocked by barricades barring access or are bifurcated by natural features. A lack of connectivity can result in drivers having relatively few choices and longer travel times during peak hours.

Rural Road Standards

Upon incorporation in 1999, the City inherited a roadway network that was built to rural or non-urban standards either by King County or private development. In general, these roadways are not built to standards that could be expected in a city – many streets lack amenities like curbs, gutters, sidewalks, bike facilities, and lighting. Instead, these roads only have asphalt travel lanes, unimproved shoulders, and ditches for stormwater conveyance.

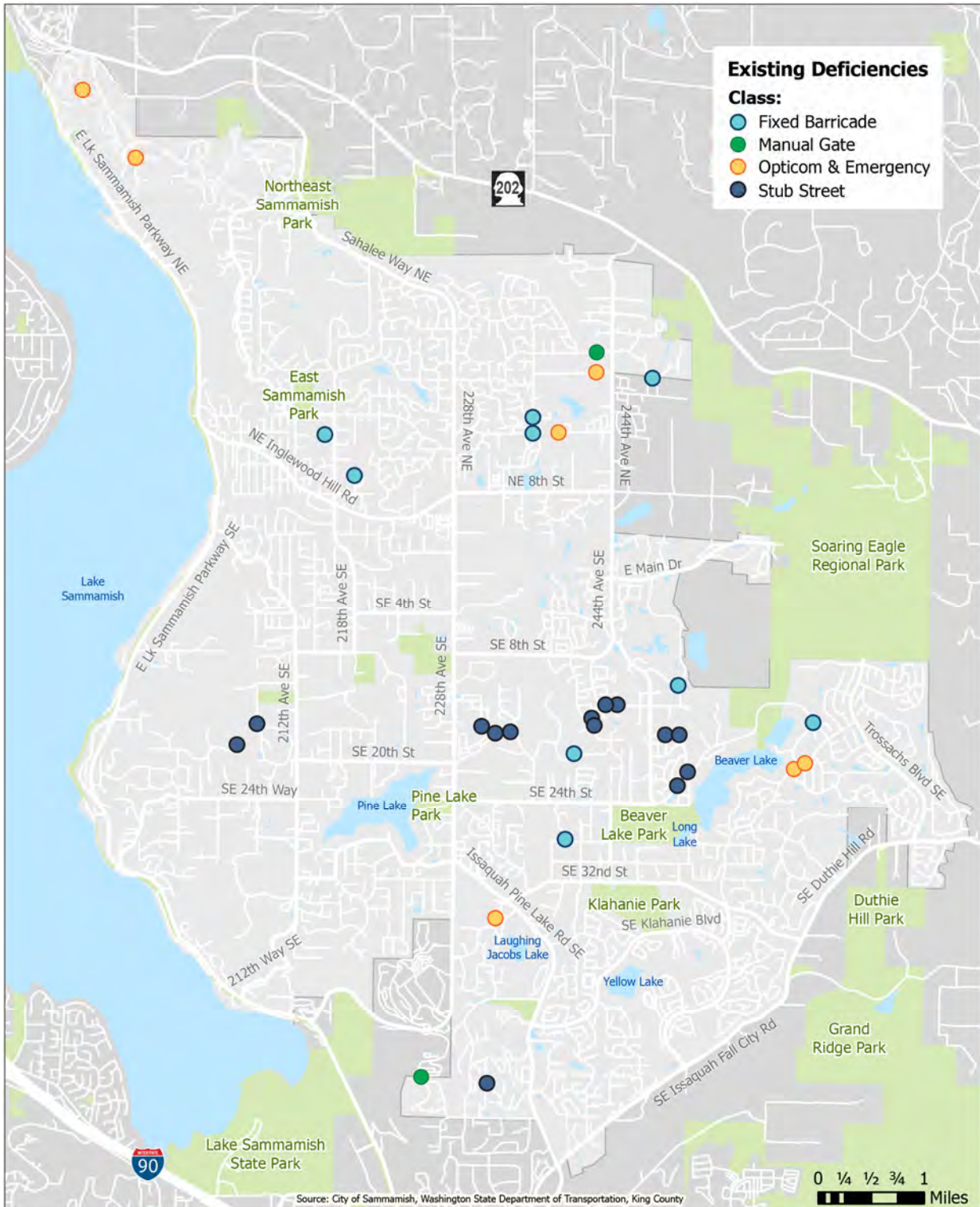


FIGURE 9. EXISTING DISCONNECTS

2.4.3 INTERSECTIONS

INTERSECTION INVENTORY

The City street network includes a total of 25 signalized intersections, 13 roundabouts, and nine all-way stop controlled intersections within City limits. Of the nine all way stop controlled intersections, two include overhead flashers to increase driver awareness of the intersection control. The locations of signalized, roundabout, and all-way stop intersections are illustrated in **Figure 13**. These intersections serve a key role in the mobility of Sammamish drivers.

VEHICULAR TURNING MOVEMENT COUNTS

Intersection turning movement counts were collected from 7:00 AM to 9:00 AM and from 4:30 PM to 6:30 PM at 54 locations in and near Sammamish on Thursday, March 16 and Tuesday, March 21, 2023 showing in Figure 10Figure 11Figure 12. Turning movement counts were analyzed to identify the peak hour of volume at each counted intersection during each two-hour count period. The peak hour is defined as the four consecutive 15-minute intervals with the highest volume during each count period. The morning peak hour typically corresponds to the hour of highest commuter and school-related traffic, while the afternoon peak hour typically corresponds to hour of highest commuter and shopping-related traffic (often characterized as the evening “rush hour”). Intersection peak hour counts represent the basis for the intersection operations analyses described later in this document.

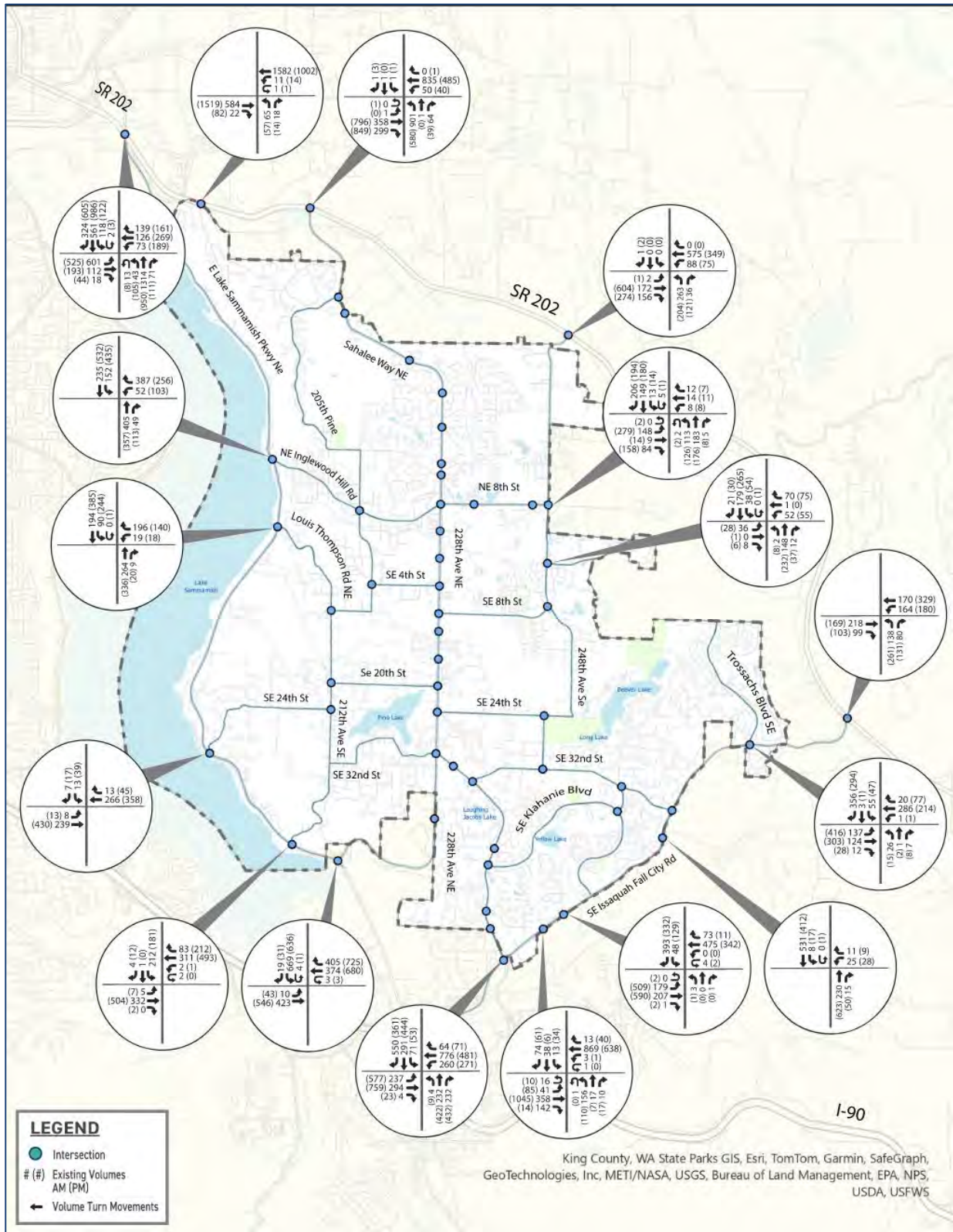


FIGURE 10. 2023 INTERSECTION MOVEMENTS

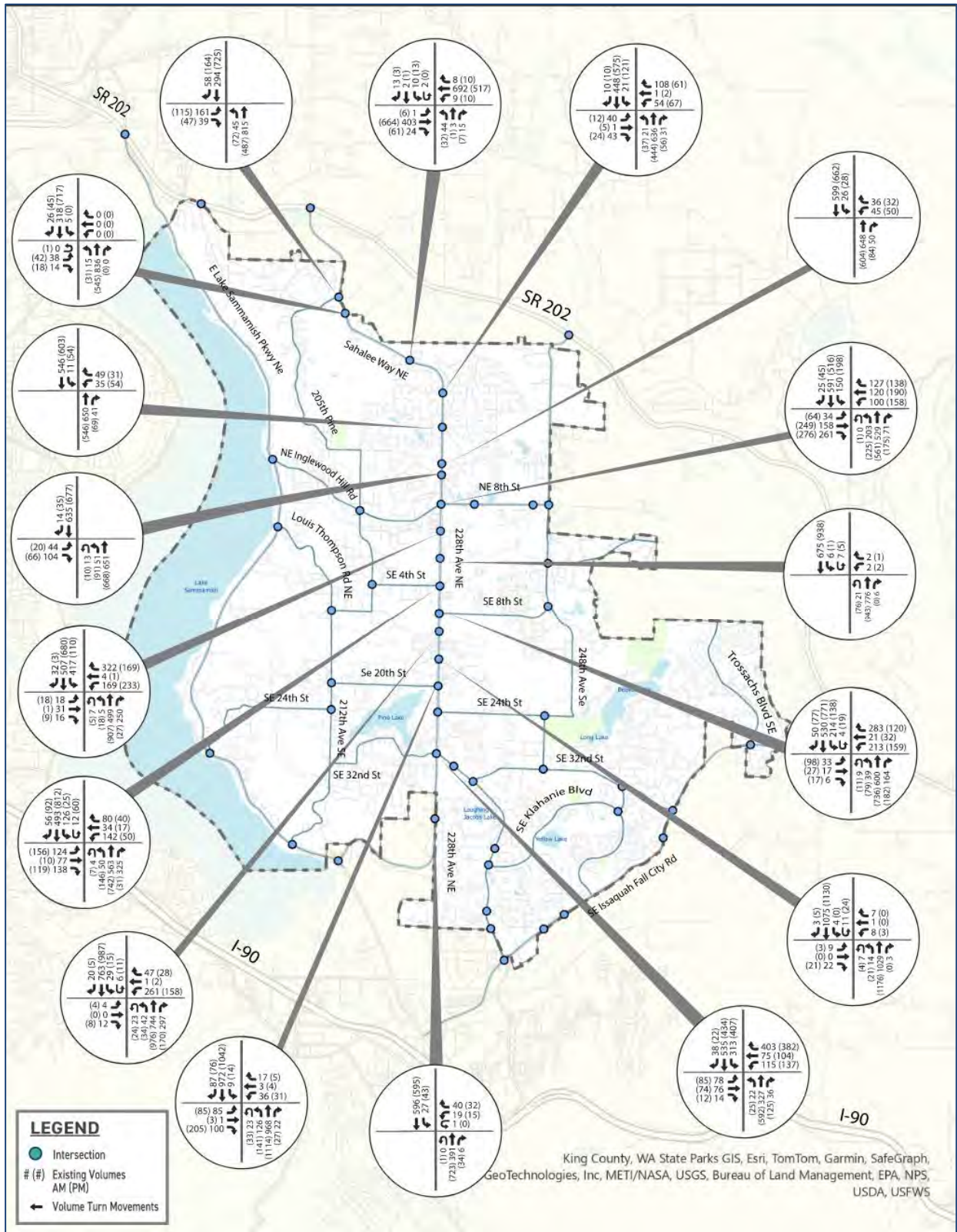


FIGURE 11. 2023 INTERSECTION MOVEMENTS

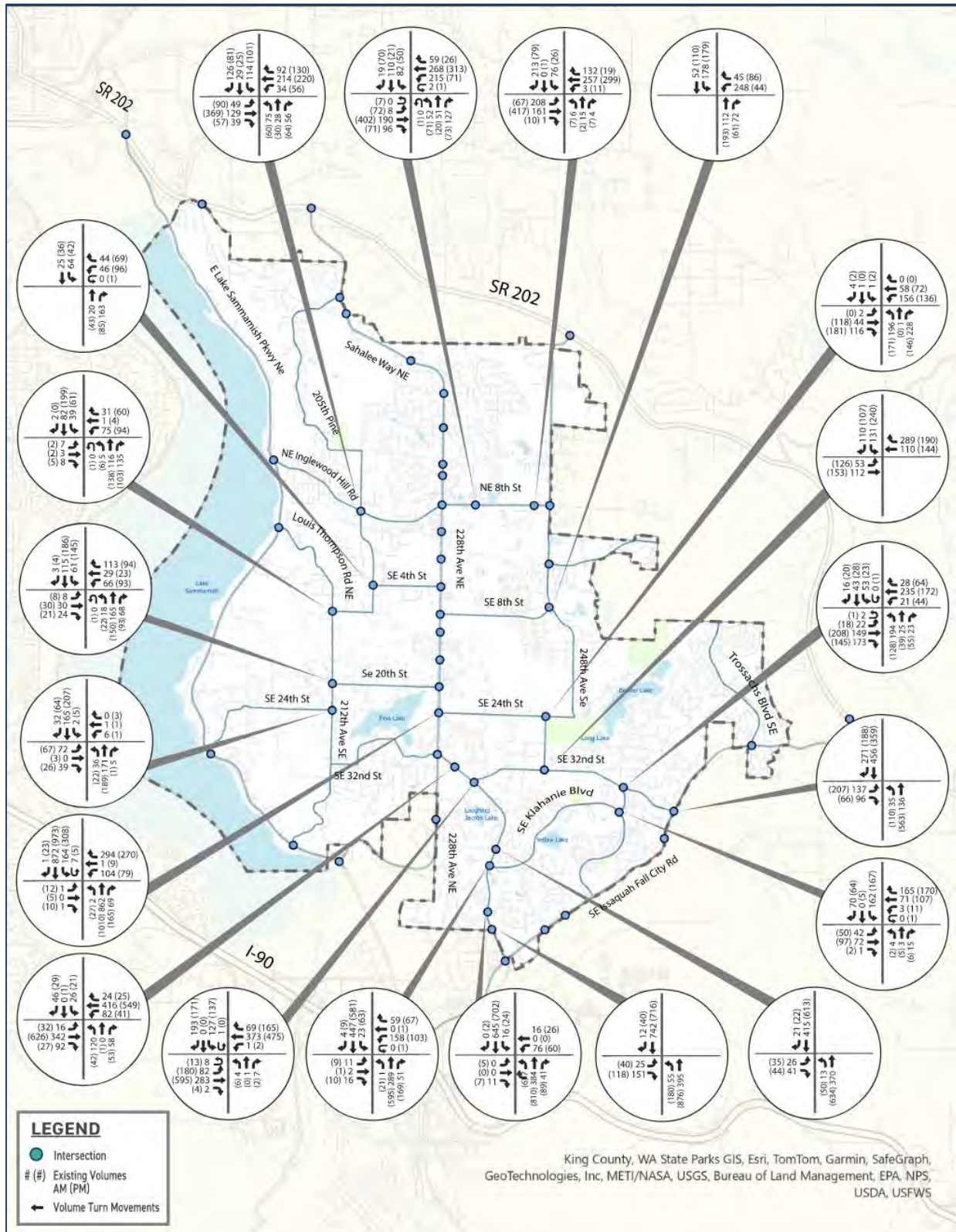


FIGURE 12. 2023 INTERSECTION MOVEMENTS

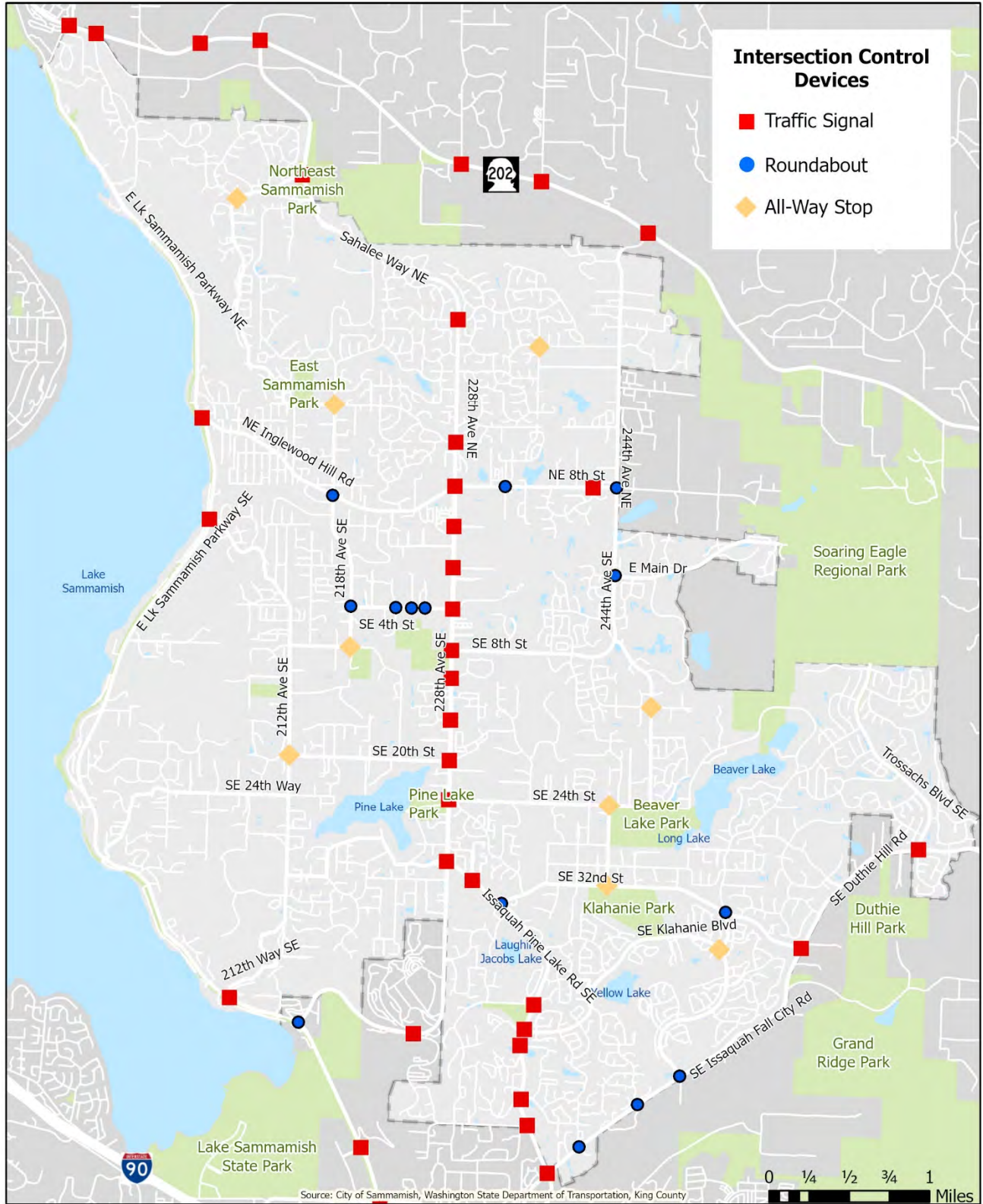


FIGURE 13. 2023 INTERSECTION CONTROL DEVICES

2.4.4 TRAFFIC CALMING INVENTORY

The primary purpose of traffic calming is to support the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort. These objectives are typically achieved by reducing vehicle speeds or volumes on a single street or a street network. Traffic calming measures consist of horizontal, vertical, lane narrowing, roadside, and other features that use self-enforcing physical or psycho-perception means to produce desired effects.

Sammamish maintains a comprehensive traffic calming program known as the Neighborhood Traffic Management Program (NTMP). The NTMP represents the City's commitment to the safety and livability of residential neighborhoods. The NTMP maintains and tracks traffic calming measures that were already in place when the City was incorporated, and it implements new measures. It is a joint effort between the community, the Public Works Department, and Sammamish City Police. The program aims to reduce the impact of traffic on neighborhoods. The NTMP provides a process for identifying and addressing traffic concerns.

Under the program, Public Works (PW) staff and City Police work with the community to evaluate traffic issues. The type and severity of problems are identified through active participation by community members. Then an approach is planned and implemented to address the problems. After implementing solutions, the effectiveness is evaluated.

The City of Sammamish places a high value on neighborhood livability. Although livability has no precise definition, it can be thought of as encompassing the following characteristics:

- The ability of residents to feel safe and secure in their neighborhoods.
- The opportunity to interact socially with neighbors without distractions or threats.
- The ability to experience a sense of home and privacy.
- A sense of community and neighborhood identity.
- A balanced relationship between multiple uses and needs of a neighborhood.

Traffic calming devices currently utilized in the NTMP for use in the City include traffic circles, chicanes, choker islands and curb extensions, raised tables for crosswalks (only allowed in school zones and non-arterial roadways), roadway narrowing, raised intersections, and medians. Existing traffic calming devices within Sammamish are located primarily along:

- NE 14th Drive from 228th Avenue NE to 220th Place NE;
- NE 14th Street from 228th Avenue NE to 235th Avenue NE;
- NE 19th Drive from 228th Avenue NE to 236th Avenue NE;
- NE 20th Way from 216th Avenue NE to NE 25th Way;
- NE 22nd Street at 236th Avenue NE;
- NE 25th Way from 228th Avenue NE to 239th Place NE;

- 205th Place NE from NE 31st Street to NE 37th Way;
- 217th Avenue NE from NE Inglewood Hill Road to Main Street;
- SE 30th Street from 244th Avenue SE to 252nd Avenue SE;
- SE 32nd Street from 228th Avenue SE to 220th Avenue SE;
- Klahanie Drive SE at 249th Avenue SE;
- SE Klahanie Boulevard at 244th Place SE;
- SE Klahanie Boulevard from Klahanie Park to Challenger Elementary School;
- Audubon Park Drive SE from SE 24th Street to SE 32nd Way;
- 230th Way SE from SE 42nd Street to SE 48th Street;
- 241st Avenue SE from SE 32nd Street to SE 37th Place;
- 248th Avenue SE at SE 17th Place;
- 262nd Avenue SE from SE 31st Street to SE 33rd Street;
- SE Windsor Blvd from 244th Avenue SE to Windsor Drive SE;
- E Beaver Lake Dr SE from SE Issaquah-Beaver Lake Rd to SE 31st Place; and
- E Beaver Lake Way SE between E Beaver Lake Drive SE.

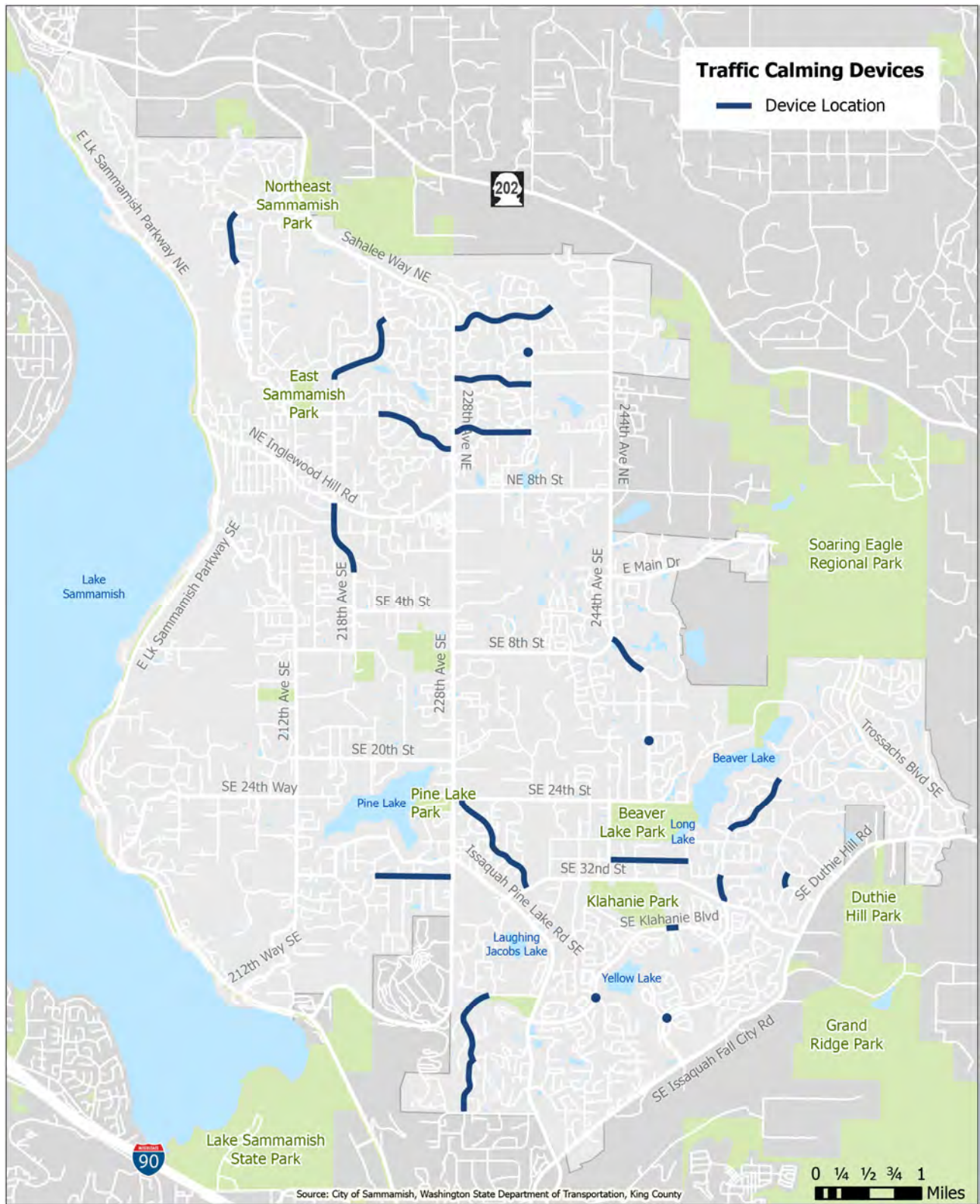


FIGURE 14. TRAFFIC CALMING DEVICE MAP

2.4.5 NONMOTORIZED INVENTORY

Nonmotorized modes of travel are primarily comprised of biking and walking but may also include other transportation devices, such as wheelchairs, scooters, and ebikes. An inventory of existing nonmotorized facilities, including sidewalks, off-street trails, and bike lanes, was undertaken to identify the current level of nonmotorized connectivity in Sammamish. **Figure 16** illustrates existing pedestrian and bicycle facilities and identifies the locations of major nonmotorized attractions including schools, parks, and public facilities.

The Bicycle and Pedestrian Priority Network is a network identified as providing pedestrian connectivity to key areas of Sammamish. Identifying the Bicycle and Pedestrian Priority Network helps planners understand where to focus pedestrian and bicycle enhancements. Tier 1 is all Principal and Minor Arterials. Tier 2 is all Collector Arterials.

SIDEWALK FACILITIES

Sidewalks provide a safe and accessible space for pedestrians along the public street network. The City of Sammamish inherited its street and sidewalk network from King County when the City incorporated in 1999. Though many upgrades throughout the City have occurred since incorporation, many gaps still exist in the sidewalk network that require attention. Dense areas with commercial land uses and streets that serve schools are particularly important for safe walking, as they support more pedestrians and may have a larger portion of vulnerable users than other streets.

The Sammamish street network includes 214.4 miles of sidewalk. **Figure 15** represents gaps along the Pedestrian Priority Network; approximately 139.2 miles of City streets include sidewalks on one or both sides. This represents 66 percent of the public street network.

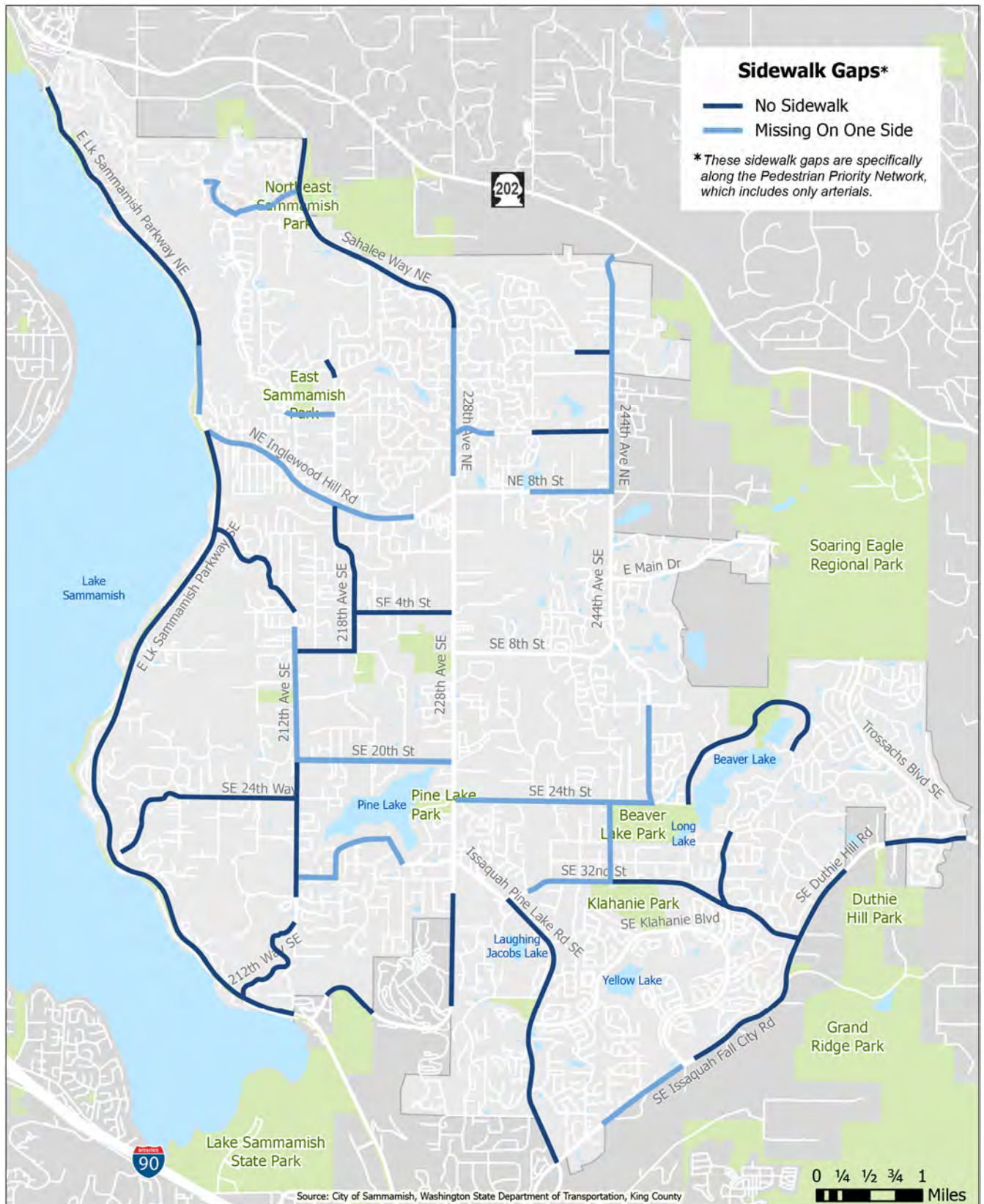


FIGURE 15. SIDEWALK GAPS ALONG THE PEDESTRIAN PRIORITY NETWORK

BICYCLE FACILITIES

Bike lanes are portions of paved streets which have been designated by striping, signage, and pavement markings for exclusive use by bicyclists. These facilities provide physical separation between bicyclists and vehicle traffic and generally create a more comfortable experience for bicyclists relative to shared-use lanes, particularly on high-speed, high-volume streets. The Sammamish street network includes 24.8 miles of bike lanes, the majority of which exist on collector and arterial streets. A total of 16.4 miles of public streets include bike lanes on one or both sides of the street. The existing bicycle facilities are shown in **Figure 16**.

Shared use of travel lanes by vehicles and bicycles can provide a viable option for bicycle connectivity on low-volume, low-speed streets. Shared-use streets may be identified using Shared Lane Markings (SLMs) or “sharrows.” SLMs are not currently used in the Sammamish street network.

Paved shoulders may be used by pedestrians and cyclist, although they are considered a gap in the pedestrian and bicycle network. Paved shoulders are shown in **Figure 16**. A total of 17.5 miles of public streets include paved shoulders on one or both sides.

OFF-STREET TRAILS

Off-street trails consist of both paved and unpaved (gravel or grass surface) paths which provide varying levels of access to pedestrians, bicyclists, and other wheeled mobility users. Off-street trails provide connections between schools, parks, transit stops, and other facilities of public interest, in locations which do not follow the existing street alignment. They also provide recreational opportunities for the community. The City operates its own trail network and has several county-owned trails within or near to Sammamish City limits, including a 7.3-mile paved section of the regional East Lake Sammamish Trail. More information on trails can be found in the City’s Park, Recreation, and Open Space Plan. The existing off-street trails are included in **Figure 16**.

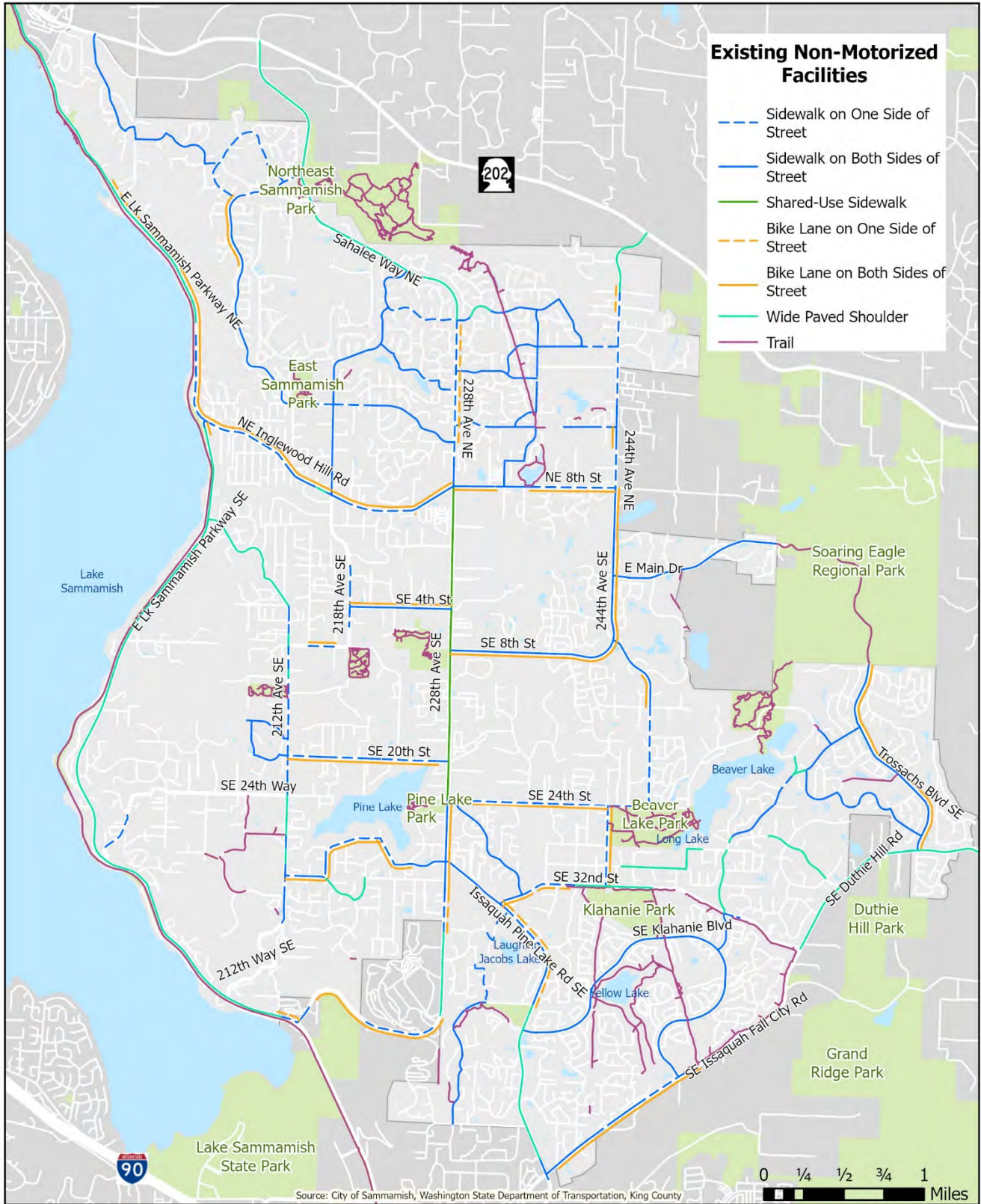


FIGURE 16. 2023 NONMOTORIZED FACILITIES

2.4.6 TRANSIT INVENTORY

TRANSIT SERVICE

King County Metro and Sound Transit provide transit service to the City of Sammamish. Two transit routes currently serve the City on weekdays, with service as summarized in **Table 9**. As of February 2024, there is no fixed route transit service in Sammamish on either weekend day.

TABLE 9. 2023 FIXED-ROUTE TRANSIT SERVICE

ROUTE #	ROUTE DESCRIPTION	SERVICE HOURS	HEADWAY
269	Issaquah TC / North Issaquah / Issaquah Highlands / Bear Creek / Overlake	Monday-Friday 6:23 AM-7:39 PM	Every 30 minutes*
554	Redmond / Issaquah Highlands / Issaquah TC / Downtown Seattle	Monday-Friday 4:38 AM-11:41 PM	2 trips AM southbound 5 trips PM northbound

Note: Route 269 scheduled headway is working toward a service change from 30 minutes to 15 minutes.

In addition to the fixed route transit services described above, King County Metro operates Metro Flex, an on-demand neighborhood transit service, within a designated geographic area in the City of Sammamish. The service runs from 7 AM to 6 PM on weekdays and from 9 AM to 6 PM on Saturdays. Existing transit facilities and fixed-route transit service area are shown in **Figure 17**.

TRANSIT RIDERSHIP

US Census data indicates that 5.7 percent of Sammamish residents commute by transit. Transit ridership data from King County Metro showed that total stop activity (boardings and alightings) Citywide decreased 35 percent between 2019 and 2022, to approximately 500 boardings/alightings per day in 2022. A decrease in ridership between 2019 and 2022 is consistent with regional trends. Metro Flex averaged 78 rides per day in April 2023.

PARK-AND-RIDE FACILITIES

Sammamish currently has four park-and-ride (P&R) facilities, which are summarized in shown in **Figure 17**. Fixed route transit service via Sound Transit or King County Metro is available at South Sammamish Park & Ride and the Sammamish Hills Lutheran Church lots. There are two parking facilities (Klahanie #1 & #3) available for commuters, however they do not accommodate fixed route transit services.

Existing transit routes and P&R lots within the Sammamish City limits are shown in **Figure 17**. Outside of the City limits, the nearest P&R lots are:

- Bear Creek P&R at 7760 178th PI NE, Redmond (334 spaces);
- Tibbett’s Valley P&R at 12th NW and Newport Way, Issaquah (594 spaces).
- Issaquah Highlands P&R at Highlands Drive NE and NE High Street, Issaquah (1,000 spaces).

The lots outside of Sammamish provide Sammamish residents an opportunity to park and connect to transit.

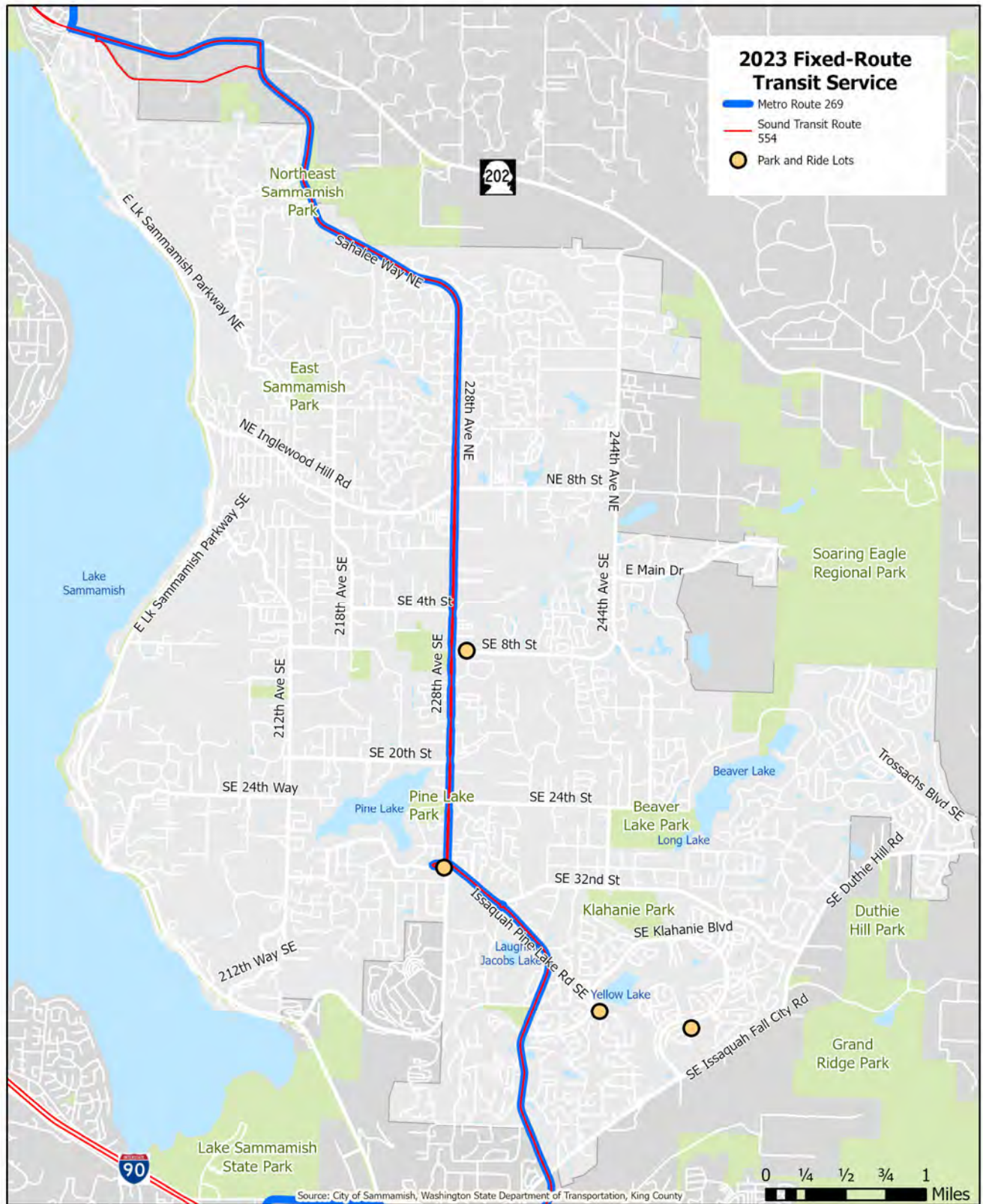


FIGURE 17. 2023 FIXED-ROUTE TRANSIT SERVICE

2.5 LEVEL OF SERVICE

2.5.1 INTERSECTION LEVEL OF SERVICE

DEFINITION

Level of service (LOS) is a qualitative description of the operating performance of an element of transportation infrastructure such as a roadway corridor or an intersection. LOS for intersections is typically expressed as a letter score from LOS A, representing free flow conditions with minimal delays, to LOS F, representing breakdown flow with high delays.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

TDM refers to a variety of strategies that reduce congestion on our transportation corridors. TDM emphasizes commute options, including the use of carpools, vanpools, buses, bicycling, walking, compressed or varied work hours, or working from home. These strategies will be particularly critical in Sammamish given the constraints of the City and region's roadway network and the cost to add capacity to the roadway network.

TRANSPORTATION CONCURRENCY MANAGEMENT

The Washington State Growth Management Act (GMA) requires cities and counties to provide public infrastructure, including transportation facilities and services, concurrent with new development. For transportation facilities, the GMA defines "concurrent" as any necessary "improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years."

Transportation concurrency requires that the impacts of new development do not reduce transportation Level of Service (LOS) below the responsible agency's adopted LOS standards. If it is determined during the development review process that the proposed land use action would reduce LOS below the adopted standard, the development must be modified to reduce its transportation impact or provide corrective transportation improvements. Transportation improvements, which may include project funding, must be identified and programmed within a six-year period from development permitting. Should any of these requirements fail to be met, the development proposal cannot be granted approval.

Transportation concurrency requires that local agencies maintain a plan to correct existing deficiencies, bringing transportation facilities up to adopted LOS standards. If meeting the adopted LOS standard is not feasible, local agencies must revise their adopted LOS standards via Comprehensive Plan update.

A Transportation Concurrency Management System (TCMS) is a policy procedure designed to monitor the adequacy of a transportation system to serve new development. The criteria for an intersection's inclusion in the TCMS are:

1. All signalized, all-way stop controlled, or roundabout intersections on functionally classified streets.
2. Intersections with stop control on at least one functionally classified (arterial or collector) approach.

A total of 52 intersections in Sammamish meet the above criteria and are included in the TCMS.

INTERSECTIONS

Intersection LOS is defined by the average delay experienced by a vehicle traveling through an intersection. Delay at a signalized intersection can be caused by waiting for the signal or waiting for the queue ahead to clear the signal. Delay at roundabouts and stop-controlled intersections is caused by waiting for a gap in traffic or waiting for a queue to clear the intersection or roundabout.

INTERSECTION LEVEL OF SERVICE POLICY

Intersection level of service (LOS) is calculated using the standard analysis procedures described in this section for the AM and PM peak hours. Intersections with LOS below the defined standards will be considered deficient. For intersections of roadways with different functional classifications, the standard for the higher classification applies to the entire intersection.

The intersection LOS standards adopted in the Transportation Element are LOS C for intersections that include Minor Arterial or Collector Arterial roadways, and LOS D or E for intersections that include Principal Arterials. Attaining LOS D at major intersections with high approach volumes can result in large intersections with exclusive right-turn lanes, double left-turn lanes, and additional through lanes. While these improvements reduce delays for vehicles, they can result in very long crossing distances for pedestrians, as well as increased pedestrian-vehicle conflicts. Therefore, Principal Arterials have a standard of LOS D except where LOS D cannot be met with three approach lanes in any direction. In those cases, a minimum LOS E is permitted.

INTERSECTION LEVEL OF SERVICE CRITERIA

Level of service for intersections is determined by the average amount of vehicle control delay experienced by vehicles at the intersection. For signalized and roundabout (RAB) controlled intersections the LOS is calculated based on average delay for the entire intersection. **Table 10** summarizes the LOS criteria for intersections.

The LOS criteria for minor-approach stop controlled Two-way Stop Controlled (TWSC) and all-way stop controlled (AWSC) intersections have different threshold values than those for signalized intersections, primarily because drivers expect different levels of performance from different types of transportation facilities. In general, stop-controlled intersections are expected to carry lower volumes of traffic than signalized and roundabout controlled intersections. Thus for the same LOS,

a lower level of delay is acceptable at stop-controlled intersections than it is for signalized and roundabout controlled intersections.

For TWSC intersections, LOS is calculated based on the control delay of the worst approach, which tends to be the stop-controlled minor streets, or for left turn movements from major streets, whichever is worse.

TABLE 10. INTERSECTION LEVEL OF SERVICE CRITERIA.

LOS	SIGNAL AND ROUNDABOUT DELAY (SEC/VEH)	STOP-CONTROLLED INTERSECTION DELAY (SEC/VEH)
A	≤10	≤10
B	>10 – 20	>10 – 15
C	>20 – 35	>15 – 25
D	>35 – 55	>25 – 35
E	>55 – 80	>35 – 50
F	>80	>50

Source: *Highway Capacity Manual 7th Edition* (Transportation Research Board 2022); “WSDOT Sidra Policy Settings” (WSDOT 2021)

INTERSECTION LEVEL OF SERVICE ANALYSIS METHODOLOGY

Sammamish utilizes Synchro 12, or latest version, software for operations analysis of signalized and stop-controlled intersections. This software allows the utilization of *Highway Capacity Manual* methodologies for intersection capacity analysis. Sidra Intersection software is utilized for roundabout operations analysis. This software uses the Sidra roundabout analysis methodology, which is the standard of practice for Washington State Department of Transportation (WSDOT) and follows WSDOT Sidra Policy.

Intersection operations model outputs are used to evaluate concurrency, predict intersection capacity and delays, inform signal timing plan options to optimize intersection operations, and to evaluate potential solutions for intersection operational deficiencies. Notwithstanding these uses, there are limitations to the use of these models. They do not, for example, account for queuing and delay impacts which occur when intersection operations are interrupted by queuing from a downstream intersection. Neither do they explicitly model unserved demand, which occurs when an intersection operates with oversaturated conditions for an extended period.

2023 INTERSECTION LEVEL OF SERVICE RESULTS

Intersection LOS for the 2023 AM and PM peak hours were calculated using intersection turning movement counts and the analysis tools and methods described above. The results of the 2023 intersection LOS analysis are summarized in **Table 11** and **Figure 18** and **Figure 19**.

In 2023, one intersection on the TCMS operated below the adopted LOS standard. The intersection of SE 8th Street and E Windsor Blvd operated at LOS F in the AM peak hour. In July 2024, this intersection level of service was corrected to operate at LOS C in the AM peak and in the PM peak.

TABLE 11. 2023 INTERSECTION LEVELS OF SERVICE

ID	NAME	CONTROL	LOS STD	2023 AM		2023 PM	
				DELAY (S)	LOS	DELAY (S)	LOS
ID 1	Issaquah-Pine Lk Rd & SE 48 th St	Signal	D	10.2	B	11.6	B
ID 2	228 th Ave SE & NE 12 th Pl	Signal	D	7.3	A	6.6	A
ID 3	Klahanie Dr SE & Issaquah-Fall City Rd	RAB	D	6.1	A	6.5	A
ID 4	244 th Ave SE & SE 24 th St	AWSC	C	12.4	B	12.1	B
ID 5	SE 32 nd Way & 244 th Ave E	AWSC	C	12.4	B	14.2	B
ID 6	Issaquah-Pine Lk Rd & SE 32 nd Way	RAB	D	4.3	A	5.0	A
ID 8	SE Klahanie Blvd & 256 th Ave SE	AWSC	C	11.7	B	10.7	B
ID 9	Issaquah-Fall City Rd & 247 th Pl	RAB	D	6.1	A	5.2	A
ID 11	242 nd Ave NE & NE 8 th Street	Signal	C	15.2	B	11.3	B
ID 12	228 th Ave SE & SE 8 th St	Signal	D	27.5	C	18.4	B
ID 14	216 th Ave NE & NE Inglewood Hill Rd	RAB	C	6.6	A	5.9	A
ID 15	228 th Ave SE & NE Inglewood Hill Rd/NE 8 th St	Signal	D	15.7	B	18.7	B
ID 16	228 th Ave SE & NE 4 th St	Signal	E	39.8	D	16.8	B
ID 17	228 th Ave SE & SE 4 th St	Signal	E	21.1	C	17.1	B
ID 18	212 th Ave. SE & SE 8 th St	TWSC	C	15.4	C	15.6	C
ID 19	228 th Ave SE & SE 16 th Pl	Signal	D	7.4	A	7.7	A
ID 20	E Lk Sammamish Pkwy & 212 th Way SE	Signal	C	4.4	A	5.3	A
ID 21	E Lk Sammamish Pkwy & SE 24 th Wy	TWSC	C	12.1	B	17.2	C

ID	NAME	CONTROL	LOS STD	2023 AM		2023 PM	
				DELAY (S)	LOS	DELAY (S)	LOS
ID 22	212 th Ave SE & SE 20 th Street	AWSC	C	11.2	B	11.0	B
ID 23	E Lk Sammamish Pkwy & Louis Thompson Rd	Signal	C	9.5	A	10.3	B
ID 24	E Lk Sammamish Pkwy & Inglewood Hill Rd	Signal	C	8.7	A	13.6	B
ID 25	Sahalee Way NE & NE 37 th Way	Signal	D	5.9	A	7.6	A
ID 26	NE 8 th Street & 244 th Ave NE	RAB	C	4.5	A	5.1	A
ID 27	228 th Ave SE & SE 20 th St	Signal	D	14.2	B	15.7	B
ID 28	228 th Ave SE & SE 24 th St	Signal	E	20.3	C	21.3	C
ID 29	228 th Ave SE & Issaquah-Pine Lk Rd	Signal	E	25.2	C	28.6	C
ID 30	Issaquah-Pine Lk Rd & Klahanie Blvd	Signal	D	9.3	A	11.4	B
ID 31	Issaquah Beaver Lake Rd & Duthie Hill Rd	Signal	D	15.1	B	12.6	B
ID 32	Issaquah Beaver Lake Rd & 256 th Ave SE	RAB	C	7.2	A	5.4	A
ID 34	228 th Ave SE & NE 25 th Way	Signal	D	11.7	B	9.7	A
ID 35	Issaquah-Pine Lk Rd & SE 42 nd St	Signal	D	4.4	A	4.6	A
ID 36	Issaquah-Pine Lk Rd & 230 th Ln SE	Signal	D	50.1	D	22.7	C
ID 38	Issaquah-Pine Lk Rd & SE 47 th Way/238 th Way SE	Signal	D	7.6	A	26.1	C
ID 39	233 rd Ave NE & NE 8 th St	RAB	C	6.4	A	5.6	A
ID 40	228 th Ave SE & E Main St	Signal	D	5.4	A	6.8	A
ID 41	244 th Ave NE & E Main Dr	RAB	C	5.2	A	4.9	A
ID 42	Duthie Hill Rd & Trossachs Blvd SE	Signal	D	14.8	B	15.2	B
ID 43	228 th Ave SE & Church drwy/Skyline HS	Signal	D	11.0	B	10.2	B

ID	NAME	CONTROL	LOS STD	2023 AM		2023 PM	
				DELAY (S)	LOS	DELAY (S)	LOS
ID 44	SE 4 th St & 218 th Ave SE	RAB	D	6.3	A	6.5	A
ID 45	SE 8 th Street & 218 th Ave SE	AWSC	C	8.2	A	7.8	A
ID 46	212 th Ave SE & SE 24 th St	TWSC	C	15.1	C	13.3	B
ID 47	212 th Ave SE & SE 32 nd St	TWSC	C	10.1	B	10.3	B
ID 48	SE 8 th Street & SE Windsor Blvd*	TWSC	C	55.1	F	13.3	B
ID 49	216 th Ave NE & NE 16 th St	AWSC	D	10.0	A	8.8	A
ID 50	Issaquah-Pine Lk Rd & SE 44 th Street	Signal	D	11.6	B	13.7	B
ID 51	Issaquah-Fall City Rd & 242 nd Ave SE	RAB	C	5.9	A	5.3	A
ID 52	SE 4 th Street & 222 nd PI SE	RAB	C	2.5	A	2.6	A
ID 53	SE 4 th Street & 224 th Ave SE	RAB	C	1.8	A	1.8	A
ID 54	SE 4 th Street & 225 th PI SE	RAB	C	2.2	A	2.4	A
ID 55	SE 24 th St & 248 th Ave SE	TWSC	C	11.3	B	9.8	A
ID 56	248 th Ave SE & SE 14 th St	AWSC	C	9.2	A	8.9	A
ID 57	205 th PI NE & NE 37 th Way	AWSC	C	7.5	A	7.6	A
<i>Outside City of Sammamish</i>							
ID 61	E Lk Sammamish Pkwy & SR 202 (Redmond-FC Rd)	Signal	E	48.7	D	57.1	E
ID 62	E Lk Sammamish Pkwy & SE 43 rd Way	RAB	D	4.8	A	4.5	A
ID 63	Sahalee Way NE & SR 202 (Redmond-Fall City Road)	Signal	D	18.9	B	23.3	C
ID 64	244 th Ave NE & SR 202 (Redmond-Fall City Road)	Signal	E	14.5	B	15.7	B
ID 65	Duthie Hill Rd & SR 202 (Redmond-Fall City Road)	Signal	E	6.7	A	16.7	B
ID 66	192 nd Dr NE & SR 202 (Redmond-Fall City Road)	Signal	E	5.8	A	7	A

ID	NAME	CONTROL	LOS STD	2023 AM		2023 PM	
				DELAY (S)	LOS	DELAY (S)	LOS
ID 67	Issaquah-Pine Lk Rd & SE Issaquah Fall City Rd	Signal	D	18.6	B	22.2	C

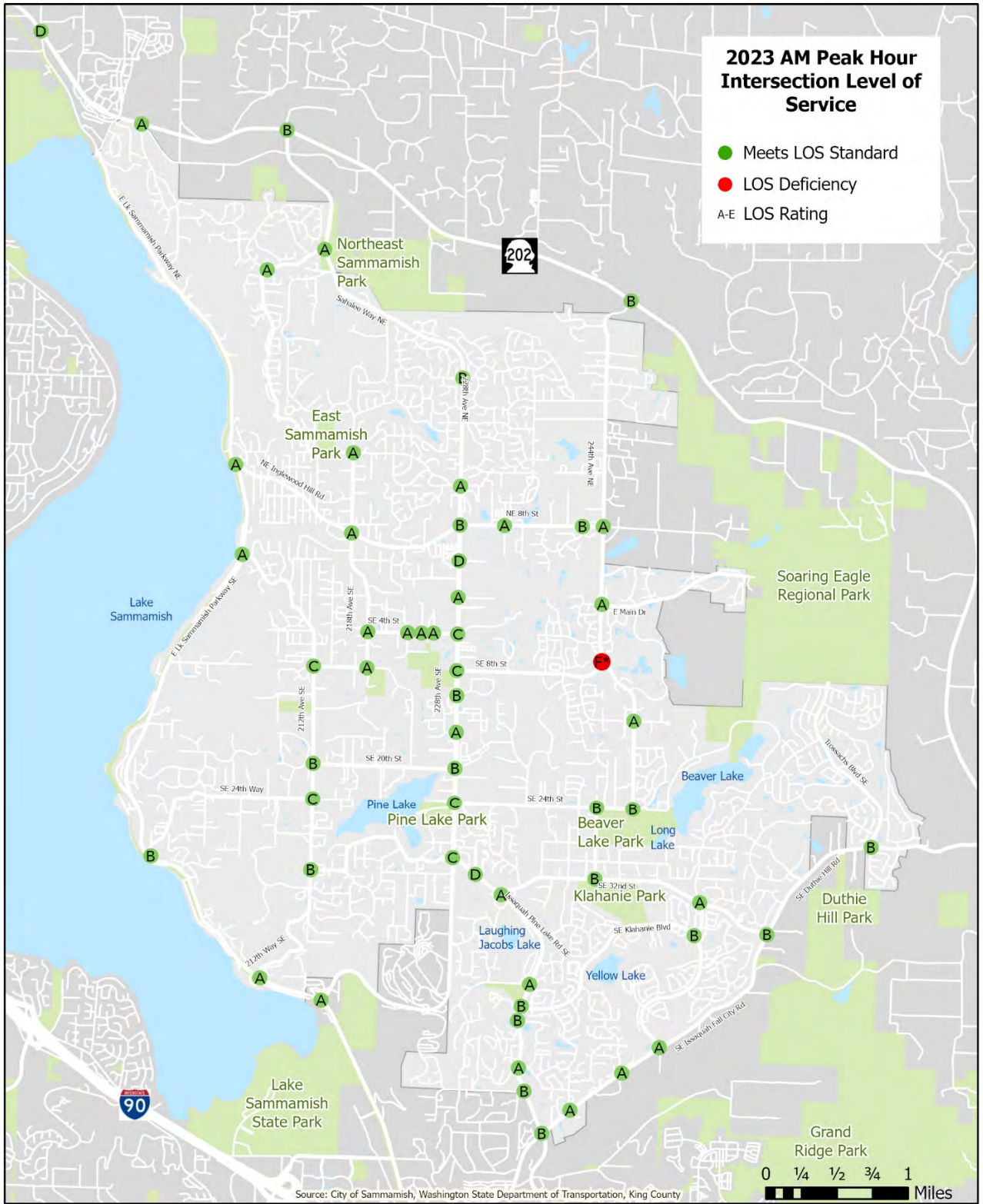
¹ AWSC: all-way stop control; RAB: roundabout; Signal: signalized; TWSC: two-way (minor-approach) stop controlled
Intersection LOS deficiencies highlighted

*Intersection improvements implemented in July of 2024, addressed the intersection’s LOS deficiency producing LOS C in the AM and PM peak hours.

The following key intersections fall outside of Sammamish City limits; but have a significant impact on mobility for people travelling to and from Sammamish:

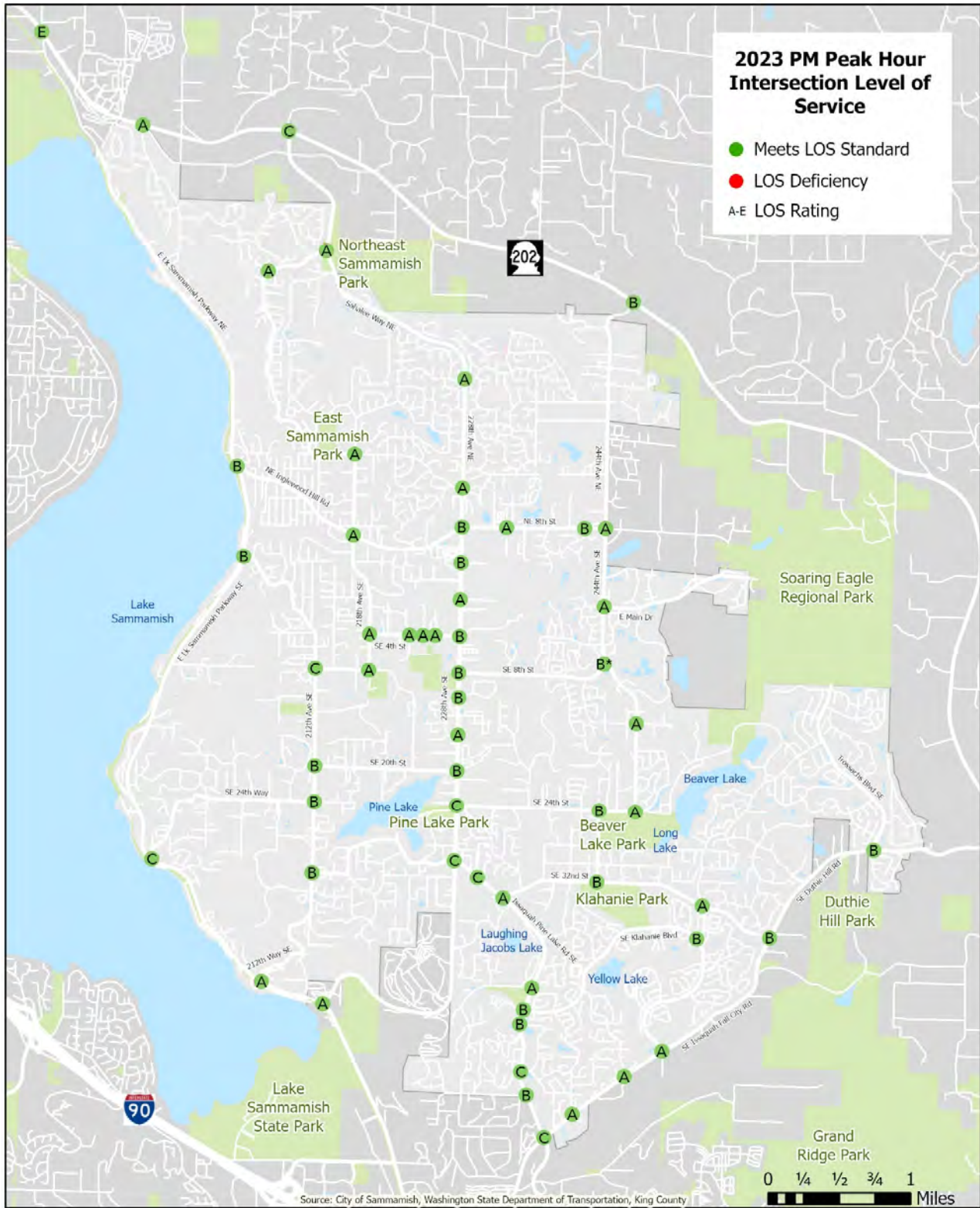
- East Lake Sammamish Pkwy and SR 202 (NE Redmond Fall City Rd)
- E Lk Sammamish Pkwy and SE 43rd Way
- Sahalee Way NE and SR 202 (Redmond Fall City Rd)
- 244th Ave NE and SR 202 (NE Redmond Fall City Rd)
- Issaquah Pine Lk Rd SE and SE Issaquah Fall City Rd
- SR 520 ramp terminal intersections with SR 202
- I-90 ramp terminal intersections with 17th Ave NW, Front St, and Highlands Dr NE

While the City does not control the operations of these intersections, their function impacts the ability of the Sammamish community to access regional destinations. Traffic analysis shows that drivers experience delays leaving the City in the morning and entering in the evening.



* July 2024 mitigation changed to LOS C

FIGURE 18. 2023 AM PEAK HOUR INTERSECTION LEVELS OF SERVICE



* July 2024 mitigation changed to LOS C

FIGURE 19. 2023 PM PEAK HOUR INTERSECTION LEVELS OF SERVICE

2.5.2 MULTIMODAL LEVEL OF SERVICE

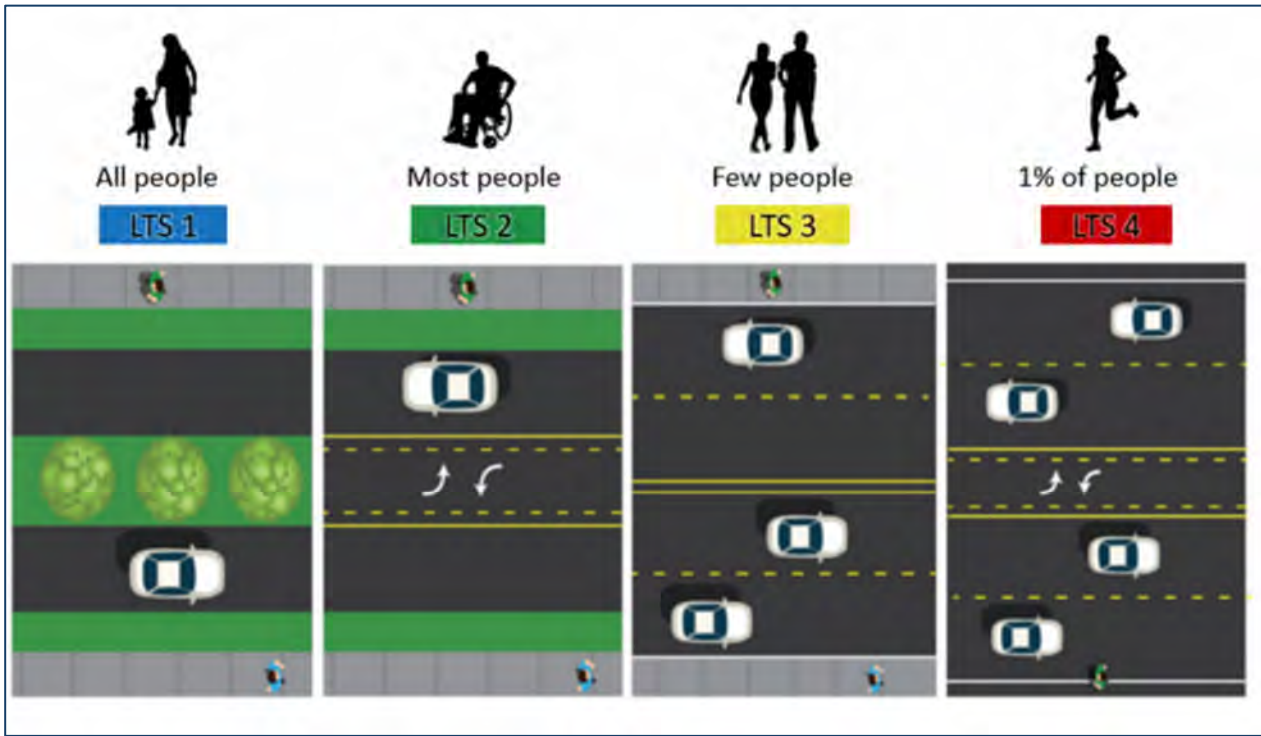
Like vehicular Level of Service (LOS), Multimodal Level of Service (MMLOS) provides a performance metric for user experience on a given element of transportation infrastructure. MMLOS are aspirational and implemented as guidelines. MMLOS projects will be evaluated for implementation with the 6-year Transportation Improvement Plan, otherwise known as the constrained project list, where financial impact is a factor in determining the MMLOS for any given project. In support of the City of Sammamish’s multimodal transportation users, the City has broken users into three categories, Bicycle, Pedestrian, and Transit, measuring the level of service for each. LOS for bicycles and pedestrians are based on level of traffic stress (LTS) and Sammamish’s adopted public works standards. Evaluating LTS is the first step in determining the MMLOS of the roadway.

LEVEL OF TRAFFIC STRESS

LTS is a metric based on user perception of personal comfort and/or safety. LTS is the recommended standard of practice for bicycle and pedestrian system planning; the Washington Department of Transportation (WSDOT) *Design Manual* M 22-01.22 Chapters 1510 and 1520 define a planning-level methodology. The WSDOT *Design Manual* methodology was used as the basis for the LTS analysis a full list of tables can be found in **Appendix A**. At a minimum the numeric LTS rating is based on Average Daily Traffic (AADT), posted speed, and the number of travel lanes. .

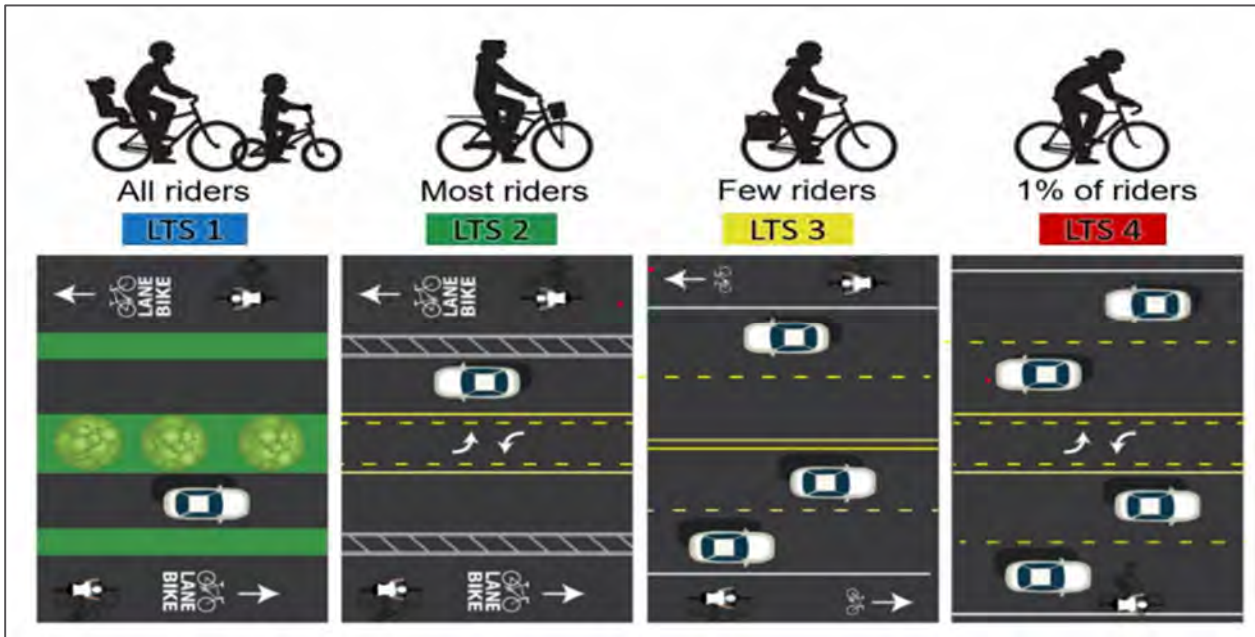
Bicycle LTS (BLTS) and Pedestrian LTS (PLTS) are expressed on a scale of 1 to 4, where a higher LTS score represents lower level of user comfort. Bicycle and pedestrian LTS categories are defined and illustrated in **Table 12** and **Figure 20** and **Figure 21**, where a designation of LTS 4 equals the lowest level of comfort, LTS 3 equals low level of comfort, LTS 2 equals a high level of comfort and LTS 1 equals highest level of comfort.

A BLTS and a PLTS score was calculated for each functionally classified (collector or arterial) street segment in Sammamish. Both sides of the street (i.e. northbound and southbound) were evaluated for LTS, and the worse of the two sides of the street is assigned to the street overall.



Source: WSDOT

FIGURE 20. PEDESTRIAN LEVEL OF TRAFFIC STRESS AND COMFORT



Source: WSDOT

FIGURE 21. BICYCLE LEVEL OF TRAFFIC STRESS AND COMFORT

As illustrated in **Figure 21**, the greater the separation between the bicyclist and vehicular traffic, the lower the Level of Traffic Stress.

Several factors affect the levels of stress that a bicyclist can experience, including:

- Number of travel lanes
- Speed of traffic
- Traffic volume
- Presence or lack of bicycle lanes
- Width of the bicycle lane
- Presence of physical barriers

All of these are considered when evaluating bicycle LTS.

TABLE 12. LEVEL OF TRAFFIC STRESS DEFINITIONS

LTS	USER CATEGORY	DESCRIPTION	EXAMPLE
1	Very Low Stress	All Ages & Abilities: LTS 1 is a level that most children and their parents would find comfortable and safe.	Physically separated bike lane or sidewalk on a 25-mph two-lane street.
2	Somewhat Low Stress	Interested but Concerned: LTS 2 facilities are acceptable to a typical mainstream adult, who can accept some degree of stress while walking or riding.	Buffered bike lane or 6-foot sidewalk on a 30-mph two-lane street.
3	Somewhat High Stress	Enthusied & Confident: LTS 3 users can tolerate some stress even though they may prefer to ride with a lower level of traffic stress.	Unbuffered bike lane or 5-foot sidewalk on a high-volume 4-5 lane street.
4	Very High Stress	Strong & Fearless: LTS 4 is tolerated for any significant distance only by users classified "strong and fearless," who are comfortable walking or riding in close proximity to high-volume roadways.	No bike lane or sidewalk on a high-volume, high-speed arterial.

BLTS results are shown in **Figure 22**. PLTS results are shown in **Figure 23**.

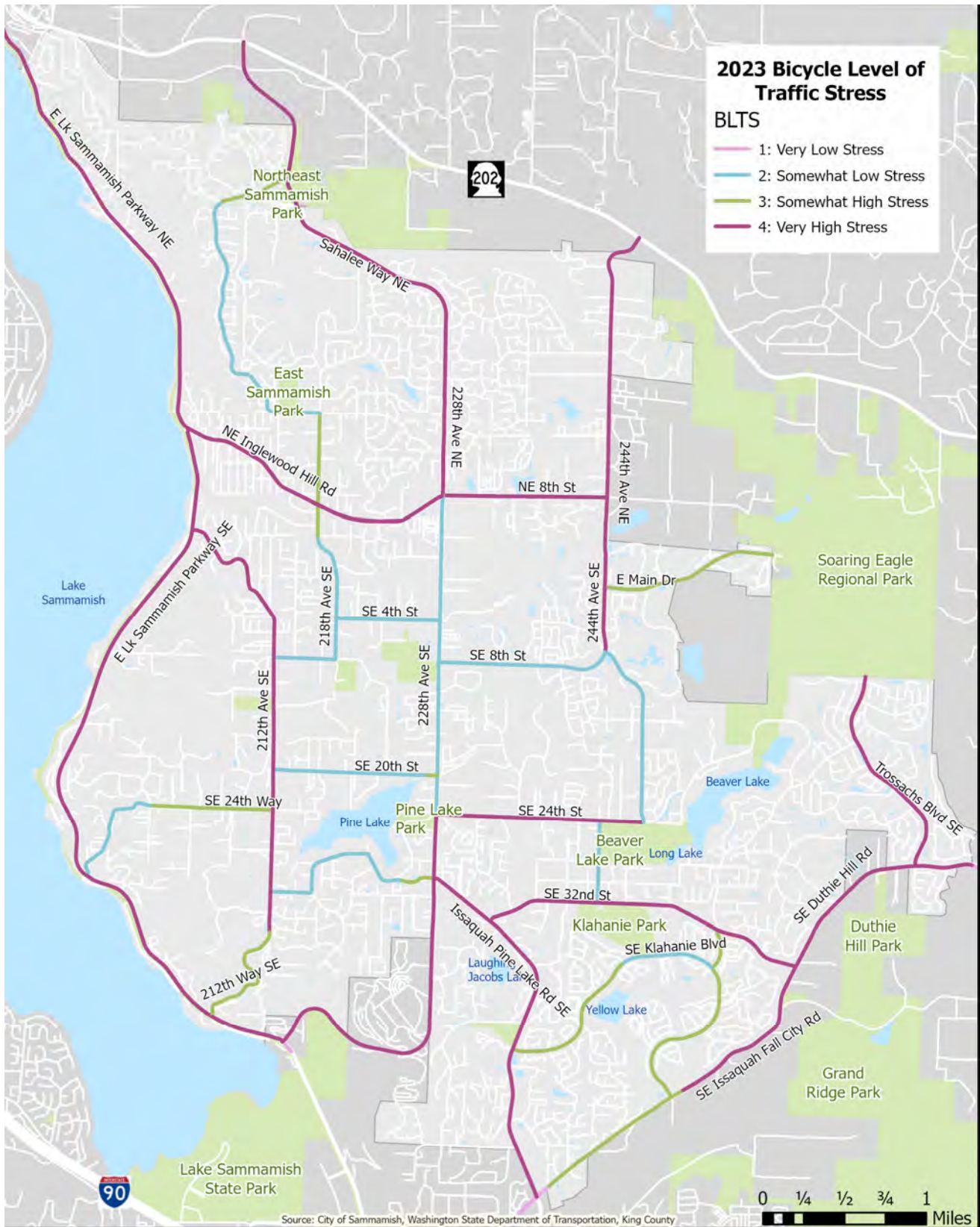


FIGURE 22. EXISTING BICYCLE LEVEL OF TRAFFIC STRESS



FIGURE 23. EXISTING PEDESTRIAN LEVEL OF TRAFFIC STRESS

PEDESTRIAN AND BICYCLE LEVEL OF SERVICE

A bicycle LOS and pedestrian LOS are assigned to each principal, minor, and collector arterial within the City. The LOS is based on functional classification, evaluated LTS, and presence of a bicycle or pedestrian facility. Bicycle and pedestrian LOS for each roadway are evaluated following these steps:

1. Evaluate BLTS and PLTS
 - a. Based on several factors, including ADT, posted speed limit, and width of bicycle or pedestrian facility, as described in the previous section
2. Determine if the roadway meets LTS guidelines
 - a. Based on LTS and functional classification, using **Table 13**
3. Determine if the roadway have some bicycle or pedestrian facility on both sides of the street
4. Evaluate Bicycle and Pedestrian LOS
 - a. Based on steps 1-3, using **Table 14**

Table 13 displays the LTS guidelines used in evaluating LOS. These guidelines were developed for Sammamish based on the City’s roadway layout, understanding of user needs and travel patterns, and the presence of parallel trails or roadways.

TABLE 13. PEDESTRIAN AND BICYCLE LEVEL OF TRAFFIC STRESS GUIDELINES

FUNCTIONAL CLASSIFICATION	PEDESTRIAN LTS GUIDELINES	BICYCLE LTS GUIDELINES
Principle Arterials	LTS 2	LTS 2
Collector Arterials	LTS 2	LTS 2
Minor Arterials	LTS 3	LTS 3

Using **Table 14**, each principal, minor, and collector arterial is assigned a Level of Service for Bicycles and Pedestrians as Green, Yellow, or Red.

TABLE 14. PEDESTRIAN AND BICYCLE LEVEL OF SERVICE DEFINITION

LEVEL OF SERVICE	PEDESTRIAN DEFINITION	BICYCLE DEFINITION
Green	Roadway meets LTS guidelines and sidewalk is present	Roadway meets LTS guidelines

Yellow	Roadway does not meet LTS guidelines, but some pedestrian facility (i.e. sidewalk) is present. Or roadway meets LTS guidelines but no sidewalk is present	Roadway does not meet LTS guidelines, but some bicycle facility (i.e. bike lane) is present.
Red	Roadway does not meet LTS guidelines, and no pedestrian facility is present.	Roadway does not meet LTS guidelines, and no bicycle facility is present.

The pedestrian Level of Service results are shown in **Figure 24**. Bicycle LOS results are shown in **Figure 25**.



FIGURE 24. EXISTING CONDITIONS PEDESTRIAN LOS



FIGURE 25. EXISTING CONDITIONS BICYCLE LOS

TRANSIT LEVEL OF SERVICE

The 2024 Citywide Transit Plan identifies Transit Level of Service (TLOS) guidelines which are intended to guide City plans and policies. The guidelines presented in the Transit Plan are intended for planning purposes and would not apply to transportation concurrency standards for new development. Ultimately, the City tracks Transit LOS based on the presence of bicycle and pedestrian facilities near transit stops.

A Level of Service is assigned to each transit stop pair based on the existing bicycle and pedestrian facilities within a half-mile radius, as shown in **Figure 26**.

The measures evaluated align with the transportation goals set forth in the City’s Comprehensive Plan. It is intended that Sammamish will evaluate its transit system routinely using the evaluation criteria listed in the transit plan.

TABLE 15. TRANSIT LEVEL OF SERVICE

TRANSIT LEVEL OF SERVICE	DESCRIPTION
Green	Adequate bicycle and pedestrian facilities within a half-mile of the stop pair.
Yellow	Limited bicycle and pedestrian facilities within a half-mile of the stop pair.
Red	Very limited or no bicycle and pedestrian facilities within a half-mile of the stop pair.

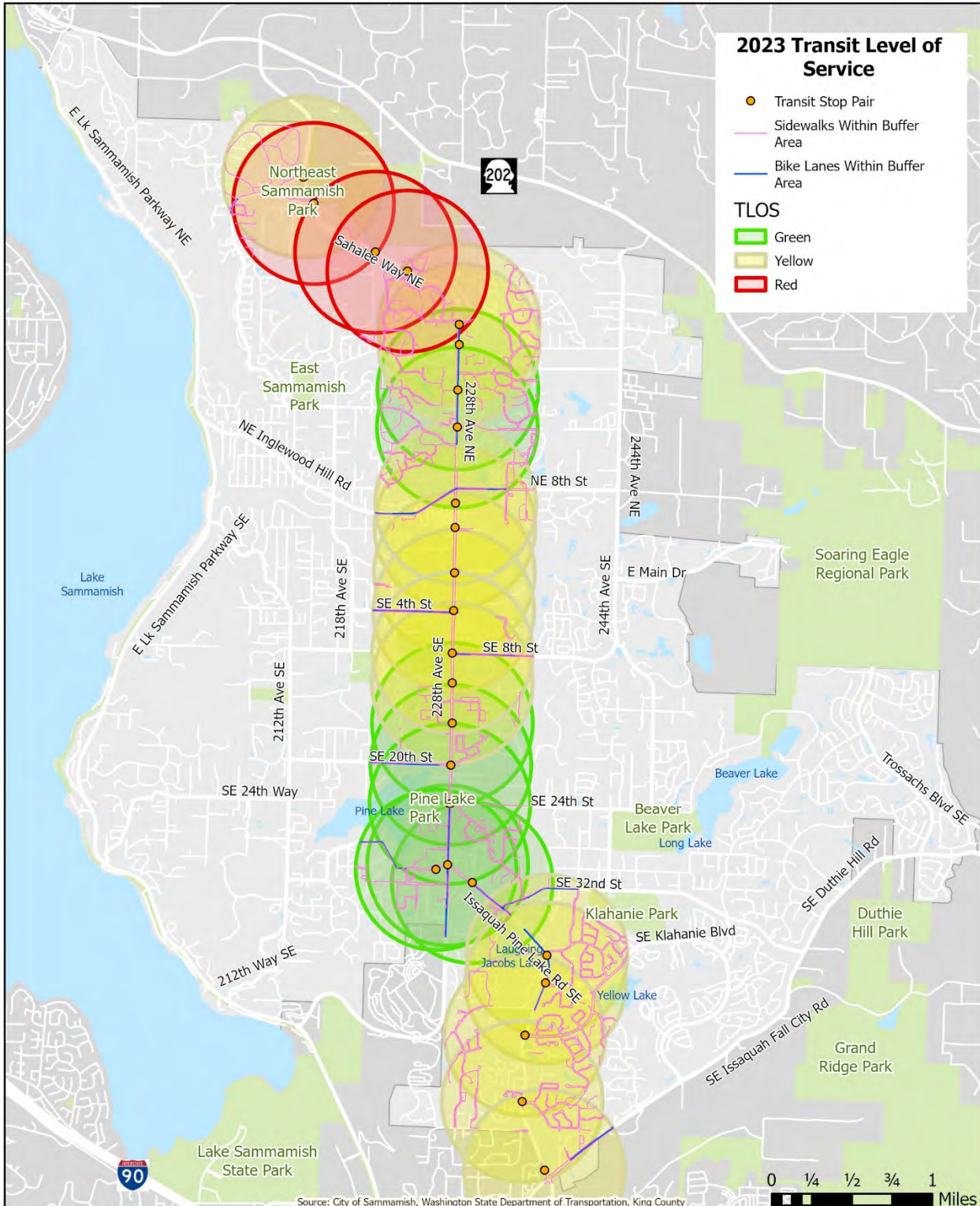


FIGURE 26. TRANSIT LEVEL OF SERVICE

2.6 SAFETY ANALYSIS

The City has completed multiple Local Road Safety Plans to meet the WSDOT Highway Safety Improvement Program guidelines. This includes identification of crash trends, safety concerns, and countermeasures to reduce fatal and serious injury crashes.

2.6.1 DATA ANALYSIS

A crash history analysis was performed by reviewing WSDOT collision reports on City of Sammamish maintained public streets during the five-year period from 2018 through 2022, obtained from the WSDOT Transportation Data Office. A total of 1,091 collisions were reported during the five-year period, of which 11 involved at least one serious injury. No fatal injury collisions occurred between 2018 and 2022. The nature of the 11 reported serious injury crashes include:

- 8 collisions (73%) involved a pedestrian or bicycle:
 - 4 collisions involved a single bicycle departing the roadway or striking a parked vehicle.
 - 2 collisions involved a bicycle failing to yield right-of-way to a passenger vehicle at an intersection.
 - 2 collisions involved a passenger vehicle striking a pedestrian.
- 2 collisions involved motorcycle-passenger vehicle collisions.
- 1 collision involved a left-turning vehicle failing to grant right-of-way to an approaching vehicle.

The number of serious injury crashes and total crashes declined from 2018 to 2022, with serious injury crashes declining from six in 2018 to two in 2022 and total crashes declining from 275 in 2018 to 224 in 2022. Collision trends over time are summarized in **Table 16**. Total number of crashes by type are summarized in Figure 27.

TABLE 16. 2018-2022 COLLISION TRENDS

YEAR	SERIOUS INJURY CRASHES				TOTAL CRASHES			
	AUTO	PED	BIKE	TOTAL	AUTO	PED	BIKE	TOTAL
2018	2	1	3	6	260	4	11	275
2019	0	0	1	1	235	3	6	244
2020	0	0	0	0	147	2	3	152

2021	0	1	1	2	188	1	7	196
2022	1	0	1	2	211	2	11	224
Total	3	2	6	11	1,041	12	38	1,091
Frequency	0.6	0.4	1.2	2.2	208.2	2.4	7.6	218.2

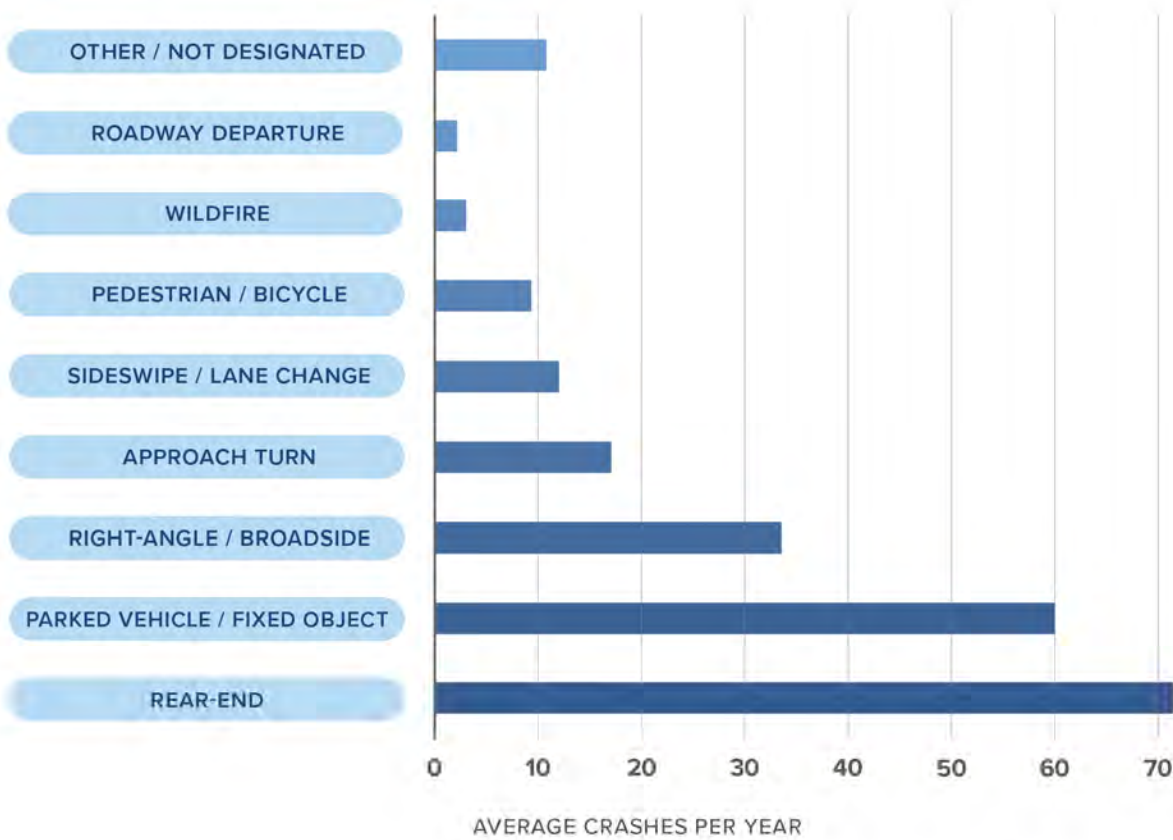


FIGURE 27. 2018-2022 COLLISION HISTORY BY TYPE

Approximately 34% of Sammamish crashes occur on the Sahalee Way/228th Avenue corridor. Contributing factors include high traffic volumes, vehicle speeds and inexperienced drivers, the latter related to the various schools along the corridor. In addition, the 228th Avenue corridor provides access to the City’s major commercial and institutional areas.

CHAPTER 3.

FUTURE CONDITIONS



3.1 INTRODUCTION

This chapter presents the future year 2044 transportation conditions for Sammamish. In compliance with PSRC, the GMA, the City’s Comprehensive Plan, Sammamish uses a future year of 2044, twenty years into the future. This chapter presents the future conditions for all modes, including auto, bicycle, pedestrian, and transit.

This chapter evaluates traffic forecasts under the baseline scenario and three alternatives in 2044 using the local transportation demand model. Land use, usually at the Transportation Analysis Zone (TAZ) level, is an important input to travel demand models. It is important in determine the trip generation and distribution in the travel demand model. More details on the travel demand model and land use assumptions are provided in **Appendix B**.

3.2 FUTURE TRAFFIC CONDITIONS

3.2.1 2044 TRAFFIC SCENARIOS

This section summarizes intersection LOS results for all 2044 analysis scenarios.

The methodology utilized for the Travel Demand Model, including dwelling unit numbers, is described in Appendix B.

The Baseline travel demand model assumed a partial buildout of the Sammamish Town Center Street network which included intersection control modifications, additional streets and street extensions summarized in **Appendix B**.

Alternative scenarios considered modified transportation network and travel behavior assumptions, as summarized in **Table 17**.

TABLE 17. 2044 ALTERNATIVE DESCRIPTION

2044 ALTERNATIVE	NETWORK ASSUMPTIONS	TRAVEL BEHAVIOR
Alternative 1: STC Network Buildout	New “Southeast Connector” complete street per Town Center conceptual street network	Baseline
Alternative 2: Back-to-Office	Baseline	Revert to pre-pandemic trip generation rates
Alternative 3: Transit Shift	Baseline	Implement transit mode shift

Alternative 1 assumed the construction of the new Southeast Connector Street in the Town Center subarea, consistent with the Sammamish Town Center Environmental Impact Study (EIS). This new street will provide a new north-south connection from SE 4th Street to SE 8th Street to the east of 228th Avenue SE.

Alternative 2 assumed a broad trend of office workers returning to in-person work, similar to pre-COVID-19 behavior. Trip generation data collected in 2023 indicated an ongoing reduction in trip generation rates relative to pre-pandemic behavior. This appears to correlate with the proliferation of long-term remote work arrangements in the post-pandemic era. Alternative 2 assumes this trip generation reduction will be eliminated as workers return to in-person work.

Alternative 3 evaluated a shift toward transit usage in areas within a half-mile walkshed of active public transit stops. Transit usage was modeled by reducing the vehicle trip generation rate for each land use. Transit mode share was applied in each of two zones: a medium-transit-usage zone was defined as all areas within the half-mile walkshed with the exception of Town Center, and a high-transit-usage zone was defined as the area comprising Town Center. Transit mode shares were defined consistent with the September 2022 City of Bellevue Multimodal Concurrency Implementation Guide and are shown in **Table 18**.

TABLE 18. 2044 ALTERNATIVE 3 TRANSIT MODE SHARE BY LAND USE

LAND USE	MEDIUM-TRANSIT ZONE	HIGH-TRANSIT ZONE (TOWN CENTER)
Single-Family Detached Housing	9%	13%
Townhomes (2-3 units/73ldg..)	11%	14%
Multifamily Housing (>3 units/73ldg..)	13%	25%
Age-Restricted Housing	9%	13%
Mixed-Use Residential with 1 st Fl. Comm.	13%	25%
Retail	8%	12%
Office	12%	30%
Medical/Dental	3%	12%
Community Center / Public Assembly	5%	8%
PreK-8 Education	35%	35%

High School & Post-Secondary Education	35%	35%
Wholesale Trade, Construction, & Utilities	5%	5%
Industrial & Manufacturing	5%	5%
Active Land/Parks	5%	8%

3.2.2. 2044 INTERSECTION LEVEL OF SERVICE DEFICIENCIES

In the Baseline scenario, the intersection of SE 8th Street & SE Windsor Blvd intersection falls below LOS standards in the AM peak hour, and the intersection of SE 8th Street & 212th Ave SE intersection falls below LOS standards in the PM peak hour. All other intersections are expected to meet LOS standards. Table 19 Figure 28

Two additional intersections may drop below the LOS standard in the three 2044 alternatives. Alternative 2 depicts failures at the AM Peak for the NE 8th Street & 242nd Ave NE intersection and the Pine Lk Rd & 230th Ln SE/231st Ln SE intersection and depicts failure at the PM peak for the SE 8th Street & 212th Ave SE intersection.

All 3 alternatives depict failure at the AM Peak for the SE 8th Street & SE Windsor Blvd intersection.

TABLE 19. 2044 INTERSECTION LOS DEFICIENCIES

ID	NAME	CONTROL	LOS STD ¹	AM PEAK HR		PM PEAK HR	
				DELAY(S)	LOS	DELAY(S)	LOS
11	NE 8 th Street & 242 nd Ave NE		C				
	<i>2044 Baseline</i>	Signal		13	B	12	B
	<i>2044 Alternative 1: STC Network Buildout</i>	Signal		13	B	12	B
	<i>2044 Alternative 2: Back-to-Office</i>	Signal		36	D	12	B
	<i>2044 Alternative 3: Transit Shift</i>	Signal		14	B	12	B
18	SE 8 th Street & 212 th Ave SE		C				
	<i>2044 Baseline</i>	TWSC		15	B	25	D
	<i>2044 Alternative 1: STC Network Buildout</i>	TWSC		14	B	22	C
	<i>2044 Alternative 2: Back-to-Office</i>	TWSC		22	C	40	E
	<i>2044 Alternative 3: Transit Shift</i>	TWSC		14	B	18	C

ID	NAME	CONTROL	LOS STD ¹	AM PEAK HR		PM PEAK HR	
				DELAY(S)	LOS	DELAY(S)	LOS
36	Issaquah-Pine Lk Rd & 230 th Ln SE/231 st Ln SE		D				
	<i>2044 Baseline</i>	Signal		46	D	21	C
	<i>2044 Alternative 1: STC Network Buildout</i>	Signal		46	D	22	C
	<i>2044 Alternative 2: Back-to-Office</i>	Signal		62	E	23	C
	<i>2044 Alternative 3: Transit Shift</i>	Signal		44	D	21	C
48	SE 8 th Street & SE Windsor Blvd		C				
	<i>2044 Baseline</i>	TWSC		31	D	18	C
	<i>2044 Alternative 1: STC Network Buildout</i>	TWSC		34	D	17	C
	<i>2044 Alternative 2: Back-to-Office</i>	TWSC		36	E	19	C
	<i>2044 Alternative 3: Transit Shift</i>	TWSC		27	D	17	C

¹Minimum LOS Standards are LOS C for minor arterial and collector arterial intersections and LOS D or E for principal arterial intersections.

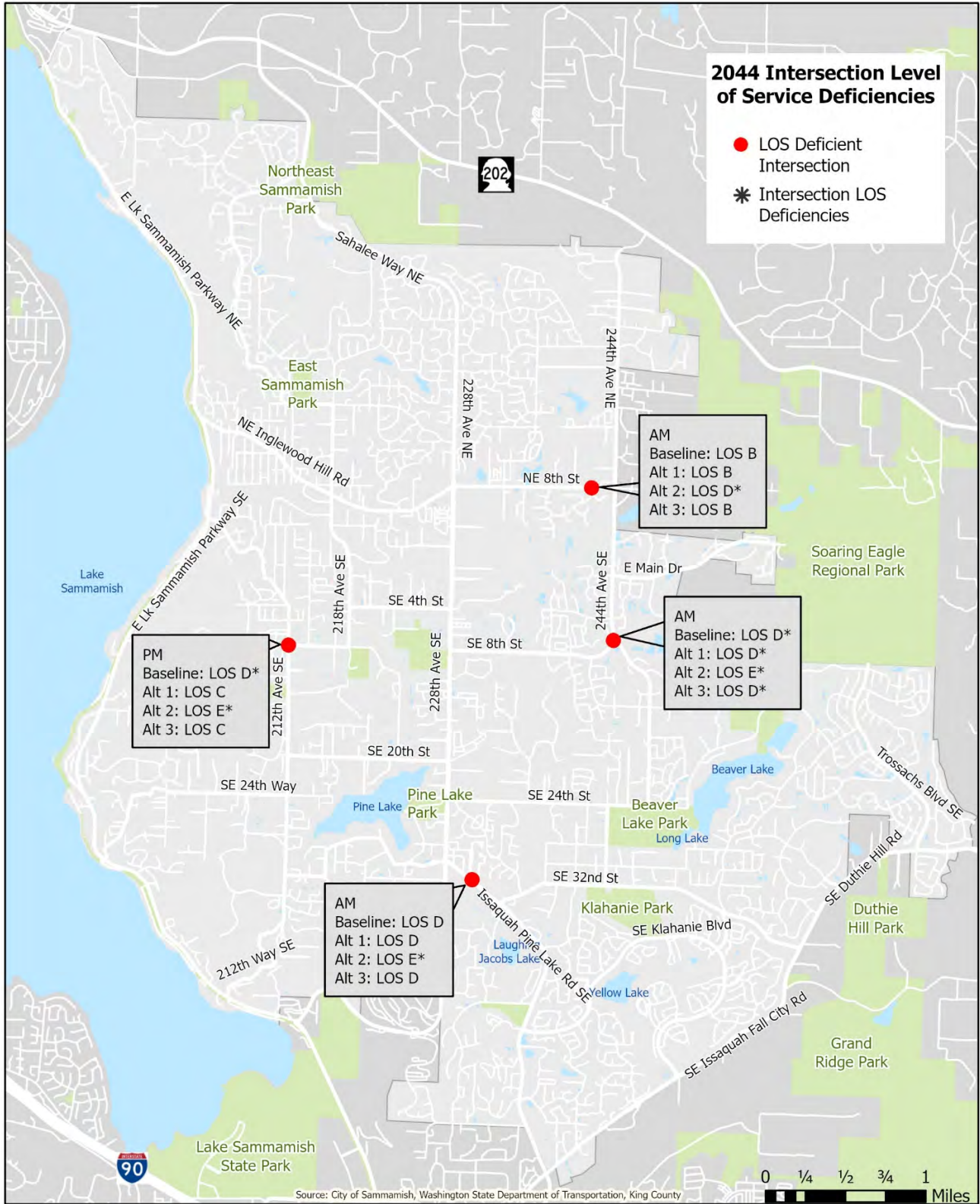


FIGURE 28. 2044 INTERSECTION LEVEL OF SERVICE DEFICIENCIES

3.3 FUTURE MULTIMODAL CONDITIONS

3.3.1 FUTURE BICYCLE AND PEDESTRIAN FACILITIES

As growth continues, increased demand for bicycle and pedestrian facilities will continue, with the highest demand near commercial development and local centers. Pedestrian and bicycle demand are not part of the local transportation demand model described in **Appendix B**. Instead, planning for bicycle and pedestrian facilities is based on connecting existing and future destinations, and improving safety for non-motorized road users. Bicycle and Pedestrian LOS guidelines and methodology are described in Chapter 2 of the TMP.

The 2025-2030 Transportation Improvement Plan (TIP) includes several projects that improve or add bicycle or pedestrian facilities. In addition, many of the connection and corridor projects include a non-motorized aspect. **Table 20** describes the ongoing transportation programs and non-motorized improvement projects on the 6-year TIP.

TABLE 20. NON-MOTORIZED TIP PROJECTS AND PROGRAMS

PROJECT TYPE	ID NO.	PROJECT/PROGRAM NAME	FUNDED/UNFUNDED
Program	TR-C	Sidewalk Gap & Non-motorized Program	Funded
Non-Motorized Project	TR-100	Flood Mitigation- SE Issaquah-Fall City Road: Endeavor Elementary School to SE Duthie Hill Road	Funded
Non-Motorized Project	TR-108	Inglewood Hill Road Sidewalk Gap	Partially Funded
Non-Motorized Project	TR101/SW-601	Louis Thompson Road Tightline Project	Funded
Non-Motorized Project	TR-63	Flood Mitigation Project: 212 th Ave SE/SE 14 th Pl to SE 18 th St	Funded
Non-Motorized Project	TR-04	East Lake Sammamish Parkway SE/SE 24 th St Intersection	Unfunded
Non-Motorized Project	TR-132(P49)	E Beaver Lake Way SE Sidewalk Improvement: SE 32 nd Street to E Beaver Lake Way SE	Unfunded

Non-Motorized Project	TR-131(P47)	248 th Avenue SE Active Transportation Improvements: SE 24 th Street to SE 14 th Street	Unfunded
Non-Motorized Project	TR-39	256 th Ave SE/E Beaver Lake Dr SE/Issaquah Beaver Lake Road	Unfunded

Each of these projects is expected to improve non-motorized connections and safety.

3.3.2 FUTURE TRANSIT SERVICE AND FACILITIES

This section identifies anticipated changes to transit service and facilities in and near Sammamish through 2044.

PLANNED NEAR-TERM CHANGES (2025-2027)

Regional Transit

The regional transit system will change with the Sound Transit Link light rail East Link extension in 2025. As of Fall 2024, parts of the Link 2 Line are open, connecting South Bellevue with Redmond Technology. In 2025, the Link 2 Line will extend and will connect light rail from Seattle to Redmond Technology with stops in Mercer Island and Bellevue, as shown in

Figure 29. The Downtown Redmond Link Extension project, also planned to open in 2025, will extend the light rail from Redmond Technology Center to Marymoor Village and Downton Redmond, as shown in Figure 30. The King County Metro bus system will have changes to the network to better connect the East Link area with the light rail system. The associated East Link Connections Project includes re-routing many of the existing bus routes serving eastside communities as well as the addition of several new routes and the elimination of others. Several other routes are planned for increased frequencies to enhance overall transit service. shows Sound Transit’s planned Link Light Rail expansion for 2025.



FIGURE 29. SOUND TRANSIT 2 LINE LINK LIGHT RAIL 2025

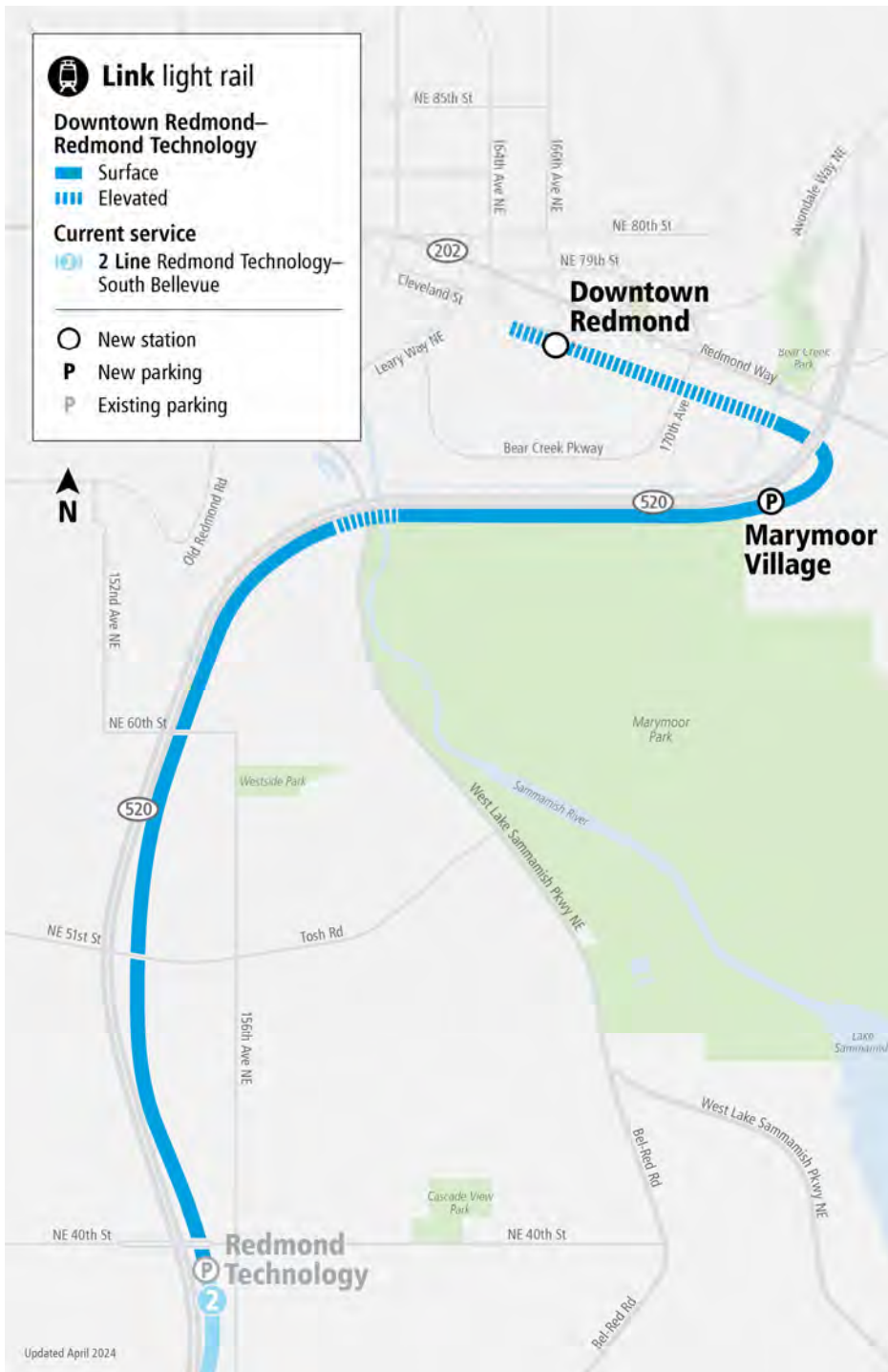


FIGURE 30. SOUND TRANSIT DOWNTOWN REDMOND EXTENSION 2025

Local Transit

With the East Link Connection Project, transit will run along the same alignment within Sammamish (Issaquah-Pine Lake Road SE, 228th Avenue NE, and Sahalee Way NE), but route 269 will have some changes. Route 269 will connect to the Marymoor Village light rail station in Redmond and to

the Mercer Island light rail station through Sammamish and Issaquah. This route is planned to run with 15-minute headways during the weekday peak, 30-minute headways during the rest of the weekday, and weekend service with 30-minute headways from 5am to 7pm. These changes represent a considerable increase in frequency during the weekday in addition to the first ever weekend fixed-route transit service in Sammamish.

Route 554, operated by Sound Transit, will continue to operate with limited service in Sammamish. However, instead of providing service into downtown Seattle, route 554 will terminate at the Bellevue Transit Center in downtown Bellevue and serve as another connection point to the light rail system.

It should be noted that amenities, some of which are under the City’s control, play an important role in increasing ridership, along with improvements in transit service. Amenities such as sidewalks and crosswalks are under the City’s jurisdiction, while amenities such as bus shelters and display boards are under King County Metro’s jurisdiction.

PLANNED LONG-TERM CHANGES (2028-2044)

Regional Transit

The Link light rail 4 Line, which connects south Kirkland to Issaquah and generally following the alignments of I-90 and I-405, is expected to be complete in 2041 or 2044, depending on funding availability. This new light rail service is planned to serve Issaquah with six-minute headways during peak periods and a single station in Central Issaquah which would serve as the end of the line. **Figure 31** shows the planned light rail line from South Kirkland to Issaquah.

With the light rail opening, some service changes to King County Metro and Sound Transit operated bus routes are anticipated with the intent to improve transit connections to the new light rail service. However, the extent of these service changes and details such as the stop locations and potential rerouting are unknown. It is expected that residents of Sammamish will be able to access the new light rail station in Issaquah via a bus or driving to the proposed Park and Ride facility to be located at the station. According to Sound Transit’s ST3 Plan, the new station in Issaquah is expected to have 500 parking spaces.

Three Sound Transit Bus Rapid Transit (BRT) lines, which is bus service typically characterized by high frequencies, increased stop spacing, and transit priority infrastructure such as bus lanes, are planned to open in 2027 and 2028. These new routes will connect Bellevue to Lynnwood to the north and Burien to the south as well as connecting Shoreline to Bothell. A transfer to these BRT routes can take riders to Kirkland, Woodinville, Bothell, Lynnwood, Burien, Tukwila, Renton, Shoreline, Lake Forest Park, Seattle, and Kenmore. Depending on destination and the availability of a vehicle to use the Park and Rides, these trips may require two to three transfers.



FIGURE 31. SOUND TRANSIT LINK LIGHT RAIL 2044

Transit LOS guidelines and methodology is presented in Chapter 2. Because the City has little control over transit service, transit LOS is based on access to transit.

CHAPTER 4.

PUBLIC OUTREACH



4.1 INTRODUCTION

Community input is essential to guiding the future of the transportation network. Over time there have been numerous outreach opportunities offered to engage the Sammamish community in a meaningful way towards developing improved mobility options, a connected transportation network, and targeted investments. These outreach opportunities, which are summarized below, included stakeholder workshops, open house events, presentations at community events, online outreach, and a continuous focus on existing direction from the public as represented by the City's vision, community priorities, and Comprehensive Plan.

4.2 COMPREHENSIVE PLAN UPDATE

The Comprehensive Plan update process held a "Planning Summit Series" between November 3 and November 16, 2022. More than 85 attendees including City staff and leadership, and City residents participated in the City of Sammamish's Planning Summit Series, and 22 community members attended the Transportation Planning Summit held on November 16, 2022.

Transportation Summit participants confirmed that there are long-term mobility challenges in the City and provided feedback on what some of the biggest concerns are from their point of view. It was noted that traffic issues largely remain the same even with altered commute patterns due to Covid as the city's street network has limited capacity on major arterials. Continued population growth and their subsequent travel patterns is a growing concern.

Summit participants engaged in an exercise in which they were asked, "in one sentence, please describe your vision for mobility transportation in Sammamish." **Table 21** below summarizes the feedback received.

TABLE 21. TRANSPORTATION SUMMIT POLING FEEDBACK

- Are there any plans to connect thru streets?
- Park & Ride in North
- Need busses to/thru Town Center Zip car, etc.
- A transportation plan that is city wide.
- Town Center that is hub for community that is easily accessed.
- Car rental for 1-4hrs
- Separated micro-mobility in town center.
- Walkable, bikeable to town center.
- With transit hub at town center
- More sidewalks and lighted cross walks
- Sammamish shuttle bus connecting to light rail Easier to be car free.
- Established freight routes well communicated for trucks.
- Convenient and safe Slower driving, watchful, educated able to walk to as many destinations as feasible.
- More local, easily accessed (walkable, bikeable) businesses (town center) to limit traffic.
- Protect neighborhood streets from cut through traffic.
- The plan has safety listed at number 3; it should be number 1 so that getting out of the car is safe for multiple mobility opportunities.
- Add frequent transit service to the light rail Utilize land uses to manage car use, promote multi-modal functionality, and appropriate density in centers to support local and regional transit routes.
- Everyone walks or rides their bikes. There aren't many cars...
- Frequent looping bus routes that penetrate the outer arteries street away from 228th
- People safely moving around the city without cars.
- Development requirement for connectivity
- Increase number of lanes at major arteries
- People walking, connecting, less driving using shuttles, vans, busses where we want to go.
- Connected network of streets, paths and trails that supports multiple modes of transportation.
- Remove barricades and increase density in town center.
- A more walkable city to services and trails.
- Fix the choke points leaving the Plateau.
- No need to use a car to move around Sammamish.

4.2.1 COMPREHENSIVE PLAN POLICY WORKSHOP

On October 21st, 2023, a Goal and Policy Workshop was held. The Workshop brought together members of the City Council, Planning Commission, and other City Commissions to review the existing 2015 Comprehensive Plan goals and policies. The Workshop was designed to collect high-level direction on how goals and policies should be updated and amended to meet new state, regional, and local planning requirements while reflecting community aspirations and local context. The policy considerations identified are summarized in **Table 22**.

TABLE 22. POLICY WORKSHOP CONSIDERATIONS

- Local transit investment is needed to connect people to jobs, activities, and regional transit routes.
- Rethink LOS and concurrency to prioritize non-motorized modes. Leverage private development by requiring multimodal improvements as a condition for approval.
- Support non-motorized opportunities via more trails, including private trails, and by connecting dead-end streets.
- Coordinate construction to minimize transportation delays.
- Co-locate EV infrastructure for bikes and cars.
- Emergency considerations must be included in the Transportation Element to support rapid mobility on/off the plateau.
- Walk/Bike/Roll support: bike lockers, street design, dedicated bus/bike lanes, bridges, citywide bike program, and bike parking/charging.
- Create and improve shelters, lighting, seating, and other pedestrian infrastructure to support transit.
- Strategies for funding limitations and opportunities.
- Monitor travel times for all modes to evaluate progress.

4.3 TRANSIT PLAN OUTREACH

In March 2023, the City of Sammamish began the process of developing the city’s first Transit Plan. To ensure that the creation of the Transit Plan is consistent with community’s values, priorities and concerns, a public outreach program was established that included a series of workshops, social pinpoints, and input by a community advisory committee. In addition, a statistically valid survey was conducted. The detailed results of the survey are provided in the Transit Plan. However, the following survey responses provide insight as to how the community views its transportation system.

Residents of Sammamish were decidedly mixed in their assessments of how well the transportation system in their communities meet their needs.

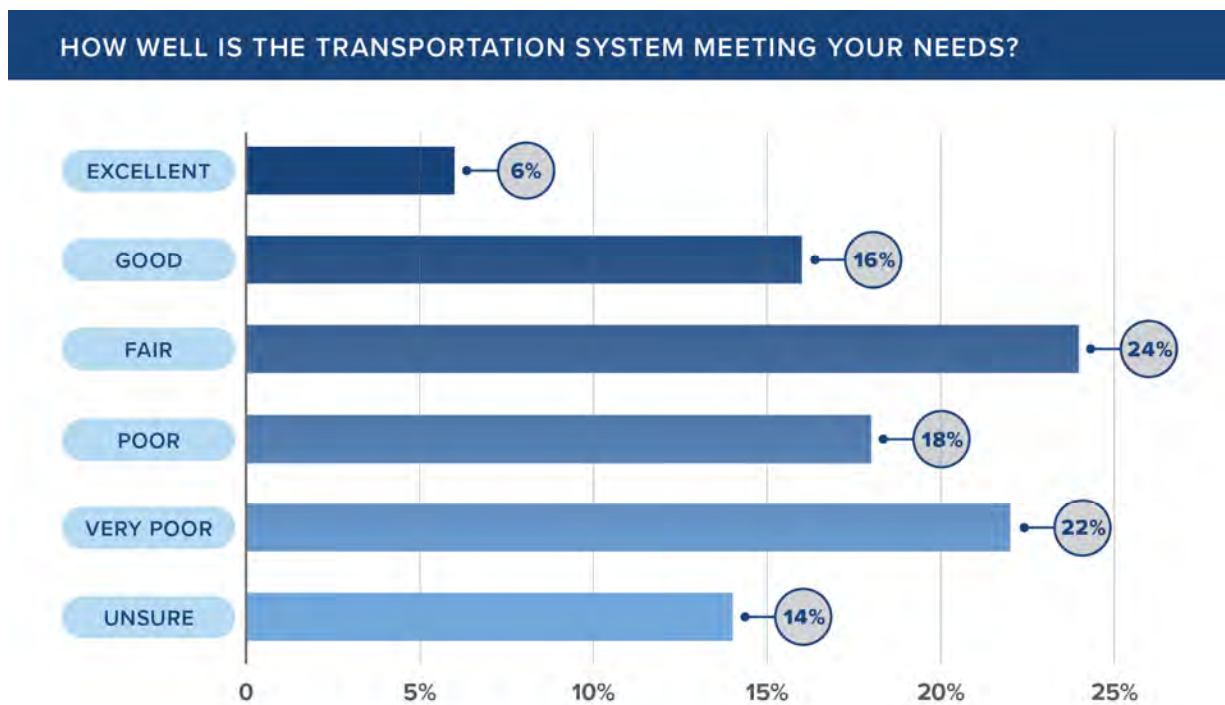


FIGURE 32. FUTURE NEEDS SURVEY RESPONSES

Traffic congestion appeared to be a common concern for the community with respect to the transportation system. Traffic congestion often rates among the most important issues that residents would like local leaders to address, and it can play an important role in mode choice for certain types of trips. Accordingly, survey respondents were asked to identify how big of a problem traffic congestion generally is when they travel in Sammamish and neighboring areas. The most striking pattern at the subgroup level is that individuals who had lived in the City of Sammamish at

least 10 years and those who don't currently ride transit at least occasionally were much more likely than their counterparts to rate traffic congestion in the area as a big or moderate problem. Keeping traffic congestion from getting worse was also viewed as the most important issue facing the community—more important than protecting the environment, improving the quality of education in public schools.

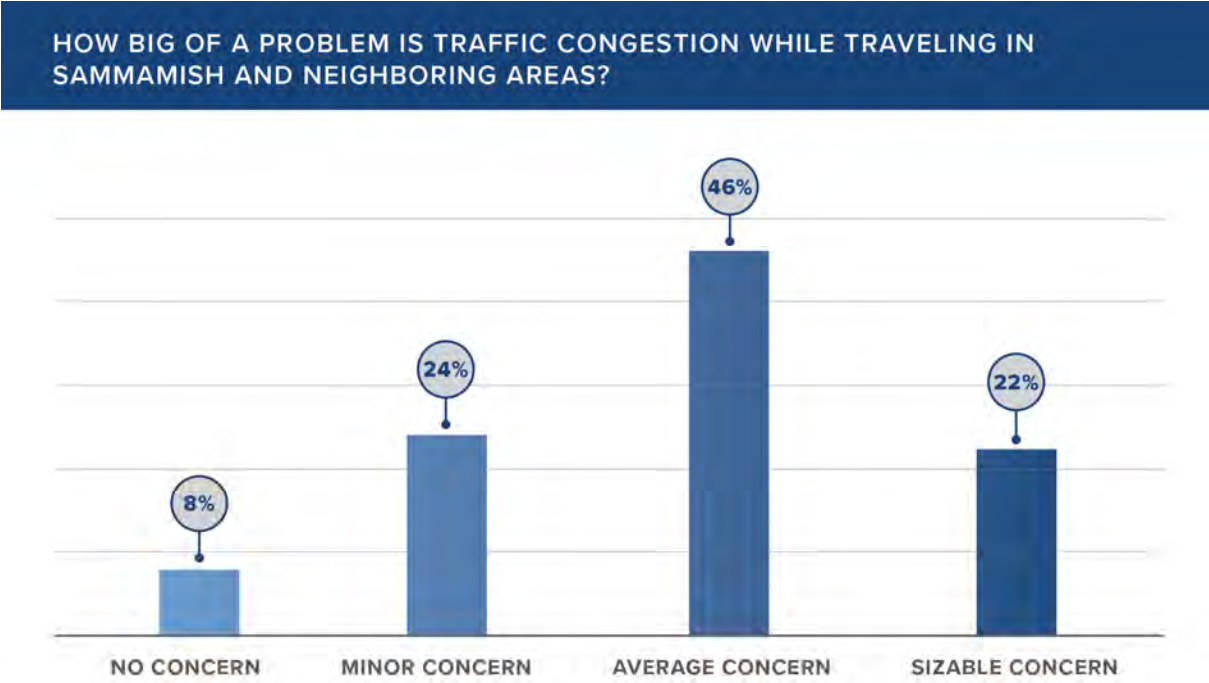


FIGURE 33. TRAFFIC CONGESTION SURVEY RESPONSE

Understanding how individuals view different modes is key to identifying the potential or latent market for different transit services. When it comes to how easy it is to get to places they need or want to go, driving a car was (as expected) widely perceived to be the easiest option, with 93% of respondents providing a rating of very easy or somewhat easy. Approximately one-quarter of respondents also thought it was very or somewhat easy to reach the places they need or want to go by walking (26%) and biking (26%). With respect to transit, however, few felt they can easily get to the places they need or want to go using a bus (7%), the King County Metro Community Van (3%), and on-demand Metro Flex shuttle (3%).

IS IT EASY / VERY EASY TO REACH YOUR DESTINATION USING EACH MODE?

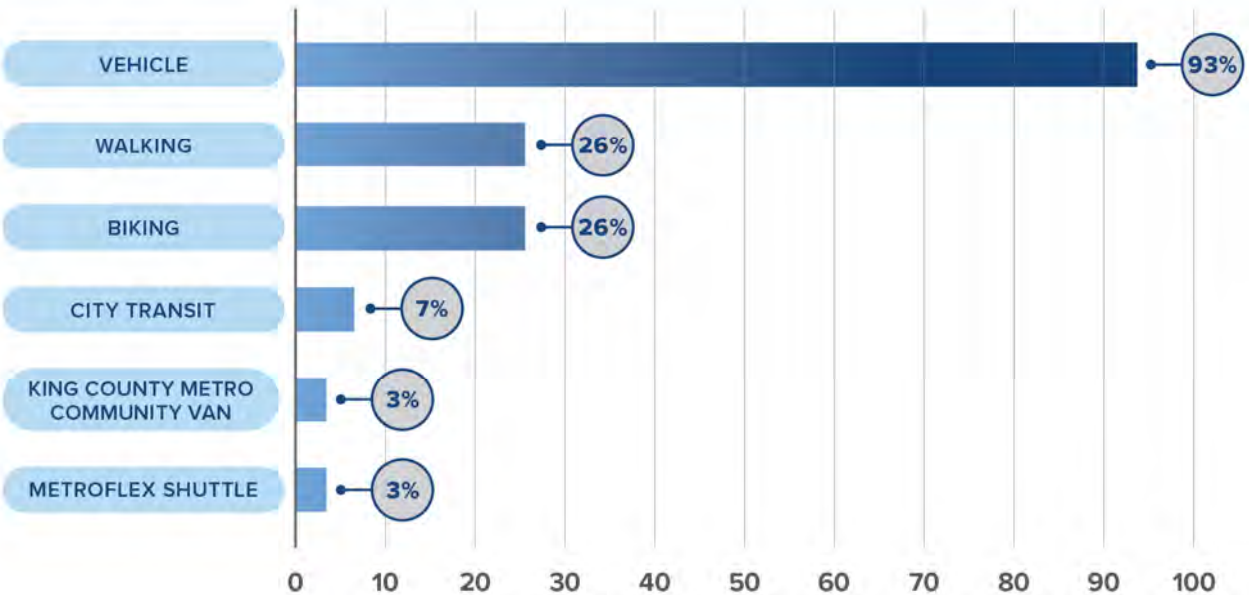


FIGURE 34. EASE TO REACH DESTINATION SURVEY RESPONSE

Sound Transit has expanded the light rail service out to the City of Redmond, with a light rail station expected to open in that city in 2025. Once the Redmond station is open, approximately 45% of Sammamish residents surveyed anticipated using light rail at least once per month. Expected use of light rail once the Redmond station is open ranged from a low of 30% to a high of 85% across subgroups, being highest among those who currently rely on public transit or active transportation as their primary mode, individuals who live rent-free in someone else's home, and those who currently ride transit at least once per month.

Common themes for transit included:

- having more routes available,
- buses running more frequently,
- having accurate real-time information about bus pick-up times and arrival times,
- ensuring that there are continuous sidewalks, bike lanes, and crosswalks from the bus stop to their destination so they can walk or bike safely after departing the bus, and
- improving the safety of buses, bus stops, and stations.

Under the scenario that improvements were made on all these fronts, 16% of respondents indicated they would definitely ride the bus on a weekly basis, while an additional 26% indicated they would probably do so. More specifics on improvements that would make the bus a more

attractive travel option, and how the patterns vary across subgroups can be found in the City-wide Transit Plan.

4.4 TRANSPORTATION MASTER PLAN

The Transportation Master Plan (TMP) process, which began in 2019, had an extensive outreach program. Through a combination of public workshops, stakeholder meetings, Meetings in a Box, and tabling events at Sammamish's Farmers Markets, National Night Out, and Party on the Plateau, first-hand information was collected from the public on the TMP and proposed future transportation projects. The TMP project team engaged with approximately 400 people over the outreach period. In addition, a statistically valid survey was sent by either mail or online. The COVID-19 pandemic affected travel patterns in the City and was not reflected in the survey response or other outreach conducted in 2019.

The City of Sammamish 2019 Transportation Master Plan Survey gave community members the opportunity to provide their opinion about the transportation needs and priorities of the Sammamish community. The City of Sammamish contracted with the National Research Center to administer by mail to 3,000 randomly selected households within the City boundaries in October 2019. Those participating in the survey rated the importance of various goals for the Transportation Master Plan, gave feedback on their preferred approach to improving roads and enhancing school zone safety, improving bus service, making it easier to bike and walk, and their support for various specific mobility improvement projects. After responses from the survey were collected all Sammamish residents were invited to participate in the same survey during an Open Participation period. Of the 2,941 households that received a survey in the mail (the other surveys were sent to vacant households), 687 surveys were completed, providing a response rate of 23%. The survey was initially sent to randomly selected households, after which the entire public was invited to participate during the Open Participation period, where the community was asked about the TMP as well as proposed projects. A total of 151 people responded to the Open Participation survey.

In total, 159 projects were discussed (56 were generated by the city, 103 via Connect Sammamish and write-ins), and there were 1,313 total votes and/or responses to questions during the workshops and online exercise. Overall, respondents felt it was essential or very important to shorten travel distances between destinations by improving street connectivity. Moreover, respondents felt it was essential to make it safe and easier to walk to destinations.

In 2023, the transportation planning team tabled at two Sammamish Farmers Markets and engaged with the community. Additionally, the City of Sammamish held the Community Block Party on September 30 where transportation staff tabled and engaged with the community on transportation needs. The most common themes from these interactions are a desire for more public transit, new and/or improved sidewalks, additional bicycle infrastructure and lighting.

Table 23 below summarizes the themes that were derived from the TMP outreach efforts.

TABLE 23. TRANSPORTATION MASTER PLAN OUTREACH THEMES

- Lack of internal connectivity, such as the Belvedere Barricade located where the extension of SE Belvedere Way intersects with E Beaver Lake Dr SE, generated passionate debate in the community and drove participation in the workshops.
- Schools and school districts shared concerns over pedestrian safety, connectivity (for school bus routes), enrollment implications related to growth, construction impacts, and congestion at key intersections.
- Congestion on arterials was a major concern. While this point may seem obvious, the conversations were diverse and revolved around many topics, such as traffic demand management, signal operations, capital projects, connectivity, residential growth, and lack of transit service.
- Residents wanted better options for getting to regional destinations via transit, particularly for commuting purposes. A related concern was that there are not consistent and safe options for people to get to bus stops, and many are on the roadside and lack sidewalks, crosswalks, lighting, and/or shelters.
- Residents were concerned that the recent rate of residential growth in Sammamish is resulting in more cars on the roads, but without much investment in expanding the road system.
- A common theme heard in workshops and stakeholder meetings was that a more connected and safer sidewalk and bike system would be needed to encourage other modes of travel beyond the car.

4.5 OVERALL THEMES

After synthesizing the information collected through the above outreach efforts, several common themes became apparent. In summary, the Sammamish community desires a multi-modal transportation system that:

- Enhances connectivity and accessibility to all modes of transportation throughout the city.
- Provides options to Drive, Walk, Bike, and take Transit.
- Safe, Walkable, Diverse, and Inclusive transportation system.
- Provide an interconnected and safer sidewalk and bike system would be needed to encourage other modes of travel beyond the car.
- Reduces congestion.
- Provides better options for getting to regional destinations via transit, particularly for commuting purposes including access to the Sound Transit Link station in Redmond and the future station in Issaquah.
- Transit improvements should focus on:
 - Providing safety around bus stops, including lighting and sidewalks/waiting areas.
 - Improving access to transit, including crossings and sidewalks.
 - Increasing frequency or service hours.
 - Expanding metro flex service.
 - Expanding service area.

4.6 CHALLENGES

The technical analysis and community outreach identified several issues and opportunities to be addressed by this TMP. As the following chapters outline a Future Transportation Vision (Chapter 5) and how this TMP can be implemented over time (Chapter 6), the following aspects of Sammamish's transportation system today should remain a key priority when thinking about future investments:

- A limited number of streets currently provide meaningful connections to the regional network.
- Major connections to the regional network are not within the City's jurisdiction.
- In-town circulation is impacted by a disconnected roadway system that results in traffic funneling onto just a few streets.

- Most of the City’s streets were built prior to incorporation and lack basic amenities like curbs, gutters, sidewalks, bike facilities, and lighting.
- Significant gaps exist in the City’s sidewalk, trail and bicycle networks that need to be filled in order to enhance non-motorized connectivity.
- Regional transit service to Sammamish is limited and is unlikely to increase substantially, given the City’s location and ridership trends.

Despite these headwinds, the City’s transportation future is bright. The outreach process identified near community consensus around the need to address congestion on key arterials and identified several creative ideas to improve connectivity, intersection function, and safety around schools. Moreover, the City has developed a strong foundation for success with a robust pipeline of capital projects and the highest impact fee in the State, ensuring that growth pays for the additional capacity needed to support it.

CHAPTER 5.

FUTURE TRANSPORTATION VISION



5.1 INTRODUCTION

The TMP provides the framework to guide transportation investments over the next 20 years in accordance with the community's vision and goals. To achieve Sammamish's vision, the Transportation Goals and Policies in the Transportation Element of the Comprehensive Plan serve as the foundation for strategies outlined in this chapter. This chapter describes Sammamish's vision for its future transportation network, as well as provides a strategic framework to accomplish each Transportation Goal and Policy.

The City of Sammamish envisions a future transportation system that serves all users and modes of travel by offering a safe and welcoming transportation network that optimizes connectivity and efficiency, aligns with the Climate Action Plan and sustainability goals of the city, maintains fiscal sustainability, and enhances the community.

5.2 MULTIMODAL NETWORK

A complete multimodal transportation network has connected modes for all road users, including pedestrians, cyclists, transit users, people with disabilities, and drivers. A connected multimodal network can enhance safety, promote inclusivity, increase employment opportunities, support transit ridership within and to surrounding cities, and offer a wide array of lifestyles. The City of Sammamish's Comprehensive Plan's Transportation Element Transportation Goal 1 focuses on the multimodal network. The Transportation Element policies listed in this section focus on creating an equitable transportation network for all road users and each mode. The following sections review the existing network for each mode, describe the City's vision for how each mode is served, and identify the type of infrastructure and action necessary to achieve the vision.

Accommodating and encouraging multimodal travel can in some cases requires retrofitting an existing infrastructure system with the addition of sidewalks, bike lanes/paths and adequate transit stop facilities. When looking to achieve a connected network so that walking and bicycling are safe, comfortable and attractive for people of all ages and abilities, some challenges can be posed with existing barriers or gaps in the system. Looking to national guidance can provide a greater awareness of the flexibility and versatility available in overcoming these challenges related to both new and retrofit projects and reduce conflicts between modes. Working in collaboration with multiple jurisdictions, community members, developers, homeowners' associations, and interdepartmental offices will bring together a connected and holistic multimodal transportation system.

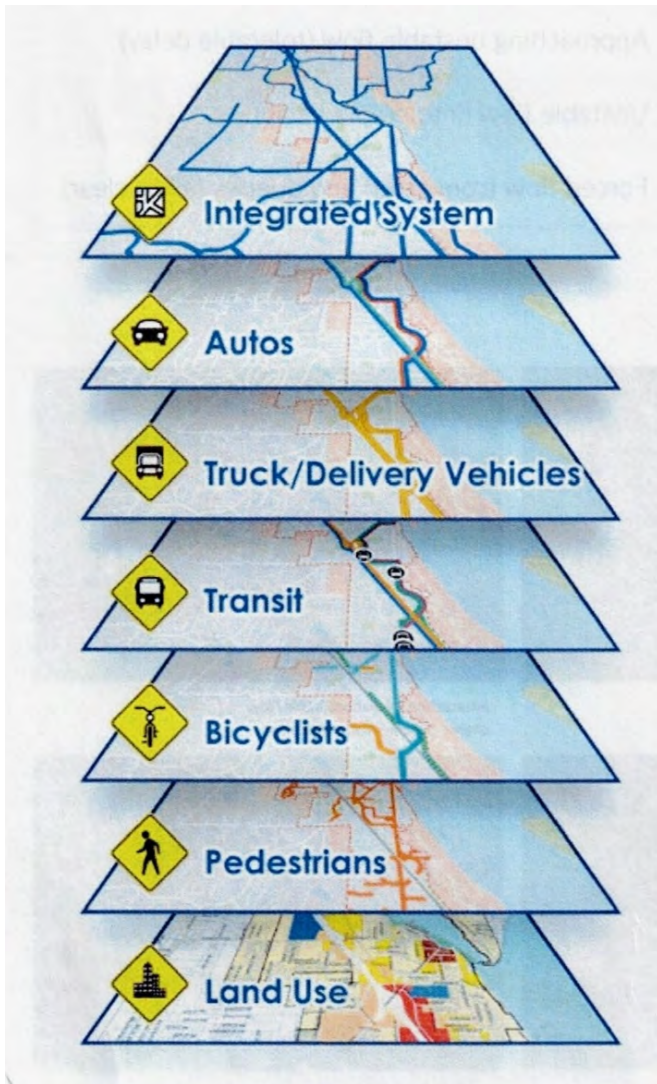


FIGURE 35. THE LAYERED NETWORK

TRANSPORTATION GOAL T1

Support the City’s and region’s growth strategy by focusing on moving people and goods within the City and beyond with a highly efficient multimodal transportation network.

Policy T1.1

Adopt and regularly update the Transportation Master Plan (TMP). The TMP is the framework for implementing and funding all transportation programs, plans, projects, and services. The TMP supports the development of a multimodal transportation system and provides implementation

It can be a challenge for a single roadway to be a true “complete street” and satisfy the demands and expectations of all modes at any given time. Generally, this is also not desirable from a user or a planning perspective. In response to this challenge, the City is implementing a layered network approach that focuses on how the City’s transportation network can function as a system to meet the needs of all users. Thee layered network builds on complete streets, and individual travel modes are prioritized on different facilities throughout the overall network where the need is the greatest.

Streets in Sammamish serve different travel purposes, and the modal networks therefore prioritize a different balance of users on each corridor.

Determining how the entire transportation network fits together in Sammamish requires identifying streets for each mode, combining them to locate overlaps, and then assigning priority to certain modes.

strategies that reflect the City’s vision, community priorities, and adheres to the Growth Management Act.

Policy T 1.2

Plan, build, and maintain a balanced, multimodal system that enhances local and regional connectivity through private and public infrastructure planning, improvements, investments, and maintenance programs.

Policy T 1.3

Encourage the promotion of the mobility of people and goods through a multimodal transportation system consistent with the regional priorities and Vision 2050.

Policy T 1.4

Coordinate with neighboring jurisdictions and regional transportation planning organizations to develop and operate a highly efficient transportation system.

Policy T 1.5

Encourage transit ridership and increase accessibility to transit.

Policy T 1.6

Design, implement, and maintain transportation system improvements and deliver transportation services and programs in accordance with the Americans with Disabilities Act (ADA) and the City’s ADA Transition Plan.

The following sections review the City’s existing multimodal network by mode, describe the City’s vision for how each mode is served, and identifies the type of infrastructure and action necessary to achieve the vision.

5.2.1 WALKING & BIKING

The Sammamish community has a vision for greater pedestrian mobility and connectivity throughout. To achieve this vision, an integrated network of sidewalks, bicycle facilities, single and multi-purpose trails is needed to connect neighborhoods to local activity centers, including schools, parks, transit, commercial areas, Town Center, and regional destinations as feasible. The development of an integrated network of pedestrian facilities requires a holistic approach and interdepartmental coordination between Parks and Public Works Departments to bring greater efficiency to the effort of building needed pedestrian infrastructure throughout Sammamish.

BICYCLE AND PEDESTRIAN MOBILITY PLAN

To achieve the objective described above, it is recommended that the City prepare a Bicycle and Pedestrian Mobility Plan that will:

- Address a 20-year vision for the development of an integrated network of pedestrian and bicycle transportation facilities including sidewalks, bicycle facilities, and single and multi-use trails and corridors.
- Provide greater connectivity throughout the City by linking neighborhoods to local activity centers using non-motorized means.
- Consider the 2024 Parks, Recreation, and Open Space Plan (PROS) and the 2004 Trail, Bikeways and Paths Plan.
- Identify a list of priority projects to be implemented.
- Identify funding implementation strategies that incorporate local, state and federal opportunities.
- Coordinate with the surrounding jurisdictions to provide connectivity and safety.

Following completion and adoption, the Bicycle and Pedestrian Mobility Plan will be incorporated into the Transportation Master Plan.

MULTIMODAL LEVEL OF SERVICE

As required by the Growth Management Act, the City’s multimodal level of service guidelines for locally owned arterials and active transportation facilities will serve as a gauge to measure the performance of the system and success in achieving the City’s transportation vision.

Transportation modes consist of vehicles, pedestrian, bicycle, rollers (scooters, wheelchairs, e-bikes, etc.), and transit. Each mode has its own level of service guideline, as described in Chapter 2 of the TMP. The LOS for each mode will be monitored and updated for each mode regularly, including expected Future LOS based on the adopted project list.

OTHER WALKING AND BIKING STRATEGIES AND ACTIONS

- Guide the development of new streets and maintenance of existing streets to form a well-connected network that accommodates safe, direct, and convenient access to the existing roadway network for pedestrians, bicyclists, transit, and automobiles.
- Implement a multimodal traffic safety and management plan specific to Sammamish’s location and geography as a long-term strategy to reduce traffic accidents and potential fatalities.

ADA TRANSITION PLAN

The City of Sammamish continues the commitment of providing equal access for all, including those with disabilities. In accordance with Title II of the Americans with Disabilities Act of 1990, the City of Sammamish has undertaken a comprehensive evaluation of its facilities and programs

within the public rights-of-way, public parks, and public buildings to determine what types of access barriers exist for individuals with disabilities. Both the Self-Assessment and the Transition Plan are required elements of the federally mandated ADA Title II, which requires that government agencies provide equal access to programs and services they offer.

The City’s objective is to remove physical barriers associated with access to public park facilities, building interior pathways, park trails, sidewalks, and curb ramps.

ADA Strategies include

- Prioritize safety improvements to the existing transportation system to protect mobility and lower overall asset life-cycle costs.
- Continue to pursue projects identified in the ADA Transition Plan to attain barrier-free (ADA compliant) access, where readily achievable, by modifying existing facilities or when designing or constructing new facilities.

5.2.2 TRANSIT

Transit systems throughout can provide accessibility between communities in and outside of the city, with key connections to regional and local transit services. Frequent and reliable transit service is an important part of creating a connected and accessible transportation network.

The City has limited control over the transit service provided by King County Metro and Sound Transit. However, the City can prioritize investment on access to transit and roadway projects that improve speed and reliability of transit service within Sammamish.

CITYWIDE TRANSIT PLAN

Sammamish adopted its first Citywide Transit Plan in 2024. The plan recommends projects to improve safety, speed and reliability, and access to transit. This plan should be regularly updated to ensure that it aligns with the City’s over transportation vision.

Transit strategies include:

- New development and redevelopment within a quarter mile of an existing or planned transit route should be designed to provide and encourage non-motorized access to transit where appropriate, including lighting, sidewalks, and crosswalks, bus stops, and mobility hubs. Improvements should align with the City’s TMP, Transit Plan, Standards, and other applicable plans; and be incorporated into a project’s development design.
- Develop a bus stop amenity improvement plan that prioritizes bus stop accessibility improvements.
- Work with public transit service providers and other relevant stakeholders to develop infrastructure and technology projects that enhance the speed and reliability of transit services such as Transit Signal Priority (TSP) and queue jumps.

- Collaborate with transit providers and facilitate private partnerships to add mobility hubs along the transit corridor. Park-and-ride facilities and mobility hubs should include safe and convenient access and facilitate multimodal transfers.
- Promote information on fixed route transit, non-fixed route transit and other transit programs.
- Increase local transit service and rideshare in the City that provide connections to East Link and regional transit.
- Through cooperation with other jurisdictions, work regionally to promote transit services that are dependable, maintain regular schedules and provide an adequate transit LOS throughout the day, weekends and holidays.
- Provide first and last mile connections to transit.

5.2.3 VEHICLES

Most of the Sammamish community are funneled onto a few major corridors each day in order to exit the city, creating several traffic choke-points due to the limited number of access points onto regional arterials north and south of Sammamish. Other than these major corridors, however, many of the other streets in the City are local streets and do not see significant traffic volumes throughout the day. As described earlier, the City classifies its roadways as either Principal Arterials, Minor Arterials, Collector Arterials, or Local Streets. These classifications indicate the intended function of each street, specifically in terms of its intended ability to facilitate vehicle and freight mobility as well as other modes.

INTERSECTIONS LOS

Developing a fully connected, multimodal street network will support mobility for current residents and enable future growth in Sammamish. A well-connected, multimodal transportation network has many short links, numerous intersections, and minimal dead-ends (cul-de-sacs). As connectivity increases, people have more travel route choices.

To support the mobility of the community, Sammamish has set peak hour LOS standards for 52 concurrency intersections. The intersection standards shall be applied to both the morning and afternoon peak hours. The LOS standard for the higher road classification shall be the standard applied. The LOS standards, methodology, current and future concurrency conditions are described in Chapters 2 and 3 of the TMP.

STRATEGIES INCLUDE:

- Maintain a concurrency management system, including Level of Service (LOS) that monitors the impacts of growth and development on the transportation system and ensures that LOS standards are met.

5.2.4 COMPLETE STREETS

Complete Streets are streets designed and operated to enable safe use and support mobility for all users. Those include people of all ages and abilities, regardless of whether they are travelling as drivers, pedestrians, bicyclists, or public transportation riders. The concept of Complete Streets encompasses many approaches to planning, designing, and operating roadways and rights of way with all users in mind to make the transportation network safer and more efficient.

Complete Streets approaches vary based on community context. They may address a wide range of elements, such as sidewalks, bicycle lanes, bus lanes, public transportation stops, crossing opportunities, median islands, accessible pedestrian signals, curb extensions, modified vehicle travel lanes, streetscape, and landscape treatments. Complete Streets reduce motor vehicle-related crashes and pedestrian risk, as well as bicyclist risk when well-designed bicycle-specific infrastructure is included. They can promote walking and bicycling by providing safer places to achieve physical activity through transportation.



There is no one design that defines a Complete Street as each roadway is unique and each community's needs are different. However, there are common features such as:

- ADA improvements
- Frequent and visible crosswalks
- Accessible sidewalks
- Refuge islands at crosswalks
- Narrower vehicle lanes
- Bike lanes
- Roundabouts and

- Curb extensions

These implementations can increase drivers' attention and lower speeds, provide defined spaces for bicycles, reduce pedestrian crossing distance and more comfort to access community businesses and amenities.

COMPLETE STREET POLICY

Complete Streets establish a street or network of streets that are constructed and operated to meet the needs of all users. Complete Streets are essential to implementing a multimodal transportation system and enhancing connectivity in the community. However, given the historical development of the City's street network, it is unrealistic that all streets will become complete streets. A more realistic approach is to ensure that streets in new developments, near Neighborhood Centers, in Town Center, and streets that provide connectivity to transit, schools, and parks consider Complete Streets amenities. City capital improvement projects on arterials and, where appropriate, street maintenance projects should meet flexible design standards for complete streets.

A critical component of connectivity and multimodal infrastructure is the development and adoption of a Complete Streets policy, **which should consider:**

- Applicability and basis of the policy.
 - Based on street classification, adjacent land use, and other relevant criteria
- How the City will plan, design, and maintain streets so they are safe for all users of all ages and abilities.
- Consideration of all users ages and abilities for all new, retrofit/reconstruction, maintenance, and ongoing projects and new development projects.
- Integration into maintenance schedules and plans. Use basic repaving work to improve the overall network, rather than just waiting on large, expensive, capital projects.
- Alignment with other planning efforts.
- Provide a performance measure and tracking system of completed projects to assist in understanding the successes and needs that are being met and guide future project implementation.

Strong Complete Street policies help transform how decision makers think about road design. Policies are the first step in community practices for street design, in turn developing projects that build the vision and goals, and in turn creating a complete and connected street network safe and reliable for all road users of all ages and abilities.



Source: Smart Growth America

Complete streets strategies include:

- Encourage connections between existing developments and new developments to provide an efficient network of travel route options for pedestrians, bicycles, vehicles, transit, and emergency vehicles.
- Maintain a neighborhood traffic management program based on education, enforcement, and engineering for evaluating and responding to residential neighborhood traffic related concerns.
- Ensure that new development contributes its fair share of the cost of transportation facilities, programs and services needed to mitigate growth related transportation impacts.

5.3 INVESTMENTS IN TRANSPORTATION SYSTEMS

Planning and prioritizing transportation investments can provide improvements to economic development, assist in land use decisions, improve tourism and ensure equitable access to City amenities. As the City continues to grow, improving mobility and ensuring that all people equitably benefit from the City's transportation system is key to addressing the diverse needs of residents and visitors alike.

The City of Sammamish's TMP provides the framework to guide short and long-range (20 – 30 years) transportation investments in accordance with the community's vision and goals. Prioritized transportation investments can ensure that large transit projects and other regional infrastructure are coordinated with growth and help improve how people and goods are moved throughout the City. Investments and policies can create a safe, clean and efficient transportation system essential to the quality of life, health and economy of the City of Sammamish's residents and visitors.

TRANSPORTATION ELEMENT GOAL T2

Invest in transportation systems that offer greater options, mobility and access in support of the City's growth strategy.

Policy T 2.1

Prioritize investments in programs, projects, and planning efforts that advance multimodal transportation, safety, and reduce vehicle miles traveled and greenhouse gas emissions.

Policy T 2.2

Maintain and regularly update financial strategies for multimodal transportation investments

Policy T 2.3

In coordination with the State's 6-year Transportation Improvement Plan (TIP), develop and implement the City's six-year TIP that includes transportation programs, projects, services, and a sustainable, multi-year financing plan.

Policy T 2.4

Ensure that new development mitigates its impacts on the transportation system.

TRANSPORTATION IMPROVEMENT PLAN

The Sammamish Transportation Improvement Plan (TIP) looks ahead to address future challenges with a wide variety of transportation investments including transit and bicycle and pedestrian facilities. The TIP does so by identifying specific improvement projects and estimating the City's annual costs across six years. These projects are included in the Transportation Capital Program

funded by local Traffic Impact Fees, Real Estate Excise Tax (REET), and awarded grant funding from State and Federal opportunities.

The TIP is updated and adopted annually to include recently identified and prioritized projects. These updates ensure alignment with the City's transportation vision, improved safety, mobility options and the region's growth.

Infrastructure investments can come in a range of strategies to prepare the City for the coming decade. Some of which include:

Transportation Impact Fee strategies:

- Assess a transportation impact fee for all new development which is related to and proportionate to the impact caused by new development and is applied to growth related transportation system improvements.
- Provide an annual report for the impact fee account outlining monies collected, earned or received and system improvement that were financed by impact fees.

Investment strategies include:

- Invest and encourage the integration of transportation systems to make it easy for people to move from one mode or technology to another.
- Reduce the need for new capital improvements through investments in operations, demand management strategies, and system management activities.
- Maintain a citywide traffic monitoring program to determine how transportation investments are performing over time.
- Protect the transportation system against major disruptions by third party infrastructure projects and maintenance.

Financial strategies include:

- Utilize the Transportation Master Plan (TMP) to guide short- and long-range transportation planning and investment decisions.
- Maintain a detailed revenue forecast to fund the ongoing maintenance, operation and delivery of the transportation system.
- Identify potential revenue sources, including general fund contributions, impact fees, local improvement districts, transportation benefit districts, street maintenance utility grants, developer and other contributions, business taxes, bonds and debt financing.

New Development Standard strategies include:

- Mitigating impacts through improvements or strategies such as nonmotorized transportation modes, transit, ride sharing and transportation demand management.

A. New development shall be allowed only if all transportation facilities are adequate at the time of development and transportation impacts will not negatively impact or reduce LOS below standards elsewhere; and/or a financial commitment is in place to complete the necessary improvements or

strategies to accommodate transportation impacts within six years, in order to protect investment in and the efficiency of existing transportation facilities and services and promote compact growth.

- New development must be responsible for street improvements adjacent to and internal to the development.
- Projects along designated non-motorized corridors should be designed to incorporate the corridor as part of the project.
- Guide the development of new streets and maintenance of existing streets to form a well-connected network that accommodates safe, direct, and convenient access to the existing roadway network for pedestrians, bicyclists, transit, and automobiles. Prioritize non-motorized connections to reinforce the City's vision of pedestrian connectivity.

5.4 MAINTENANCE, OPERATIONS & SAFETY

Ongoing maintenance and preservation are critical to keeping roadways in operational condition and making the most efficient use of transportation investments. Effective transportation operational strategies are key to ensuring safe and continuous movement of people and goods through all modes. Transportation policies have increasingly prioritized the maintenance, preservation, and optimization of existing transportation infrastructure and services.

Transportation operations are the intentional strategies, tools, and real-time actions needed for the system to serve all road users safely and reliably as it was planned, invested, designed, constructed, and maintained.

The TMP primarily focuses on future transportation investments; however, maintenance efforts are vital to the system's ability to continue to provide safe, useable and efficient mobility.

TRANSPORTATION ELEMENT GOAL T3

Maintain, preserve, and operate the City's transportation system in a safe and functional state.

Policy T 3.1

Maintain and operate the City's multimodal transportation system to provide continuous safe, efficient, and reliable movement of people, goods, and services.

Policy T 3.2

Prioritize safety for all transportation modes when planning and implementing maintenance programs, capital improvements, monitoring programs, and new or redevelopments.

Policy T 3.3

Through planning, maintenance, and investments, foster a transportation system that is sustainable and resilient.

Policy T 3.4

Through collaboration with school districts, implement Safe Routes to School, to assure that safety and accident prevention for pedestrian and bicycle travel to school receives the highest consideration.

Recognizing the role of adequate maintenance and preservation will assist in providing proper accommodation to expected future travel. Focusing strategies to maintain, preserve and operate the facilities that planners, designers, constructors, maintenance crews, and safety specialists envisioned for the real-time user experience can include:

LOCAL ROAD SAFETY PLAN

A local road safety plan (LRSP) provides a framework for identifying, analyzing, and prioritizing roadway safety improvements tailored to issues and needs. The process results in a prioritized list of issues, risks, actions, and improvements that can be used to reduce fatalities and serious injuries on local roads.

WSDOT provides the Highway Safety Improvement Program designed to assist local agencies with funding of safety improvements projects to reduce or eliminate fatal and serious injury crashes outlined within the LRSP. To be eligible for these funds the City must submit a local road safety plan developed from crash data analysis. This program requires LRSP updates every two years to be eligible for each funding cycle.

Safety driven transportation strategies for all modes include:

- Design and operate transportation infrastructure that safely accommodates each mode intended to be served.
- Prioritize safety improvements to the existing transportation system to protect mobility and lower overall asset life-cycle costs.
- Continue to improve the safety of the transportation system to achieve the State's goal of zero deaths and disabling injuries.
- Ensure that the design speed of facilities reflects the intended operating speed for the facility.

SAFE ROUTES TO SCHOOL

A Safe Routes to Schools (SRTS) program can empower the community to make walking and bicycling to school a safe and routine activity. WSDOT's SRTS program provides funding for infrastructure projects within two miles of a school serving children kindergarten – 12th grade. The City of Sammamish has participated in funding applications and continues to seek funding under the program guidelines. To ensure continued participation the TMP encourages following the below strategies:

Project selection and prioritization strategies include

- Provide pedestrian and bicycle pathways on streets connecting to, or within, the school zone, and pedestrian facilities that are physically separated from vehicle and bicycle traffic.
- Locate appropriate signs to alert motorists entering school zones.
- Use adequate traffic calming devices in school zones.

MULTIMODAL LOS

Multimodal level of service (MMLoS) indicates the overall quality of transportation network in terms of the user’s comfort level and how the roadway performs or supports pedestrian and bicycle travel. Recent updates to the Growth Management Act require Transportation Element updates to include policies and strategies to achieve more adequate multimodal facilities.

Strategies include:

- Install adequate lighting along roadways and pathways.
- Establish crosswalks in areas of good visibility, lighting and proximity to connecting modes.
- Ensure continued maintenance and preservation of existing trails.
- Consider when reconstruction or major maintenance work on a City street not having sidewalks, fully explore the ability to provide sidewalks or alternative pedestrian facilities.
- Encourage multimodal connections where feasible, including strong pedestrian linkage between the transit facilities.

5.5 ENVIRONMENT

Designing policies and strategies to reach substantial reduction of emissions of greenhouse gases that contribute to concerns for our climate and environment now and as well as prepare for future impacts. The Transportation Element Goal T4 is to prioritize investments that that minimize the negative impact on the environment. An emphasis on non-motorized and electric transportation options, as well as public transit can result in a reduction of vehicle miles traveled and greenhouse gas emissions.

As the City of Sammamish continues to grow, the increase in electric demand will require infrastructure improvements to accommodate the increased loading and maintain reliability of the system. Additionally, as electric vehicle (EV) adoption in Washington State increases, charging infrastructure is a great consideration for those considering purchasing zero-emission vehicles. Puget Sound Energy currently provides programs to Transportation Electrification Programs to reduce EV adoption barriers and boost charging infrastructure within the state. A transition to Electric Vehicles will require increased infrastructure to ensure there is a safe, reliable, and effective source of energy for charging.

Climate change is an urgent environmental, economic, and equity threat being addressed by taking committed actions. The City has adopted a Climate Action Plan which aligns with the PSRC's regional climate change goals and strategies to substantially reduce carbon emissions with reduction of greenhouse gases and reducing vehicle miles traveled. In doing so the City is participating in creating a healthier, more sustainable transportation system.

TRANSPORTATION ELEMENT GOAL T4

Design and manage the City's transportation system to minimize the negative impacts of transportation on the natural environment.

Policy T 4.1

Seek the development and implementation of transportation modes and technologies that are energy-efficient, reduce vehicular emissions, support regional and national efforts and improve overall system flow and performance.

Policy T 4.2

Encourage transportation system development that minimizes existing tree canopy removal and replaces any necessary tree removal along traffic rights of way.

Policy T 4.3

Design and operate transportation facilities in a manner that is compatible with and integrated into the natural and built environment including features, such as natural drainage, native plantings, and local design themes.

Policy T 4.4

Consider traffic impacts on residential neighborhoods as part of the City's transportation system management program.

Policy T 4.5

Encourage noise reduction on roadways in innovative ways other than the use of noise walls.

Policy T 4.6

Support local transportation demand management programs (education and/or local regulations) to reduce the impacts of high traffic generators not addressed by the Washington State Commute Trip Reduction Act including: City offices, recreational facilities, schools, and other high traffic generating uses.

Policy T 4.7

Reduce greenhouse gas (GHG) emission by 50% by 2030 and 96% by 2050.

Policy T 4.8

Reduce per capita Vehicle Miles Traveled (VMT) by 30% by 2030, and 50% by 2050.

Policy T 4.9

Utilize innovative strategies and technology to encourage mode shift to active transportation and transit to work towards meeting the City’s VMT and GHG reduction targets.

CLIMATE CHANGE AND RESILIENCY

Building resiliency within the Sammamish community is critical to the overall health and wellbeing of the transportation system and its residents. The ability to prepare and plan for or recover from potential adverse events is key to mitigating impacts and recover to a “normal” pre-event state. Building resiliency into the City’s transportation system can ensure that routes remain viable for deliveries, health needs, and can strengthen infrastructure to withstand natural events.

STRATEGIES INCLUDE:

- Encourage the integration of transportation systems to make it easy for people to move from one mode or technology to another.
- Work to attract more businesses to the City that provide essential and needed services/goods and broaden the employment opportunities within the city.
- Understand the existing broadband network within the City and work with providers to expand this service thereby enabling more reliable connections for people to successfully work remotely.

Electric Vehicle and Charging planning

In 2021, the Washington State Climate Commitment Act was signed into law, which, among other things, establishes a “cap and invest” program. In 2021 the Clean Fuel Standard was also signed into law, requiring the carbon intensity of fuels to be reduced by 20% by 2038. The Washington State Legislature also provided direction related to EV infrastructure, including the adoption of building codes and development of tools for forecasting charging infrastructure needs.

STRATEGIES INCLUDE:

- Where financially feasible, promote the expanded use of alternative fuel vehicles by converting public fleets, applying public incentive programs, and encouraging the establishment of electric vehicle charging stations throughout the City where appropriate.
- Increase use of electric vehicles and support increased fuel efficiency to reduce transportation related emissions and provide cleaner and healthier air for the community.
- Encourage EV Adoption within the Sammamish community.
- Support electric vehicles in local government operations.
- Encourage electric charging facilities within private development and redevelopment.

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is defined as a set of strategies aimed at maximizing traveler choices encouraging travel by other modes, carpooling or encouraging remote work schedules. The City looks at the specific needs of the community and the existing transportation system based on performance and with objectives driven by goals and policies set in the TMP.

TDM STRATEGIES INCLUDE:

- The City should serve as a model to the community by striving to comply with the requirements of the State Commute Trip Reduction (CTR) Act.
- Support the reduction of vehicle dependence in the City by supporting ride share, on-demand car services, and electric bike/scooter programs.
- Apply technology and innovative strategies to enhance active transportation, promote transit, and increase efficiency for all modes of transportation to work towards the City's VMT and GHG reduction goals.
- Continue to ensure the city, as an employer, sets a positive example for other employers by maintaining the use of telework, flexible work hours, compressed work week schedules and other options as deemed feasible to reduce VMT and GHG.

5.6 SAMMAMISH TOWN CENTER

In June 2008, the City adopted the Sammamish Town Center Plan. The Town Center Plan established policy direction that amends the previous Comprehensive Plan. The Town Center provides a central area for the increased residential and commercial densities. Transportation improvements associated with the Town Center are intended to provide safe, efficient, and attractive connections to central uses and amenities, minimize congestion impacts within the Town Center and surrounding areas, and promote alternative travel modes. To support the Town Center Plan, improvement concepts including roadway cross-sections specific to roadways supporting the Town Center were developed. These concepts are described in detail in the Sammamish Town Center Plan.

Transportation impacts of Town Center development will be addressed through a variety of strategies, including:

- Greater connectivity of roadways within, to and from the Town Center.
- Trip reduction through bicycle/pedestrian access.
- Transportation demand management through measures such as shuttle service, carpool access, etc.

- All new City transportation improvement projects to provide appropriate accommodation for pedestrians, bicyclists, transit riders, and persons of all abilities, while promoting safe operation for all users.
- Roadway and intersection improvements inside and outside the Town Center.
- Other measures may be identified.

Below is a summary of the overarching strategies related to circulation.

5.6.1 TOWN CENTER STREET NETWORK

Vehicular traffic should move as smoothly and reliably as possible. This may mean limiting businesses fronting on major arterials like 228th Avenue SE, providing more connecting roads, or implementing other strategies.

Roadway improvements should facilitate vehicle, pedestrian, and bicycle movement. Some recommended improvements are necessary to improve circulation around and within the Town Center while other roads primarily provide access to new development. Roadway system will emphasize pedestrian and bicycle travel and promote transit use.

To support the Town Center Plan, improvement concepts including roadway cross-sections specific to roadways supporting the Town Center were developed.

5.6.2 TOWN CENTER NONMOTORIZED FACILITIES

Providing safe, efficient, and attractive pedestrian and bicycle facilities is one of the top priorities for the Town Center’s development. The Town Center Plan calls for an extensive and connected network of streets and trails. Walking and bicycling are among the most promising travel modes. The plan proposes sidewalks on all public streets, with the widest sidewalks in the mixed-use areas. Bicycle lanes have been implemented on SE 4th Street and are recommended for other key connector streets. Crossing improvements at all the signalized intersections along 228th Avenue SE are important, particularly on SE 4th Street.

The Town Center bike and pedestrian network should also connect to external locations. Previously developed plans have proposed a citywide network of shared-use corridors that would interconnect neighborhoods to the City’s primary activity centers. The 2024 PROS Plan identified a primary conceptual east-west trail that connects to the Town Center. The City and Town Center developers should work together to ensure that the vision of a citywide shared-use corridor network is achieved.

5.6.3 FUTURE 2044 CONDITIONS IN TOWN CENTER

The development forecasts applied in this analysis include a total of 1,737 new dwelling units and 339,000 square feet of commercial development in the Sammamish Town Center area, in addition to a new 600-student public high school on the east side of 228th Ave SE north of SE 4th Street.

The intersection of 228th Avenue SE & SE 4th Street constitutes to be a critical access point to Town Center and a key location for Citywide mobility due to its location on the 228th Avenue SE principal arterial corridor. As such, it will be important to maintain acceptable operations at this location. The 2044 analysis indicates that the intersection will operate at LOS C or better in both peak hour periods of all 2044 scenarios and will satisfy the minimum LOS standard. Intersection LOS results at 228th Avenue SE & SE 4th Street are summarized in **Table 24**.

TABLE 24. 2044 INTERSECTION LOS RESULTS, 228TH AVE SE & SE 4TH ST

ID	NAME	CONTROL	LOS STD	AM PEAK HR		PM PEAK HR	
				DELAY (S)	LOS	DELAY(S)	LOS
	2044 Baseline	Signal	E	19	B	19	B
	2044 Alternative 1: STC Network Buildout	Signal	E	19	B	18	B
	2044 Alternative 2: Back-to-Office	Signal	E	20	B	23	C
	2044 Alternative 3: Transit Shift	Signal	C	19	B	18	B

5.6.4 TOWN CENTER TRANSIT FACILITIES

The Town Center’s configuration with compact mixed-use nodes will be built to accommodate viable transit use. The street grid will be designed such that transit is easily accessible and the mixed-use nodes will be designed to provide for transit stops at key locations. The land use mix and intensity in these mixed-use areas are intended to provide sufficient pedestrian activity to support transit use.

In 2024, the City adopted a Transit Plan that evaluates the existing and future transit system in Sammamish. This plan considered access to transit, transit speed and reliability, and transit-related safety. Through this planning effort, six key projects were identified that are intended to enhance transit access, improve transit speed and reliability, and bolster transit-related safety within Sammamish.

The Transit Plan calls for the establishment of “mobility hubs” strategically located in the City. A mobility hub is a space that connects a variety of transportation options, providing a more attractive connection to transit, access future light rail facilities in Redmond (2024) and Issaquah (2044). By creating these hubs, the City is responding to the growing demand for sustainable and efficient transportation options. Recognizing that 228th Avenue NE/SE is the primary transit corridor, the Transit Plan identified that Sammamish could benefit from a new centrally located mobility hub near Town Center. To provide desired transit service, including a centrally located

transit hub, coordination between the city, Town Center developers, King County Metro, and Sound Transit is essential.

5.6.5 TOWN CENTER PLAN UPDATE & EIS

In 2024 the City began the process to update the Town Center Plan and Environmental Impact Study to address a proposed increase in residential capacity from 2,000 units to 4,000 units and commercial capacity. Any increase in residential or commercial capacity will necessarily be associated with the delivery of diverse and affordable housing. This update to the City's Town Center Plan will recalibrate the previous plan with updates in the existing conditions since the original Plan was adopted in 2008, account for current development proposals, and adjust the infrastructure and transportation planning. However, the extent of any potential adjustment is not known at this time.



CHAPTER 6.

PLAN IMPLEMENTATION



6.1 INTRODUCTION

This Chapter summarizes the existing funds available for transportation projects and describes options for additional revenues. The remainder of this chapter discusses programmatic investments and then includes two sets of potential future transportation project lists: a prioritized project list and an unconstrained project list. The project lists and the funding assumptions contained in this Chapter will aid current and future decision makers in allocating resources to address transportation issues throughout Sammamish. Finally, this chapter describes the next steps to implement the TMP.

6.2 ANTICIPATED FUNDS AVAILABLE

The Growth Management Act requires that the transportation related provisions of comprehensive plans address the financing of the local transportation system. Multiyear financing plans serve as the basis for the six-year street, road, or transit program for cities, counties, and public transportation systems and should be coordinated with the State six-year transportation improvement program.

The City of Sammamish transportation projects are primarily budgeted in the City’s 340 Capital Improvement Project Fund. The 340 Fund’s revenue sources are as follows:

B. Projected Fund Balance: 12/31/2024 balance is \$20,973,890*.

1. Real Estate Excise Tax (REET)
2. Investment Income
3. Traffic Impact Fees (Restricted use)
4. Grants

*Some of these funds have restricted use to the Transportation Impact Fee funding source

Table 25 below summarizes the annual funding assumptions based on the last few years trend. The reasonable funding assumptions currently come from dedicated revenue sources including Real Estate Excise Tax and Traffic Impact Fees.

TABLE 25. ANNUAL FUNDING ASSUMPTIONS

FUNDING SOURCE	ASSUMPTIONS
2025 - 340 Beginning Fund Balance (Including TIF)	\$20.1 million
Real Estate Excise Tax (REET)	\$3 million annually

Traffic Impact Fees	\$500K annually
Interest Income**	\$250K annually

**Assumes a \$10 million annual ending fund balance invested at 3%, however, as the federal government reduces interest rates, this may not be achievable

Based on the existing fund balances and assumptions, the estimated revenue projection for the 20-year period 2024 – 2044 is \$75,000,000. Table 26 identifies the revenue stream for the expenditures proposed for the next 20 years based on the preliminary project cost estimates discussed in this chapter.

TABLE 26. TRANSPORTATION CAPITAL IMPROVEMENT FUNDING: 2024 - 2044

FUNDING SOURCE	AMOUNT (2024 Dollars)
Transportation CIP Fund (REET)*	60,000,000
Traffic Impact Fees (TIF) **	10,000,000
Interest Income	5,000,000
Anticipated Grants	TBD
Additional Funding to be determined****	TBD
TOTAL REVENUE	

*2024 Beginning Fund REET Balance @ \$12.5 million.

**2023 TIF Balance @ \$9,012,776.

****Project costs for 2024 – 2044 will be refined in 2025 in the TMP Update, after the Bike & Pedestrian Mobility Plan is completed.

6.3 ADDITIONAL REVENUE OPTIONS

This section provides an overview of funding options to augment the City’s current projected revenues for transportation projects. These options include grant programs, Transportation Benefit District, debt financing and budget appropriations.

6.3.1 GRANT PROGRAMS

Federal, State and Regional grant funding opportunities are available to the City of Sammamish. It should be noted that some grant programs consider whether or not applicants have an adopted

Complete Street policy or ordinance, and many are targeted toward communities more burdened by socioeconomic issues than Sammamish.

Grant opportunities are available from the following agencies:

U.S. DEPARTMENT OF TRANSPORTATION

Safe Streets for All:

The Bipartisan Infrastructure Law (BIL) established the Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over 5 years, 2022-2026. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. Over \$3 billion is still available for future funding rounds.

The SS4A program supports the U.S. Department of Transportation's National Roadway Safety Strategy and our goal of zero roadway deaths using a Safe System Approach.

The Safe Streets and Roads for All (SS4A) discretionary grant program is focused on improving roadway safety for all users by reducing and eliminating serious-injury and fatal crashes through the development, refinement, and subsequent implementation of comprehensive safety action plans (referred to as "Action Plans").

The program provides funding to develop tools to help strengthen a community's approach to roadway safety and saving lives. Projects and activities that do not have a connection to roadway safety are not eligible for SS4A funding. The SS4A provides funding for two types of grants: Planning and Demonstration Grants and Implementation Grants.

Two SS4A Grant Types

Planning and Demonstration Grants

For a Planning and Demonstration Grant, eligible activities include the following:

1. Developing, updating, or completing an Action Plan.
2. Conducting supplemental safety planning to complete or enhance an Action Plan.
3. Carrying out demonstration activities to inform Action Plan development or updates.

Implementation Grants

- Implementation Grant activities must include implementing roadway safety strategies and projects identified in an eligible, complete Action Plan.
- Projects and strategies must be infrastructural, behavioral, and/or operational activities identified in an Action Plan and must be directly related to addressing the safety problem(s) identified in the Action Plan.
- Implementation Grants may also include funding requests for supplemental planning and demonstration activities that inform an Action Plan (Activity A). In addition, Implementation

Grants may fund project-level planning, design, and development connected to the implementation of projects and strategies (Activity B).

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Highway Safety Improvement Program:

The Highway Safety Improvement Program (HSIP) is a federal program that allows states, and the local governments within them, to target safety funds to their most critical safety needs. This includes funding to local agencies through the City Safety Program.

The goal of the Highway Safety Improvement Program (HSIP) is to reduce fatal and serious injury crashes, following Washington state's Strategic Highway Safety Plan ([Target Zero](#)) and each agency's local road safety plan. WSDOT's programs for local governments include the County Safety program, the City Safety program, and the Railway-Highway Crossing program.

The City Safety program provides funding for projects that reduce fatal and serious injury crashes on city/town streets and state highways using engineering improvements/countermeasures. The 2020 program includes two subprograms:

- **Spot Location:** Projects must be at a specific intersection(s), spot or mid-block location(s), or corridor(s) and must address at least one fatal or serious injury crash in the most recent five-year period.
- **Systemic:** Projects are identified through a city/town's local road safety plan, that identifies and prioritizes projects based on the top crash type(s) in the city/town. Projects can be at intersection(s), spot or mid-block location(s), and/or on corridor(s) throughout a city/town or over wide areas within a city/town.

Cities must submit a local road safety plan that addresses fatal and serious injury crashes and systemic safety needs to be eligible to apply.

Pedestrian & Bicycle Program:

The Pedestrian and Bicycle program objective is to improve the transportation system to enhance safety and mobility for people who choose to walk or bike. Projects should be designed to:

- Eliminate pedestrian and bicyclist fatal and serious traffic crashes.
- Increase the availability of connect pedestrian and bicyclist facilities that provide low traffic stress and serve all ages and abilities.
- Increase the number of people that choose to walk and bike for transportation.

Funding sources:

The Pedestrian and Bicyclist Program is supported with funding from Washington’s Climate Commitment Act (CCA). The CCA supports Washington’s climate action efforts by putting cap-and-invest dollars to work reducing climate pollution, creating jobs and improving public health. Information about the CCA is available at www.climate.wa.gov. The program is also supported by the multimodal transportation account-state appropriation.

Eligible project types:

1. Pedestrian/bicyclist safety and/or mobility infrastructure improvements (typically, also includes preliminary engineering, and right of way).
2. Development/Design-Only projects that will result in a ready-to-construct pedestrian or bicyclist improvement project (may include tactical urbanism). Up to 5% of available program funding.

All public agencies in Washington, including tribal governments (lead agency must be the owner/operator of the transportation facilities where improvements are focused).

Safe Routes to Schools Program:

SRTS programs use a variety of education, engineering and enforcement strategies that help make routes safer for children to walk and bicycle to school and encouragement strategies to entice more children to walk and bike. They have grown popular in recent years in response to problems created by a growing reliance on motor vehicles for student transportation, an expanding built environment, as well as the development and availability of federal and state funding for SRTS programs. The program is designed to:

- Enable and encourage children, including those with disabilities, to walk, roll, and bicycle to school.
- Make bicycling and walking to school a safer and more appealing form of transportation, encouraging a healthy and active lifestyle from an early age.
- Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

Eligible project types

1. Pedestrian/bicyclist safety infrastructure improvements within two miles of a school (typically, also includes preliminary engineering, and right of way).
2. Education/Encouragement Only projects.
3. Development/Design-Only projects that will result in a ready-to-construct pedestrian or bicyclist improvement project within two miles of a school (may include community outreach and tactical urbanism). Up to 5% of available program funding.

Projects are to serve students in kindergarten to 12th grade.

Funding sources:

The Pedestrian and Bicyclist Program is supported with funding from Washington’s Climate Commitment Act (CCA). The CCA supports Washington’s climate action efforts by putting cap-and-invest dollars to work reducing climate pollution, creating jobs and improving public health. Information about the CCA is available at www.climate.wa.gov. The program is also supported by the multimodal transportation account-state appropriation.

All public agencies in Washington, including tribal governments (lead agency should be the owner/operator of the transportation facilities where improvements are focused), and nonprofit entities responsible for the administration of transportation safety education and encouragement programs

Surface Transportation Block Grant:

The Surface Transportation Block Grant (STBG) continues to be the most flexible of all the highway programs and provides the most financial support to local agencies.

WSDOT allocates STBG funds to Metropolitan Planning Organizations (MPO’s) and County Lead Agencies for prioritizing and selecting projects that align with their regional priorities involving all entities eligible to participate in a public process. In addition, WSDOT sets annual delivery targets for each MPO and county lead agency.

Eligible projects include:

- Highway/bridge construction/repair.
- Transit capital projects.
- Bicycle, pedestrian and recreational trails.
- Construction of ferry boats and terminals.

Distribution formula:

Local Programs continues to distribute funds based on a formula driven formula developed in coordination with the MPOs and counties, as follows:

- Urbanized areas greater than 200,000 population – Distributed based on 2010 Census data as required.
- Urbanized areas greater than 50,000 but no more than 200,000 – Distributed based on 2010 Census data as required.
- Urban areas greater than 5,000 but no more than 49,999.
- Under 5,000 population – Distributed based on rural lane miles.
- Flexible –
Distributed based on 75% population/25% total county lane miles
Local Programs administration costs will be decreased from the initial allocations based on a proportional share of the total allocation for each entity.

Transportation Alternatives Program:

Transportation Alternatives (TA) projects and activities encompass smaller-scale transportation projects such as pedestrians and bicycle facilities, historic preservation, safe routes to school and other transportation-related activities.

Distribution formula

In 2022, the federal transportation act allocations for the Transportation Alternatives (TA) were modified as follows:

- Over 200,000 population – Distributed based on 2020 Census data as required.
- Urbanized areas greater than 50,000 but no more than 200,000 – Distributed based on 2010 Census data as required.
- Urban areas greater than 5,000 but no more than 49,999 – Distributed based on 2010 Census data as required.
- Under 5,000 population – Distributed based on 2010 Census data for this population area.
- Flexible:
 - Prior to distribution, \$2.4 million (even year) and \$1.7 million (odd year) is provided to the statewide Safe Routes to School (SRTS) program.
 - Distributed based on 2010 Census data for the total population of the area.

Washington State Transportation Improvement Board (TIB)

The City of Sammamish is eligible to submit applications to the following TIB grant programs. Funding applications are available at each year’s call for project (from June to August). All projects must be transportation related on a federally classified route (principal, minor, collector).

Urban Arterial Program:

The Urban Arterial Program (UAP) funds projects in one of the following bands: Safety, Commercial Growth and Development, Mobility, and Physical Condition. Grants are awarded based of the following criteria:

- Eligible agencies are counties with urban unincorporated areas and cities with a population of 5,000 or greater.
- Eligible projects must be on a federally classified route (principal, minor, collector)
- Projects must be consistent with state, regional and local transportation plans.
- The local match requirement is determined by the City's valuation, or in the case of counties, by its road levy valuation (Minimum local match ranges from 10 to 20 percent).
- Funds are distributed across five regions based on arterial lane miles and population.

Urban Active Transportation Program (ATP):

The Active Transportation Program provides funding to improve pedestrian and cyclist safety, enhance pedestrian and cyclist mobility and connectivity, or improve the condition of existing facilities.

- Eligible agencies are counties with urban unincorporated areas and cities with a population of 5,000 or greater.
- Eligible projects must be on a federally classified route (principal, minor, collector)
- Projects must be consistent with state, regional and local transportation plans.
- The local match requirement is determined by the City's valuation, or in the case of counties, by its road levy valuation (Minimum local match ranges from 10 to 20 percent).
- Funds are distributed across three regions based on arterial lane miles and population.

Complete Streets:

The Complete Streets Award is a funding opportunity for local governments that have an adopted complete streets ordinance. Board approved nominators may nominate an agency for showing practice of planning and building streets to accommodate all users, including pedestrians, access to transit, cyclists, and motorists of all ages and abilities.

Agencies are required to have an adopted complete streets policy and ordinance in place and confirmed to be included on the TIB eligibility list prior to applying for funding.

Funding sources:

The Complete Streets Program is supported with funding from Washington's Climate Commitment Act. The CCA supports Washington's climate action efforts by putting cap-and-invest dollars to work reducing climate pollution, creating jobs and improving public health. Information about the CCA is available at www.climate.wa.gov.

Puget Sound Regional Council (PSRC)

PSRC helps Puget Sound Region communities secure federal funding for transportation projects. The PSRC conducts project selection processes for almost \$300 million each year in federal transportation dollars. Projects funded from a variety of sources are included in the rolling 4-year Transportation Improvement Program (TIP).

At the start of each funding cycle, PSRC's Executive Board adopts a Policy Framework to guide the project selection process in support of the region's long-range plans: VISION 2050, the Regional Transportation Plan, and the Regional Economic Strategy. The primary project selection process is conducted on a two-year cycle, and smaller processes for specific funding programs are conducted in off-years. Although the primary focus of grants administered by PSRC are regional with emphasis on urban centers, the City should consider the following program:

Transportation Alternatives Program (TAP):

The TAP is a Federal Highway Administration funding program for community-based transportation improvements, such as bicycle and pedestrian facilities, historic preservation of transportation assets, environmental mitigation, and others. The next process will be conducted in 2025.

Eligible project types

Pedestrian and Bicycle

- Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990.
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs.
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other nonmotorized transportation users.
- Recreational Trails Program (RTP) eligible projects and activities.
- Safe Routes to School (SRTS) program eligible projects and activities, including:
 - Infrastructure-related projects
 - Non-infrastructure-related activities
 - SRTS coordinators
- Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.
- Activities in furtherance of a vulnerable road user safety assessment.
 - Historic Resources
- Historic preservation and rehabilitation of historic transportation facilities. Operation of historic transportation facilities is not eligible.
- Archaeological activities relating to impacts from implementation of a transportation project.

Environmental

- Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to:
 - Address stormwater management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff.
 - Reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats.

- Community improvement activities, which include but are not limited to:
- Inventory, control, or removal of outdoor advertising.
- Vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control.
- Construction of turnouts, overlooks, and viewing areas.

King County Countywide Program:

Within King County there are 40 jurisdictions, multiple transit agencies and special districts (e.g. Port of Seattle) that have identified needs for preservation, safety, system efficiency improvements and capacity expansion to the transportation system within the county. Federal Highway Administration funds are set aside by PSRC for countywide programs. The City of Sammamish is eligible to submit grant applications in the following programs:

- **Large Jurisdiction Program:** The purpose of program is to provide funding for preservation, safety, system efficiency improvements and capacity expansion projects identified by local jurisdictions with a population of 15,000 or higher (see following Grant Eligibility Table). There is no limit on the number of proposals that a single agency can submit. However, a cap may be set on the amount of funding that can be requested per application.
- **Non-Motorized Set-Aside Program:** The purpose of this program is to provide funding for priority non-motorized projects within King County. Funding level for this program is set as King County’s population share of the 10% of funding taken off the top of the total available STP and CMAQ programs set-aside for funding non-motorized projects. Eligible agencies: cities, county, transit agencies, special districts, and tribal nations. etc. No limit on the number of applications per agency. The amount of funding that can be requested per application is set at 50% of the available funding for each year.
- **Preservation Set-Aside Program:** Purpose of program is to provide funding for preservation of the existing transportation network. There is a limit of two applications per agency and a maximum request amount of \$1.5 million per application. Project sponsors will be required to provide information on their agency’s level of effort to maintain their roadway infrastructure as part of the application submittal process.

6.3.2 TRANSPORTATION BENEFIT DISTRICT (TBD)

The Washington State legislature recognized that the residents of the state can benefit by public and private sectors cooperating in addressing transportation needs. This cooperation can be fostered through enhanced capability for cities, towns, and counties to make and fund transportation improvements necessitated by economic development and to improve the performance of the transportation system. To this end, the legislature adopted legislation (RCW 36.73) that allows cities, towns, and counties to establish transportation benefit districts in order to respond to the special transportation needs. Thus, City of Sammamish may establish a transportation benefit district within the City for the purpose of acquiring, constructing, improving,

providing, and funding a transportation improvement within the district that is consistent with any existing state, regional, or local transportation plans and necessitated by existing or reasonably foreseeable congestion levels. Once created, the TBD Board may raise revenues from the following sources:

VEHICLE LICENSE FEE:

The TBD Board may impose by a majority vote the following fees, taxes, and charges:

- I. Up to \$20 of the vehicle fee authorized in RCW [82.80.140](#);
- II. Up to \$40 of the vehicle fee authorized in RCW [82.80.140](#) if a vehicle fee of \$20 has been imposed for at least 24 months;
- III. Up to \$50 of the vehicle fee authorized in RCW [82.80.140](#) if a vehicle fee of forty dollars has been imposed for at least 24 months.

Based on vehicle registration data provided by the Washington State Department of licensing, a vehicle license fee could generate between \$1 million and \$3 million annually. This revenue could be used for individual projects and programs or to pay back bond debt.

TABLE 27. ESTIMATE VEHICLE LICENSE FEE REVENUE

EXPIRATION MONTH	NUMBER OF VEHICLES DUE TO RENEW	
	SAMMAMISH LOCATION CODE 1739	SAMMAMISH NON-RTA LOCATION CODE 4039
30-Nov-2023	4,503	187
31-Dec-2023	6,291	276
31-Jan-2024	4,918	248
29-Feb-2024	4,581	213
31-Mar-2024	6,480	281
30-Apr-2024	4,946	211
31-May-2024	6,047	278
30-Jun-2024	5,986	284
31-Jul-2024	5,950	276
31-Aug-2024	6,228	269
30-Sep-2024	5,203	205
31-Oct-2024	3,037	139
Sub Total	64,170	2,867
Total	67,037	
Estimated Vehicle License Fee Revenue		
\$20 Tab Fee	\$1,340,740	
\$40 Tab Fee	\$2,681,480	
\$50 Tab Fee	\$3,351,850	

SALES AND USE TAX:

Subject to the provisions in RCW [36.73.065](#), a transportation benefit district under chapter [36.73](#) RCW may fix and impose a sales and use tax. The tax authorized in this section is in addition to any other taxes authorized by law and shall be collected from those persons who are taxable by the state under chapters [82.08](#) and [82.12](#) RCW upon the occurrence of any taxable event within the boundaries of the district. The rate of tax shall not exceed three-tenths of one percent of the selling price in the case of a sales tax, or value of the article used, in the case of a use tax. The voter-approved sales tax may be imposed for a period exceeding 10 years if the moneys received under this section are dedicated for the repayment of indebtedness incurred in accordance with the requirements of chapter [36.73](#) RCW.

Table 28 below indicates what a voter approved one tenth of one percent to a three tenths of one percent sales tax increase could potentially generate on average between \$900,000 to \$2,800,000 annually for transportation projects. This revenue could be used to pay back “councilmanic” bonds.

TABLE 28. ESTIMATED SALES TAX REVENUE (VOTER APPROVED)

YEAR	ESTIMATED SALES (\$MILLION)	ESTIMATED CITY SALES TAX REVENUE AT CURRENT RATE	ESTIMATED ADDITIONAL REVENUE		
			1/10 OF 1 %	2/10 OF 1 %	3/10 OF 1%
2024	\$863.90	\$7,300,000	\$863,905	\$1,727,811	\$2,591,716
2025	\$903.90	\$7,637,793	\$903,881	\$1,807,762	\$2,711,642
2026	\$940.04	\$7,943,305	\$940,036	\$1,880,072	\$2,820,108
2027	\$899.40	\$7,600,154	\$899,426	\$1,798,853	\$2,698,279
2028	\$965.90	\$8,161,904	\$965,906	\$1,931,812	\$2,897,718
2029	\$1,036.30	\$8,756,435	\$1,036,264	\$2,072,529	\$3,108,793
Total	\$5,609.44	\$47,399,591	\$5,609,418	\$11,218,839	\$16,828,256

LOCAL IMPROVEMENT DISTRICTS (LID)

As provided under RCW [36.73.080](#), the TBD Board has the authority to provide, impose special assessments on all property specially benefited by the transportation improvements, and issue special assessment bonds or revenue bonds to fund the costs of the transportation improvement.

6.3.3 DEBT FINANCING

Local governments are authorized to issue debt in the [Washington State Constitution](#) in article 8, section 6. This section provides a uniform level of debt limitation for all jurisdiction types based on a percentage of taxable property values. The level of debt authority (limitation) is separated into non-voted and total debt:

- **Non-voted debt** (also called “councilmanic” debt or limited tax general obligation/LTGO debt) cannot be greater than 1.5% of assessed value (AV) of taxable properties in the jurisdiction.
- **Total debt** (including voted and non-voted debt) cannot be greater than 5.0% of AV. However, cities and towns can increase their total debt limit by an additional 5% with voter approval (to a total of 10% of AV) for water, lights, and sewers when those facilities are controlled by the municipality.

The City of Sammamish has no outstanding debt. As such, the City’s total bonding capacity for 2024 is \$1,422,854,480 broken down as follows:

TABLE 29. CITY OF SAMMAMISH LEGAL DEBT CAPACITY

Legal Debt Capacity				
Assessed Valuation for 2024 Property Taxes - \$28,522,683,316				
Debt Limits	General Capacity		Parks/Open Space	Total
	Non-Voted	Voted		
2.5% of AV	\$-	\$713,067,083	\$713,067,083	\$1,426,134,166
1.5% of AV	\$427,840,250	\$(427,840,250)	\$-	\$-
Legal Limit	\$427,840,250	\$285,226,833	\$713,067,083	\$1,426,134,166
Less Outstanding Debt:	\$-	\$-	\$-	\$-
Remaining Capacity	\$427,840,250	\$285,226,833	\$713,067,083	\$1,426,134,166

6.3.4 BUDGET APPROPRIATIONS AND PARTNERSHIPS

Budget appropriations and partnerships cannot be overlooked in obtaining revenue for priority capital improvement projects. Ongoing communication and coordination with Federal, State and County legislators by the Sammamish City Council and officials about the City’s priority project needs can create opportunities to secure budget appropriations. For example, many cities obtained funds from the Move Ahead Washington, the state’s transportation funding package that provides \$3 billion for public transportation.

6.4 REVENUE SHORTFALL CONTINGENCY PLAN

Some of the revenue forecasts are for revenues that are very secure, and highly reliable. However, other revenue forecasts are for sources that are volatile, and therefore difficult to predict with confidence, including grants, joint agency funding, motor vehicle registration fees, general obligation bonds, and mitigation/impact payments which fluctuate with the amount of new development.

In the event that revenues from one or more of these sources is not forthcoming, the City has several options: add new sources of revenue or increase the amount of revenue from existing sources; require developers to provide such facilities at their own expense; reduce the number or scope of proposed projects; change the Land Use Element to reduce the travel demand generated by development; or change and/or lower the LOS standard.

6.5 ONGOING PROGRAMS

The TMP focuses primarily on future transportation capital projects and not on-going programs or maintenance. However, these transportation programs and maintenance efforts are vital to the on-going upkeep of the City's transportation system to keep the Sammamish community moving. These programs and efforts are housed in each annual Transportation Improvement Plan (TIP)⁷ and include the vital programs listed in **Table 30** (excerpted from the 2025 – 2030 TIP).

TABLE 30. ONGOING PROGRAMS FROM 2025-2030 TIP

ID NO.	PROGRAM NAME
TR-C	Sidewalk Gap & Non-motorized Program
TR-E	Neighborhood Traffic Management Program
TR-F	Streetlight Enhancement Program
TR-G	School Zone Safety Improvement Program
TR-H	Capital Contingency Reserve/Placeholder
TR-J	Intelligent Transportation Systems (ITS) Program

⁷ <https://www.sammamish.us/government/public-works/transportation-planning/improvement-programs/>

TR-K	ADA Barrier Remediation Program
TR-L	Pavement Management Program
TR-M	Transit Enhancement Program

Programs listed in **Table 30** are primarily funded by the City’s Transportation Capital Improvement Project fund. These programs may partially support other capital projects identified elsewhere in the TMP.

6.6 FUNDED PROJECTS

The funded Six-Year project list is the Transportation Improvement Plan (TIP) 2025 to 2030. The projects in this list were scored and prioritized based on the criteria described in **Appendix C**.

Figure 36 shows a map of these funded projects. The projects include traffic, safety, and non-motorized projects; connection projects; and corridor improvement projects.

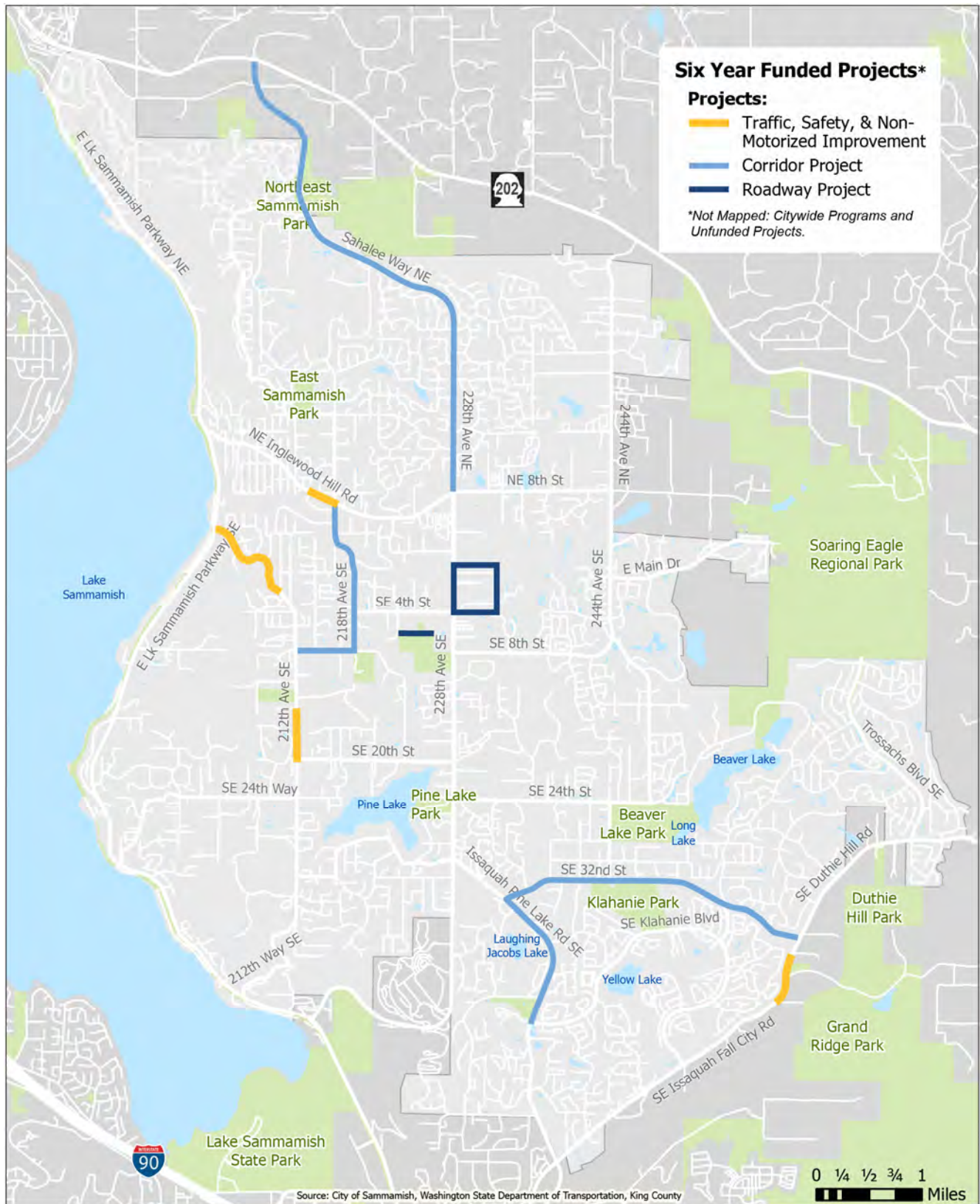


FIGURE 36. 2025-2030 TIP PROJECT MAP

Table 31 presents the recommended list of funded TIP projects. Note that all costs are in 2024 dollars.

TABLE 31. FUNDED PROJECT LIST

PROJECT TYPE	ID NO.	PROJECT NAME	COST (\$1,000)
Program	TR-C	Sidewalk Gap & Non-motorized Program	\$2,400
Program	TR-E	Neighborhood Traffic Management Program	\$90
Program	TR-F	Streetlight Enhancement Program	\$450
Program	TR-G	School Zone Safety Improvement Program	\$90
Program	TR-J	Intelligent Transportation Systems (ITS) Program	\$150
Program	TR-K	ADA Barrier Remediation Program	\$2,700
Program	TR-L	Pavement Management Program	\$15,700
Program	TR-M	Transit Enhancement Program	\$600
Traffic, Safety, & Non-Motorized Project	TR-100	Flood Mitigation- SE Issaquah-Fall City Road: Endeavor Elementary School to SE Duthie Hill Road	\$7,101
Traffic, Safety, & Non-Motorized Project	TR-108	Inglewood Hill Road Sidewalk Gap	\$1,046
Traffic, Safety, & Non-Motorized Project	TR101/SW-601	Louis Thompson Road Tightline Project	\$11,007
Traffic, Safety, & Non-Motorized Project	TR-63	Flood Mitigation Project: 212 th Ave SE/SE 14 th Pl to SE 18 th St	\$671
Connection Project	TR-126	Northeast Connector Road (Improvements at SE 1 st St & 228 th Ave SE)	\$1,255

Connection Project	TR-134	SE 6 th Street Improvement Project, Phases A, B, and C	\$6,137
Corridor Project	TR-115	Sahalee Way Corridor Improvements: NE 8 th Street to City Limits	\$2,257
Corridor Project	TR-02	Issaquah-Pine Lake Road: SE 44 th - SE 32 nd Phase 1	\$400
Corridor Project	TR-03	Issaquah-Pine Lake Road: SE 48 th - SE 344 th Phases 2	\$400
Corridor Project	TR-18	SE 8 th /218 th Ave SE- 212 th Ave SE to SE 4 th Street	\$125
Corridor Project	TR-42	218 th Ave SE/ 216 th Ave SE: SE 4 th Street to Inglewood Hill Road NE	\$125
Corridor Project	TR-122	SE 32 nd / Issaquah Beaver Lake Road Corridor Improvements	\$600

The City will continue to monitor the LOS standard at intersections throughout the Sammamish. At this time, the following projects are expected to be needed by 2044 to meet LOS standards:

- SE 8th Street & SE Windsor Boulevard: Convert to all-way stop control
- SE 8th Street & 212th Ave SE: Convert to all-way stop control

These two projects will keep the transportation system operating at the LOS standard in the 2044 baseline scenario. They are included in the unconstrained project list described in the next section.

Additionally, PSRC has identified regional capacity projects in the Regional Transportation Plan Appendix D2. Two of these projects are within Sammamish, with Sammamish listed as the sponsor. Both projects are under the status of “candidate” which means they have not yet been approved within the Regional Transportation Plan (RTP). The two projects are as follows:

- 228th Avenue SE Capacity Improvements – This project includes widening 228th Avenue SE to five lanes along with adding striped or buffered bike lanes, curb, gutter and sidewalk/boardwalk, intersection improvements at SE 40th Street, and signalization of the Providence Heights Loop intersection. The Regional Capacity List estimates that the project will be completed in 2026, but project scoping, timing, and budget have not yet been determined.
- Sahalee Way NE Capacity Improvements – This project includes widening Sahalee Way NE to three to five lanes along with adding buffered bike lanes, curb, gutter, sidewalk, intersections improvements, and signalization of the NE 28th Place intersection. It is estimated that the project will be completed in 2030. This project is also included in the City’s TIP. A corridor

study is planned for 2024-2025 to allow the City to determine the improvements necessary and a phasing approach for this corridor.

6.7 UNCONSTRAINED PROJECT LIST

The City of Sammamish considered many projects while building the prioritized project list. A number of these projects were not prioritized at this time due to budget constraints or feasibility issues. The following lists are not intended to be binding on future decision-makers but are recorded for possible inclusion in future Transportation Improvement Plan lists or as considerations for development review.

Appendix D shows remaining projects that have been considered by the City as potential future investments. These projects are still considered high possibilities for future project lists and will be considered in development review. The projects are listed in terms of their project category and score based on the ranking criteria. Projects that are higher on the list in their respective project category have scored higher on the evaluation criteria than those lower on the list, demonstrating greater relative importance to the City’s road system and meeting the community’s stated goals and priorities. Note that all cost estimates included in these tables are in 2024 dollars.

6.8 NEXT STEPS

6.8.1 INTERGOVERNMENTAL COORDINATION

The City of Sammamish works to maintain positive relationships with neighboring jurisdictions, regional agencies and service providers, and state and federal governments. The City has a shared interest and concern in maintaining a vital local and regional economy, and a high quality of life for its residents, which depend on transportation mobility across jurisdiction boundaries. The City has agreements in place that demonstrate its active commitment to working with King County, other regional partners and state and federal agencies to address transportation issues, share information and solve problems. The development and ongoing monitoring of the City’s Comprehensive Plan demonstrates that commitment. The Growth Management Act requires that plans between neighboring jurisdictions maintain a level of consistency through coordination of planning efforts.

Increasingly, Sammamish’s transportation system functions as an integral part of a larger regional system – of roadways, transit routes, park and ride facilities, and non-motorized facilities that allow walking and/or biking the first and last mile and making connections in between.

The development of this TMP relied upon travel demand forecasts provided by the Puget Sound Regional Council. Coordination efforts are expected to be ongoing with:

- Washington State Department of Transportation (WSDOT) on the recommended revisions to the City’s Roadway Functional Classification System, updates to the state Freight and Goods Transportation System (FGTS), and future improvements on SR 202 to the north of Sammamish.
- Sound Transit on Transportation Demand Management activities by major employment sites, providing access to transit facilities and services, and on maintaining and expanding transit service quality within the City.
- King County to address the needs of travel across jurisdiction limits, including mitigating the impacts of land use development outside the city, and furthering the expansion of the regional nonmotorized trail system.

Finally, the City anticipates a certification review of this Comprehensive Transportation Element by the Puget Sound Regional Council to ensure its conformity with the adopted regional Vision 2050 plan.

6.8.2 TRANSPORTATION MASTER PLAN IMPLEMENTATION

The Transportation Master Plan (TMP) is a living document and serves as the blueprint for transportation in the City of Sammamish over the next six years. The TMP should be reviewed for updates regularly to adapt to any changes in City priorities and opportunities that improve the City’s ability to meet its transportation goals. Several implementation steps should be initiated over the next few years to enhance the TMP or determine if changes are needed and to better assess the costs and benefits of projects. The next steps necessary to implement the TMP through 2027 are shown and described below in **Table 32**.

TABLE 32. IMPLEMENTATION TIMELINE

Action	2025	2026	2027
	Complete Streets Program		
	Transportation Improvement Plan (TIP)		
	Bike & Pedestrian Mobility Plan		
Community Engagement	Pedestrian LOS Guidelines		
	Bicycle LOS Guidelines		
	Transit Accessibility		

	Transportation Safety Improvements		
	Transportation Impact Fee Update		
Policy Updates	Complete Streets		
	Street Standards		Street Standards
		New Development Code Updates	
	Non-Motorized Corridor Design Policies		
	Concurrency Management (Ongoing)		
Plan Development, Evaluation, or Updates			
	ADA Transition Plan		
	TMP Update		
	Bicycle and Pedestrian Mobility Plan		
	Pavement Management Strategic Plan		
		Citywide Streetlight Strategic Plan	
		ITS Strategic Plan	



APPENDIX

APPENDIX A

WSDOT LTS TABLES

APPENDIX B

TRAVEL DEMAND MODEL DETAILS

APPENDIX C

PRIORITIZED PROJECT LIST CRITERIA

APPENDIX D

UNCONSTRAINED PROJECT LIST

APPENDIX A

WSDOT LTS TABLES



Background

Projects that are subject to this bulletin are directed to provide for facilities that contribute to network connectivity and safety through the design and construction of sidewalks, shared-use paths, bicyclist facilities, and crossings that serve to integrate the state route into the local network, in accordance with aspects of the provisions within the WSDOT Active Transportation Plan (ATP) as outlined below.

The WSDOT Active Transportation Plan sets out agency goals and performance metrics that apply to how facilities for bicyclists and pedestrians on state highways are designed in population centers. One purpose of the plan is to identify gaps in the pedestrian and bicycle network, where a gap is defined as either a physical barrier, or a highway segment that provides for a pedestrian or bicycle Level of Traffic Stress (LTS) 3 or 4 and/or a Route Directness Index greater than 2. The plan calls for an increase in the total linear length (miles) of WSDOT-owned infrastructure (or other connections identified as a parallel local facility), that provide for a bicyclist and pedestrian LTS rating of 1 or 2.

Connected to the ATP, WSDOT studied route directness and reported the findings in the ATP as well as a separate report titled [Multimodal Permeability Pilot](#).

For purposes of design, a decision is first made about the type of facility that will be provided to bring the highway segment represented by the project into compliance with the direction to provide a complete street. As part of that process, when it has been determined that a shared use path will be provided as all or part of the project solution to fulfill this requirement, refer to WSDOT Design Manual Chapter 1515 for guidance on configuration and dimensions and other design criteria associated with that facility.

For other types of active transportation facilities that are adjacent to vehicle traffic, LTS will be one of the metrics that WSDOT uses and applies during the planning and design process. LTS can be used to determine essential design characteristics of those facilities, including design elements, target speed, features, dimensions, and configuration of highway facilities. Bicycle Level of Traffic Stress (BLTS) provides an indication of the performance and relative comfort with respect to bicycle riders, while Pedestrian Level of Traffic Stress (PLTS) applies to people who are neither on a bicycle nor in a motor vehicle. LTS can be analyzed for either an existing or proposed condition and applies whether or not a bicycle lane or sidewalk is present.

At a minimum, LTS for highway segments is calculated based on the posted speed of a facility, the vehicle traffic level, and the cross-section characteristics. For purposes of design and this bulletin, this is called Basic LTS. It's expressed as an integer from 1 to 4, where a lower number indicates a greater willingness for active travelers to use the facility. The roadway characteristics serve as a proxy for stress, which is not measured directly. Basic LTS is determined by referring to tables that are developed for that purpose. For purposes of design, LTS tables provide a useful starting point for determining the type of facility that will achieve LTS 2 or better. Once the Basic LTS is determined, a refined LTS is accomplished following the more detailed consideration of additional factors not considered in the tables used to determine Basic LTS. Local conditions used to refine LTS include major driveways, turn lanes,

truck traffic, constraints imposed by culverts, debris intrusion from outside the roadway (gravel roads), etc.

Although the guidance that follows can be used in a general sense, it is specifically applied by WSDOT to state highways that are identified for complete streets treatment according to ‘*Project Delivery Memo 22-##*’.

Basic LTS

When selecting the cross-section layout and dimensions for a complete street, first determine the level of traffic stress in both the existing and design (final) condition. The design goal is to provide for a level of traffic stress value for both bicycles (BLTS) and pedestrians (PLTS) of 1 or 2.

In addition, always provide a separation from vehicle traffic for bicycle and pedestrian facilities where the posted speed is (or if different in the design year is anticipated to be) greater than 30 mph. Separation can be provided by adding a physical barrier (such as curb, traffic barrier, flexible delineators), or providing a separate bicycle and/or pedestrian facility (*eg* shared use path). Whether or not the posted speed is greater than 30 mph, use the following tables to determine the existing BLTS and PLTS for the project vicinity, and to determine the type and dimension of bicycle and pedestrian facilities and buffers or separations required for the design to achieve BLTS and PLTS 1 or 2. Note that speed referred to in the tables is its posted speed.

BLTS and PLTS for mixed traffic (no marked bicycle lane, with or without shoulder)

Recommended General LTS table (not accounting for bike lanes or sidewalk) used to develop tables below

Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	3	4	4	4	4
	751-1500	1	2	3	4	4	4	4
	1501-3000	2	2	3	4	4	4	4
	3000+	2	3	3	4	4	4	4
2 thru lanes per direction	0-7000	3	3	3	4	4	4	4
	>7000	3	3	4	4	4	4	4
3+ thru lanes per direction	Any ADT	4	4	4	4	4	4	4



BLTS Criteria for Bike Lane without Separation from Traffic (paint stripe or buffer < 2 feet wide)

Bike Lanes are greater than or equal to 7 feet (allows for 5' plus 2' buffer)									
Lanes	AADT	<=20	25	30	35	40	45	50+	
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	2	3	4	4	4	4
	751-1500	1	1	2	3	4	4	4	4
	1501-3000	1	1	2	3	4	4	4	4
	3000+	2	2	2	3	4	4	4	4
2 thru lanes per direction	0-7000	2	2	2	3	4	4	4	4
	>7000	2	2	3	3	4	4	4	4
3+ thru lanes per direction	Any ADT	3	3	3	4	4	4	4	4

Bike Lanes are less than 7 feet (must be 5' or greater to be within standard)									
Lanes	AADT	<=20	25	30	35	40	45	50+	
1 thru lane per direction (or 1 lane one-way street)	0-750	1	2	2	4	4	4	4	4
	751-1500	1	2	2	4	4	4	4	4
	1501-3000	1	2	2	4	4	4	4	4
	3000+	2	2	2	4	4	4	4	4
2 thru lanes per direction	0-7000	2	2	3	4	4	4	4	4
	>7000	3	3	3	4	4	4	4	4
3+ thru lanes per direction	Any ADT	3	3	4	4	4	4	4	4

BLTS Criteria for Bike Lane with Separation from Traffic (buffer 2 feet wide or greater)

Protected Bicycle Lane (parking or robust vertical barrier separation)									
Lanes	AADT	<=20	25	30	35	40	45	50+	
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	1	2	2	2	2	2
	751-1500	1	1	1	2	2	2	2	2
	1501-3000	1	1	1	2	2	2	2	2
	3000+	2	2	2	2	2	2	2	2
2 thru lanes per direction	0-7000	2	2	2	2	2	2	2	2
	>7000	2	2	2	2	2	2	2	2
3+ thru lanes per direction	Any ADT	2	2	2	2	2	2	2	2

Vertically Delineated Bicycle Lane (Buffered bike lane with flexible delineator/candlestick)									
Lanes	AADT	<=20	25	30	35	40	45	50+	
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	2	2	3	3	4	4
	751-1500	1	1	2	2	3	3	4	4
	1501-3000	1	1	2	2	3	3	4	4
	3000+	2	2	2	3	3	4	4	4
2 thru lanes per direction	0-7000	2	2	2	3	3	4	4	4
	>7000	2	2	3	3	3	4	4	4
3+ thru lanes per direction	Any ADT	2	2	3	3	3	4	4	4

PLTS based on Sidewalk Width

Greater than Minimum Sidewalks Present (6' or greater)								
Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	2	2	3	4	4
	751-1500	1	1	2	2	3	4	4
	1501-3000	1	1	2	2	3	4	4
	3000+	2	2	2	2	3	4	4
2 thru lanes per direction	0-7000	2	2	2	2	3	4	4
	>7000	2	2	2	2	3	4	4
3+ thru lanes per direction	Any ADT	2	2	2	3	3	4	4

Minimum Sidewalk Facility Present (5')								
Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	2	4	4	4	4
	751-1500	1	1	2	4	4	4	4
	1501-3000	1	1	2	4	4	4	4
	3000+	2	2	2	4	4	4	4
2 thru lanes per direction	0-7000	2	2	2	4	4	4	4
	>7000	2	2	3	4	4	4	4
3+ thru lanes per direction	Any ADT	2	2	3	4	4	4	4

PLTS based on Buffer Type

Sidewalk protected by robust physical barrier								
Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	1	2	2	2	2
	751-1500	1	1	1	2	2	2	2
	1501-3000	1	1	1	2	2	2	2
	3000+	2	2	2	2	2	2	2
2 thru lanes per direction	0-7000	2	2	2	2	2	2	2
	>7000	2	2	2	2	2	2	2
3+ thru lanes per direction	Any ADT	2	2	2	2	2	2	2

Wide sidewalk or sidewalk with buffer								
Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	2	2	3	3	4
	751-1500	1	1	2	2	3	3	4
	1501-3000	1	1	2	2	3	3	4
	3000+	2	2	2	2	3	3	4
2 thru lanes per direction	0-7000	2	2	2	2	3	3	4
	>7000	2	2	2	2	3	3	4
3+ thru lanes per direction	Any ADT	2	2	2	2	3	3	4

“Robust physical barrier” refers to any one of the available separated bicycle lane treatments (see definitions) in the case of bicycles (except flexible delineators), and in the case of pedestrians either 1) a separated bicycle lane, 2) planting strip and/or street trees, or 3) vehicle parking located between the rightmost vehicle lane and the pedestrian facility. Utilize DM 1239.08 when designing outer separation treatments.



Refined LTS

Once the Basic LTS for a project is determined per the tables above, and a design is selected that meets the required LTS 1 or 2, examine the additional issues in the list below to consider the need to provide design treatments in addition to those described in the Basic LTS solutions. Most of the issues in the list do not provide a quantitative basis for examining the existing or proposed (design) condition. Therefore, work with SME's to consider each category listed, and determine options for addressing each issue in order to reduce travel stress in the design for bicycles and pedestrians.

The refined LTS is considered complete when a design approach to addressing the travel stress issues listed below have been determined and documented through a collaborative process (normally during pre-design), with the intention that those approaches will be incorporated into the design. The designer can then document that the Basic LTS has now been upgraded to the Refined (and final) LTS for the project.

- Route directness
- Crosswalks
- Driveways
- Turn lanes
- Large (*e.g.* freight) vehicle traffic
- Minor pinch points (culverts, drain grates, offroad gravel intrusion, etc)

Note that major pinch points (such as bridges) also introduce travel stress, but are defined as those narrow locations where the introduction of complete streets elements can't be implemented without significant additional investments. Although these are anticipated to occur at times, since they are associated with not meeting the complete streets requirement at a particular location where that is required, they need to be documented according to provisions of Project Delivery Memo 22-##.

One exception to the qualitative nature of the additional issues list above is route directness. Route directness is measured in terms of a Route Directness Index (RDI). Major roadways present crossing barriers for active travelers that can impose significant out of direction travel burdens. An RDI of one means direct travel is possible. An RDI of 2 means the traveler must go twice the line-of-sight distance to reach a destination because of a lack of crossing opportunities (or because an available crossing is high LTS and/or imposes undo delay). Research shows that pedestrians in particular are unwilling to travel far out of direction to reach a destination. RDI's greater than 2 strongly reduce the utility of active trips by increasing the travel time, physical effort, and weather exposure a traveler experiences. A minimum RDI threshold value of 2 for state routes is proposed in the WSDOT Active Transportation Plan.

While this threshold for RDI has been established in the Active Transportation Plan, the process for evaluating it is still in development. In the meantime, consult SME's on the best approach to incorporating RDI concepts into the project design..

More information about refining LTS and applying RDI is in development, and will become available through subsequent updates to this bulletin.



Complete Street Resources

The following is a non-exhaustive list of references:

- [Washington State Active Transportation Plan - 2020 and Beyond](#)
- [FHWA Complete Streets](#)
- [FHWA Separated Bike Lane Planning and Design Guide](#)
- [FHWA Bikeway Selection Guide](#)
- [Small Town and Rural Multimodal Networks \(dot.gov\)](#)
- [Achieving multimodal networks 2016 \(FHWA\)](#)
- [Interim Approvals Issued by FHWA - FHWA MUTCD \(dot.gov\)](#)
- [AASHTO Bicycle Design Guide](#)
- [AASHTO Pedestrian Design Guide](#)
- [NACTO Urban Bikeway Guide](#)
- [NACTO Don't Give Up at the Intersection](#)
- [Florida DOT Complete Streets](#)
- [New Jersey DOT Complete & Green Streets.](#)
- [Ohio DOT Multimodal Design Guide](#)
- [Massachusetts DOT Separated Bike Lane Planning and Design Guide](#)
- [Smart Growth America](#)

APPENDIX B

TRAVEL DEMAND MODEL DETAILS

TRAVEL DEMAND FORECASTING

The travel demand models are used by the City for Comprehensive Plan development, transportation concurrency management, and other transportation planning and policy applications. Sammamish uses AM and PM peak hour travel demand models to calculate travel demand forecasts for city streets and intersections based on funded Transportation Improvement Plan (TIP) projects, permitted “pipeline” development, and long-range development forecasts.

Traffic volume forecasts were developed using the Sammamish travel demand model, which was updated in September 2023 to reflect the latest development inventory, driver behavior, trip generation rates, modeling procedures, and traffic counts. The travel demand model follows a three-step modeling process which includes trip generation, trip distribution, and traffic assignment.

This section describes the general structure of the travel demand model.

Network

STREET SEGMENTS

The travel demand model’s transportation network includes all functionally classified streets and most local streets in and near Sammamish, representing a total of 394 centerline miles of roadway. During the model development and calibration process, modeled links were reviewed to confirm the accuracy of roadway alignment, channelization, posted speeds, and directional prohibitions. Street characteristics were verified through field visits, satellite photography, online street-view photography, and discussion with City and consultant staff.

Links were modeled using planning-level inputs which are consistent with prior Sammamish travel demand models and are used by several other western Washington agencies. The model uses a lookup table which assigns free flow speed, number of lanes, and capacity based on a single “link type” input. This system streamlines model development, scenario testing, maintenance and is standard practice for a citywide planning model. Link speeds were adjusted during the model validation process to improve the accuracy of the model’s traffic assignment results.

STREET DISCONNECTS

The Sammamish roadway network includes several disconnection points which include bollards, gates, or other physical barriers on otherwise continuous public streets. City staff provided a geographic file on May 2, 2023, which identified all existing disconnection points in Sammamish network. All disconnects as of May 2023 were incorporated to the model.

INTERSECTIONS

The 2023 model update included implementation of refined intersection geometry and control settings to facilitate turn delay functions using *Highway Capacity Manual* (HCM) methodologies. This represents a refinement of the 2016 model, which utilized planning-level delay functions that included limited consideration for intersection channelization and signal phasing. The use of HCM methodologies allows more accurate delay forecasts and therefore a more accurate forecasting tool.

To implement HCM6 delay methodologies, intersections were updated to reflect detailed intersection characteristics, including channelization, turn bays, control devices, signal phasing, and signal timing. Intersection attributes were verified using satellite and street-level imagery, timing plan sheets, and field visits.

The 2044 Baseline travel demand model assumed a partial buildout of the Sammamish Town Center Street network. The baseline network buildout, shown in **Figure 22**, included the following notable street network improvement projects:

- Intersection control: Convert 228th Ave & E Main St from signal to stop control with right-in/right-out turn restrictions,
- Intersection control: Convert 228th Ave SE & SE 1st Pl from stop control to signal control,

- New street: “Northwest Connector” beginning at SE 4th St & 225th Pl SE proceeding north and turning east before terminating at 228th Ave SE & SE 1st Place. (2024-2029 TIP #124),
- New street: “Northeast Connector” beginning at E Main Street and proceeding south to terminate at Crusader Way (2024-2029 TIP #TR-126),
- Street extension: Extend SE 1st Place east to connect with Northeast Connector, and
- New streets in northwest and southwest Town Center quadrants, including SE 6th Street and 226th Ave SE extensions.

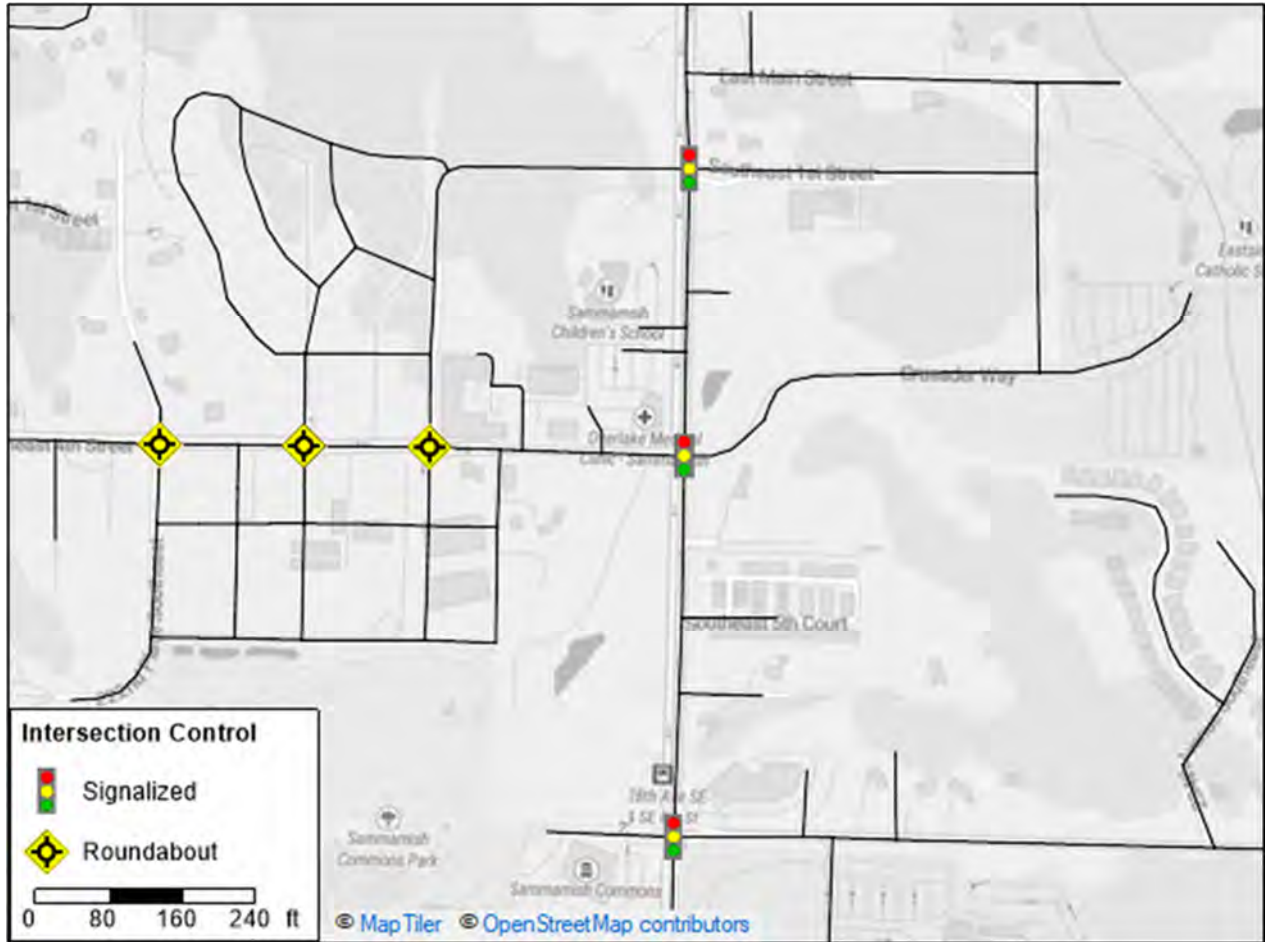


Figure B1 Sammamish Town Center 2044 Baseline Street Network

Land Use Architecture

TRANSPORTATION ANALYSIS ZONES

Land use in travel demand models is represented by geographic units called Transportation Analysis Zones (TAZs). The 2023 model development process included a review of TAZ boundaries to improve consistency with ongoing development patterns, particularly in the Town Center area, as well as city limit boundaries. Several TAZs in the Town Center area were split and their boundaries modified to improve consistency with parcel boundaries.

Travel demand modeling utilizes two types of TAZs. Internal TAZs reflect development which exists or is expected to occur within a defined geographic area. External TAZs are used to generate traffic entering and exiting the model area at key access points. The model includes a total of 267 internal TAZs and 13 external TAZs. TAZ boundaries are shown in **Figure 23**.

LAND USE CATEGORIES

The 2023 travel demand model includes 15 land use categories, consisting of 4 residential, 10 non-residential, and one mixed-use category. Land use categories were reviewed during the 2023 model development process and expanded from the 10 categories used in previous models. The expansion of land use categories was made possible through the availability of detailed parcel-level development data and was designed to create a more flexible and accurate travel demand model. Modeled land use categories are identified in **Table B1**. The methods and assumptions used to define the land use categories are described in the memorandum “2023 Travel Demand Model Land Use Categories.”

DEVELOPMENT INVENTORY

The 2023 travel demand model update included a comprehensive update of the model’s development inventory using geospatial parcel data acquired from the King County Department of Assessments in March 2023. The parcel data provides boundary and usage data for every tax parcel in the model area, including a description of existing land use type, number of residential units, and non-residential floor area. Parcel data was aggregated by TAZ to provide a detailed development inventory current to March 2023, the month in which traffic counts were collected for travel demand model calibration.

Educational uses were expressed in terms of number of students. 2023 enrollment at each educational institution in the model area was verified through review of publicly available data. The 2023 land use inventory indicated a total of 22,697 dwelling units, 1,426,000 square feet of commercial and institutional floor area (excluding schools), and 15,084 pre-kindergarten through post-secondary students within the City of Sammamish.

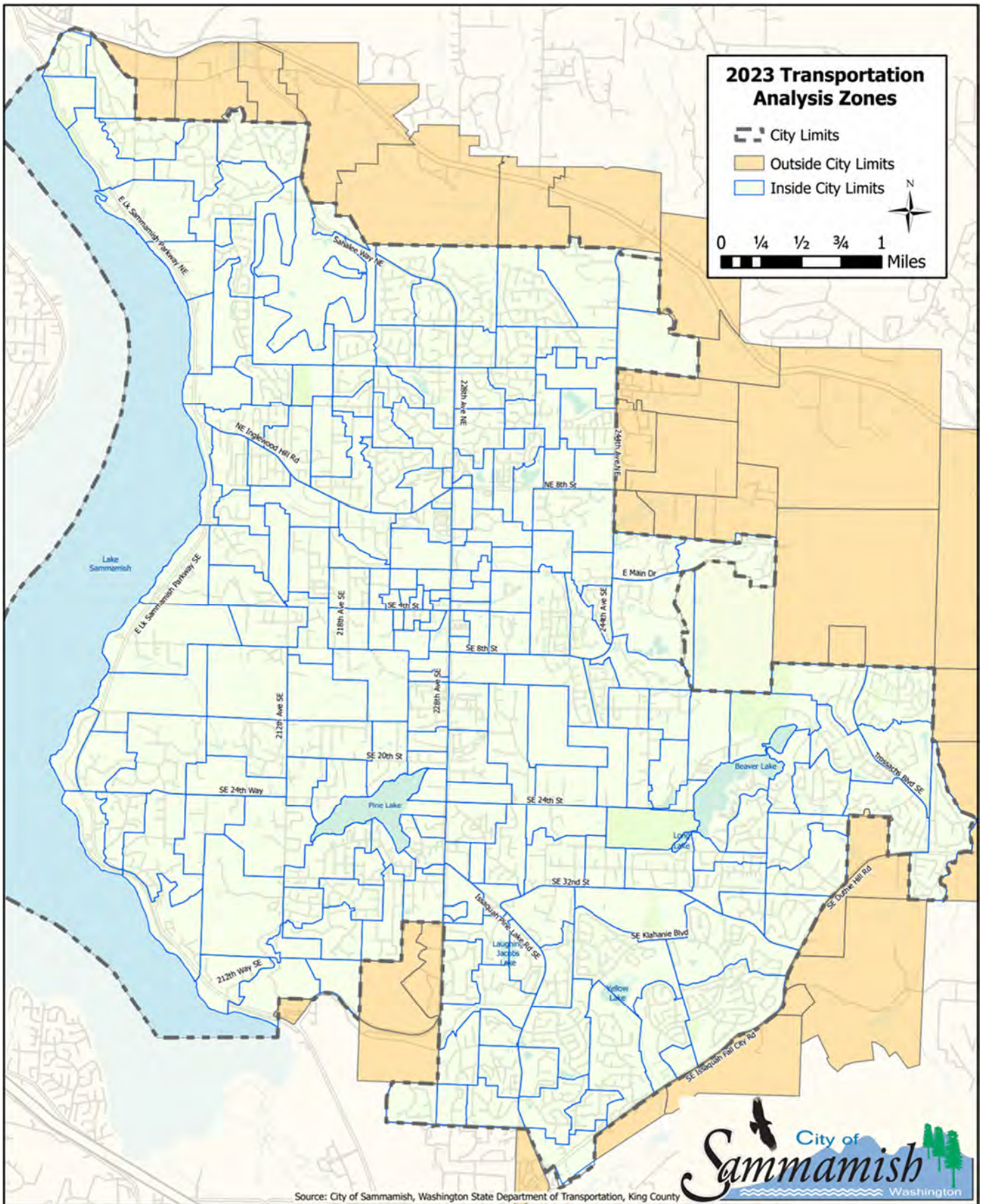


Figure B2. Transportation Analysis Zones

Table B1. 2023 Travel Demand Model Land Use Categories

	Model Land Use	ITE Land Use ¹	Units
Residential	Single-Family Detached Housing	Single-Family Detached (#210)	dwelling units (DU)
	Townhomes (2-3 5ldg.s/bldg.)	Single-Family Attached (#215)	dwelling units (DU)
	Multifamily Housing (>3 5ldg.s/bldg.)	Multifamily Housing (Low-Rise) (#220)	dwelling units (DU)
	Age-Restricted Housing	Senior Adult Housing – Single-Family (#251)	dwelling units (DU)
Mixed-Use	Mixed-Use Residential with Ground-Floor Commercial	Mid-Rise Residential with Ground-Floor Commercial (1-25k) (#231)	dwelling units (DU)
Non-Residential	Retail	Shopping Center (>150k) (#820)	1,000 sf
	Office	General Office Bldg (#710)	1,000 sf
	Medical/Dental	Medical-Dental Office Bldg (#720)	1,000 sf
	Community Center / Public Assembly	Recreational Community Center (#495)	1,000 sf
	PreK-8 Education	Elementary School (#520)	Students
	High School & Post-Secondary Education	High School (#525)	Students
	Wholesale Trade, Construction, & Utilities	Warehousing (#150)	1,000 sf
	Industrial & Manufacturing	General Light Industrial (#110)	1,000 sf
	Active Land/Parks	Public Park (#411)	acres
	Park & Ride	Park & Ride (#090)	spaces

LAND USE GROWTH

2029 travel demand growth was generated using the Sammamish development pipeline. Pipeline development included a total of 94 projects which were permitted or under construction at the time of model validation.

Pipeline projects consist of a total of 1,128 new dwelling units (DU) and 100,000 square feet (sf) of commercial floor area, of which 900 DU and all commercial area are in the Sammamish Town Center (STC) area. Pipeline development is expected to generate a total of 1,246 trips during the AM peak hour and 788 trips during the PM peak hour of travel. The pipeline trip generation forecast is summarized in **Table B2**.

Table B2. 2029 Development and Trip Growth

Scenario	Dwelling Units (DU)	Commercial Floor Area (ksf)	Trip Ends in City	
			AM Peak Hr	PM Peak Hr
Existing (2023)	22,697	1,207	21,989	22,456
Pipeline (2023-2029)	+1,128	+100	+1,246	+788
2029 Total	23,825	1,307	23,235	23,244

2044 travel demand growth was generated using the Land Use Element long-range housing and commercial growth forecasts. Long-range growth forecasts included 2,100 new dwelling units and 269,000 square feet (sf) of commercial development citywide, of which 810 dwelling units and all commercial development are anticipated to occur in the Sammamish Town Center area. The 2044 development forecast is summarized in **Table B3**.

Table B3. 2044 Development and Trip Growth

Scenario	Dwelling Units (DU)	Retail/Office/Healthcare Floor Area (ksf)	Trip Ends in City	
			AM Peak Hr	PM Peak Hr
Existing (2023)	22,697	1,207	21,989	22,456
Pipeline (2023-2029)	+1,128	+100	+1,246	+788
Long-Range (2029-2044)	+2,100	+269	+1,045	+1,571
2044 Total	25,925	1,577	24,280	24,815

Regional growth for the 2029 and 2044 analysis years were forecast using data obtained from the Puget Sound Regional Council (PSRC) VISION 2050 regional travel demand model at key access points to the city. The regional travel demand model indicates an average growth rate of 0.6 percent per year at the key access points to Sammamish.

METHODOLOGY FOR TMP VS. COMPREHENSIVE PLAN 2044 HOUSING UNIT DISCREPENCY EXPLAINED

Land use and transportation planning are intertwined; however, the methodology in growth planning for transportation is slightly different than methodology utilized for housing/land use planning due to the technical nature of transportation planning. Both methodologies are summarized below.

COMPREHENSIVE PLAN UPDATE – LAND USE VOLUME II

In the Comprehensive Plan Land Use Element Volume II, the 2023 housing unit number in Figure LU-14 is data taken from Washington Office of Financial Management; PSRC; King County; and Framework. The 2044 housing unit number simply adds the 2,100 unit growth target to the 2023 baseline number in Figure LU-14.

TRANSPORTATION MASTER PLAN (TMP)

The TMP utilizes 2044 Travel Demand Model (model), which is based on land use growth including dwelling (housing) units, and anticipated infrastructure projects. The total number of dwelling units reflected in the model is the result of a three-step update, summarized below:

- I. A baseline number of current dwelling units was established, which utilized parcel-specific King County Assessor data as well as the City’s permitting data to confirm all issued building permits through March 2023. The prior model was updated to reflect the baseline number of dwelling units.
- II. The number of pipeline dwelling units was established, which reflects development units in the pipeline from March 2023 through December 31, 2029. Through review of all issued concurrency permits that could reasonably be assumed to be built out by 2029, 1,128 dwelling units were confirmed.
- III. The number of 2044 projected growth dwelling units was established utilizing the City’s allocated 2,100 growth target consistent with the 2025-2044 Comprehensive Plan Update.

The 2044 growth in the model was developed by utilizing all three data points described above and shown below:

$$\text{March 2023 dwelling units} + \text{2029 pipeline dwelling units} + \text{growth target units.}$$

However, the 2044 model should reflect the following:

$$\text{March 2023 dwelling units} + \text{March 2023 through Dec 2024 Dwelling Units} + \text{2044 Growth Target Units}$$

Of the 1,128 pipeline units, there are approximately 128 units planned for building/completion by the end of 2024.

While the City acknowledges that there is a discrepancy between the TMP and the Comprehensive Plan; we are confident that this is not an erroneous error and rather, the numbers used in the TMP are more conservative. Utilizing more conservative numbers in our transportation modeling means we are not under planning for the future. The city plans on updating our transportation model in 2025 to better demonstrate the most accurate dwelling unit accounting as possible and will update this information when we do the 2025 Update to the TMP.

Travel Demand Model Methodology

TRIP GENERATION

Modeled trip generation rates were based on a May 2023 trip generation study conducted at 23 major developments throughout Sammamish. Supplemental trip generation data was obtained from the Institute of Transportation Engineers *Trip Generation Manual 11th Edition*, and external trip generation totals were calculated based on traffic counts collected at model boundaries.

Trips were divided into five purposes: home-to-work (HW), work-to-home (WH), home-to-other (HO), other-to-home (OH), and non-home based (NHB) trips. Trip purposes by land use were selected based on prior model updates and trip purpose data from other agencies.

TRIP DISTRIBUTION

Trips were distributed between TAZs using a gravity model, which is based on the principle that the attraction between two bodies is directly proportional to the bodies' masses and inversely proportional to the distance between the bodies. In the context of travel demand modeling, a TAZ's "mass" is represented by the number of trips generated by the TAZ, while the distance factor is represented by route travel time. The model calculates the attraction between any two TAZs using the utility function:

$$f(U) = a * (U^b) * (e^{cU})$$

In the utility function, U is defined as travel time between zones. The parameters a, b, and c are calibration factors which influence the weight of travel time in the gravity model. The gravity parameters used in the 2023 model were calibrated based on guidance from *NCHRP Report 716* (TRB 2012) to allow 2023 modeled volumes to match traffic count data.

TRAFFIC ASSIGNMENT

Trips were assigned to the transportation network using an equilibrium assignment process which allocates vehicle trips between origins and destinations along the route with the lowest travel time. The assignment routine updates network travel time iteratively to reflect network congestion, re-assigning traffic until no vehicle can decrease its travel time by shifting to a new path. Link and turn travel times are calculated using travel demand model volume-delay functions (VDFs). Link VDFs utilized the Visum software implementation of the Speiss conical volume-delay function, which is utilized in other local agency travel demand models in Western Washington. Turn VDFs utilized *Highway Capacity Manual* volume-delay equations, except for roundabouts which utilized the TRL/Kimber method.

Travel Demand Model Calibration

Travel demand model calibration consists of adjusting model procedures and formulas to allow the model to reflect local travel behavior for an observed condition. This may involve adjusting trip generation rates, trip distribution gravity model parameters, volume-delay functions, and other model parameters.

Travel demand model validation consists of comparing the model's traffic assignment output to actual traffic counts, and sometimes other available survey data, to establish correlation between the base-year model and base-year survey data. A well-calibrated model, when populated with land use and street network data that existed at the time traffic counts were collected, will generate traffic volumes that closely correlate with traffic counts. Calibration errors should

be minimal and evenly distributed to consider a model “validated” and therefore suitable for use in concurrency tests, planning, and design studies.

The 2023 model was calibrated according to best practices identified in *National Cooperative Highway Research Program Report 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design* (TRB 2014) and *Travel Model Validation and Reasonableness Checking Manual Second Edition* (FHWA 2010). A total 359 AM peak hour and 351 PM peak hour volume counts were used as reference points for model calibration. The base year model traffic volumes were checked against the base year link volume counts and model inputs were calibrated to improve the correlation between the modeled volumes and traffic counts.

The most common statistical measures of travel demand model accuracy are the coefficient of determination (R^2) and the percent root-mean square error (%RMSE) statistics. The R^2 statistic can be interpreted as a “goodness of fit” statistic and measures the strength of the linear relationship between the calculated model volumes and observed (counted) traffic volumes. Percent RMSE measures the average error between the modeled and observed traffic volumes and can be calculated using the following formula:

$$\%RMSE = 100 \times \frac{\sqrt{\frac{\sum(\text{Assignment Errors})^2}{\text{Number of Links}}}}{\text{Average Count}}$$

R^2 and %RMSE measure the overall degree to which modeled volumes correspond to observed count data, where perfection would be 100 percent correlation of modeled volumes to counts ($R^2 = 1$) with no error (%RMSE = 0). There are no national standards for R^2 or %RMSE. However, the *Model Validation and Reasonableness Checking Manual* (FHWA 1997) provides suggested guidelines for model calibration including R^2 value of at least 0.88 and %RMSE less than or equal to 35%.

The 2023 calibrated model meets the suggested calibration guidelines identified by FHWA. The calibrated AM peak hour model has an R^2 statistic of 0.98 and 13% root-mean-squared error, while the calibrated PM peak hour model has an R^2 statistic of 0.98 and 10% root-mean-squared error. These results indicate a close correlation between traffic counts and modeled volumes. All AM and PM peak hour volumes fall within the recommended allowable error curves identified in NCHRP Report 765.

Even in the most well-calibrated travel demand model, some differences will exist between raw model volumes and traffic counts. These remaining errors were reduced using Visum’s origin-destination matrix correction procedure, which compares traffic counts to raw model flows and calculates an origin-destination correction matrix which is applied at the end of the trip distribution step of the model procedure sequence.

Future year model volumes were post-processed to further reduce model error using the “difference method.” This method consists of subtracting the base year (2023) model volume from the future year model volume and adding that difference to the base year traffic counts. This method, summarized in NCHRP Report 716, reduces the influence of base year model error. However, model results must still be checked for reasonableness in any given application.

Town Center

The development forecasts applied in this analysis include a total of 1,737 new dwelling units and 339,000 square feet of commercial development in the Sammamish Town Center area, in addition to a new 600-student public high school on the east side of 228th Ave SE north of SE 4th Street.

The intersection of 228th Avenue SE & SE 4th Street constitutes to be a critical access point to Town Center and a key location for citywide mobility due to its location on the 228th Avenue SE principal arterial corridor. As such, it will be important to maintain acceptable operations at this location. The 2044 analysis indicates that the intersection will

operate at LOS C or better in both peak hour periods of all 2044 scenarios and will satisfy the minimum LOS standard. Intersection LOS results at 228th Avenue SE & SE 4th Street are summarized in **Table B4**.

Table B4. 2044 Intersection LOS Results, 228TH Ave SE & SE 4th St

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
	2044 Baseline	Signal		19	B	19	B
	2044 Alternative 1: STC Network Buildout	Signal		19	B	18	B
	2044 Alternative 2: Back-to-Office	Signal		20	B	23	C
	2044 Alternative 3: Transit Shift	Signal		19	B	18	B

APPENDIX C

PRIORITIZED PROJECT LIST CRITERIA

Prioritization Criteria Category	Prioritization Description	New Proposed Max Category Score
System Efficiency	Improves operations in the system, focusing on improvements to principal arterials and new connections	15
Connectivity	Enhance connections to the regional system and improving internal connections, including non-motorized by connecting to trails and parks and providing mobility choices for those with special needs.	20
Fiscal Responsibility	Responsibly invests in the system, including improving chances for grants/outside funding and use of impact fees	15
Safety	Addresses high collision locations, calming traffic, improving pedestrian connections, and improving evacuation routes	20
Community Character	Enhances the rights-of-way, including aesthetics via landscaping, stormwater features, etc.	10
Environmental Impact	Reduces emissions, through one or more of the following: *Inducing a mode shift away from single occupant vehicles (SOVs) *Reducing vehicle miles traveled (VMT) *Improving traffic flow (e.g. through signal coordination or by removing a bottleneck)	20
TOTALS		100

Scoring		
Score	How Closely Project Meets Criteria	Description
Max Points	HIGH	Exceeds the criteria
Half of Max Points	MEDIUM	Meets the criteria
No Points	LOW	Does not meet the criteria

APPENDIX D

UNCONSTRAINED PROJECT LIST

City of Sammamish 2024-2044 Unconstrained Project List - DRAFT

Ongoing Transportation Programs (Projects within the Program)				
Score	Project Type	ID No.	Project Name	Program Total
NOT SCORED	Program	TR-M (Transit Enhancement Program)	Transit Signal Priority (TSP)	
NOT SCORED	Program	TR-M (Transit Enhancement Program)	Transit Operation Improvement	
NOT SCORED	Program	TR-M (Transit Enhancement Program)	Mobility Hub	\$10,000 - \$20,000 per smaller mobility hub; \$200,000 - \$10 million per larger hub
NOT SCORED	Program	TR-M (Transit Enhancement Program)	Neighborhood Circulating Shuttle	
				\$ -

Traffic, Safety, & Non-Motorized Improvement Projects				
Score	Project Type	ID No.	Project Name	Project Total
57.5	Traffic, Safety, & Non-Motorized	TR-04	East Lake Sammamish Parkway SE/SE 24th St Intersection	\$5,408,000 (2024 dollars)
57.5	Traffic, Safety, & Non-Motorized	TR-132(P49)	E Beaver Lake Way SE Sidewalk Improvement: From SE 32nd Street to E Beaver Lake Way SE	
55	Traffic, Safety, & Non-Motorized	TR-131(P47)	248th Avenue SE Active Transportation Improvements: From SE 24th Street to SE 14th Street	
27.5	Traffic, Safety, & Non-Motorized	TR-39	256th Ave SE/E Beaver Lake Dr SE/Issaquah Beaver Lake Rd	\$832,000 (2024 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized		SE 24th Street: 228th Avenue SE to 244th Avenue SE: From 228th Avenue SE to 244th Avenue SE	
NOT SCORED	Traffic, Safety, & Non-Motorized	TR-25	212th Way SE (Snake Hill), E Lk Sammamish Pkwy SE-212th Ave SE improvement	\$13,738,000 (2014 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized	TR-39	256th Ave SE/E Beaver Lake Dr SE/ Issaquah Beaver Lake Rd roundabout	\$1,600,000 (2018 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized		SE 8th St & SE Windsor Blvd: Convert to all-way stop control	\$282,000
NOT SCORED	Traffic, Safety, & Non-Motorized		SE 8th Street & 212th Ave SE: Convert to all-way stop control	\$282,000
NOT SCORED	Traffic, Safety, & Non-Motorized		Issaquah-Pine Lk Rd & 230th Ln SE/ 231st Ln SE: channelization and signal improvements	\$506,000
NOT SCORED	Traffic, Safety, & Non-Motorized	TR-55	242nd Ave NE/NE 8th St widening	\$880,000 (2018 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized	TR-56	Issaquah-Pine Lake Rd/230th Ln SE/231st Lane SE improvements	\$115,000 (2018 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized		228th Ave NE Pedestrian Bridge	
NOT SCORED	Traffic, Safety, & Non-Motorized		Sammamish Gondola	
NOT SCORED	Traffic, Safety, & Non-Motorized		East Lake Sammamish Parkway Settlement Repair	\$3,300,000 to \$8,900,000 (2024 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized		212th Avenue SE Settling North of SE 24th Street.	\$116,000 (2024 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized		SE 24th Street Settling of Pavement Sections	\$46,000 to \$1,200,000 (2024 dollars)
NOT SCORED	Traffic, Safety, & Non-Motorized		Beaver Lake Trestle Approach	\$133,000 to \$729,000 (2024 dollars)

Connection Projects				
Score	Project Type	ID No.	Project Name	Project Total
92.5	Connection	TR-124	Northwest Connector Road	\$11,856,000 (2024 dollars)
92.5	Connection	TR-127	Southeast Connector Road & New Signal at SE 8th	\$13,832,000 (2024 dollars)
57.5	Connection	TR-125	SE 4th Extension (Crusader Way)	\$8,632,000 (2024 dollars)
52.5	Connection	TR-49	Beaver Lake Drive: 24th Street to SE Belvedere Way	\$33,550,400 (2024 dollars)
50	Connection	TR-20	SE 14th Street Extension: Lawson Park Plat to 248th Ave SE	\$2,600,000 (2024 dollars)
Not Scored	Connection	TR-30	New Roadway Connection to E BeaverLk Dr SE at 266th Way SE	\$8,498,000 (2014 dollars)
Not Scored	Connection		New 190th Pl NE Connection	
Not Scored	Connection		New 196th Ave NE Connection	
Not Scored	Connection		New 218th Ave NE Connection	
Not Scored	Connection		New 231st Ave SE Connection	\$1,054,000 - \$1,405,000
Not Scored	Connection		New 236th Ave NE Connection	
Not Scored	Connection		New 242nd Ave SE Connection	
Not Scored	Connection		New 249th Pl SE Connection	
Not Scored	Connection		New Lancaster Way SE Connection to 223rd Avenue SE	
Not Scored	Connection		New NE 14th St Connection 3	
Not Scored	Connection		New NE 20th St Connection	
Not Scored	Connection		New NE 20th St Connection to 244th Ave NE	\$10,233,000 - \$13,644,000
Not Scored	Connection		New Roadway Connection to E Beaver- Lk Dr SE at 266th Way SE	
Not Scored	Connection		New SE 13th St Connection	
Not Scored	Connection		New SE 18th Pl Connection	
Not Scored	Connection		New SE 28th St Connection	
Not Scored	Connection		New 251st Pl SE Connection	
Not Scored	Connection		New SE 17th St Connection	
Not Scored	Connection		New SE 47th Way Connection	

Corridor Improvement Projects				
Score	Project Type	ID No.	Project Name	Project Total
55	Corridor	TR-26	SE Duthie Hill Road: West side of the "Notch" (City Limits) to Trossachs Blvd SE	
52.5	Corridor	TR-23	East Lake Sammamish Parkway SE: 212th Ave SE to South City Limits	
Not Scored	Corridor		244th Ave Widening	\$24,188,000 - \$32,251,000
Not Scored	Corridor		SE Duthie Hill Rd: From West side of "notch" to Trossachs Blvd SE Widening	\$4,676,000 - \$6,235,000
Not Scored	Corridor	TR-24	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd-"notch" Widening	\$13,230,000 (2014 dollars)

Regional Projects				
Score	Project Type	ID No.	Project Name	Project Total
Not Scored	Regional	TR-19	[WSDOT] SR202/Sahalee Way NE Intersection	
Not Scored	Regional	TR-27	[Issaquah] IPLR Ph. 3 - 48th to IFCR	
Not Scored	Regional	TR-48	[King County] Sahalee Way: SR202 to North City Limits	
Not Scored	Regional	TR-118	Signalized Pedestrian Crossing at Duthie Hill Rd and SE Issaquah Fall City Rd	
Not Scored	Regional	TR-119	Pedestrian pathway along Duthie Hill Rd	
Not Scored	Regional		Soaring Eagle Boulevard: Trossachs to Main St.	