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City of Sammamish

Transportation Master Plan

March 2020



City of Sammamish

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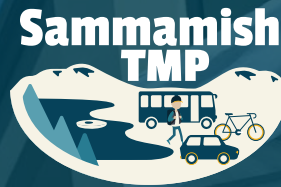
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Sammamish TMP Executive Summary

The City of Sammamish initiated development of its first ever Transportation Master Plan (TMP) in 2017. This effort, which includes substantial technical analysis and community involvement, will shape the City for years to come by providing concrete direction on policies and transportation project priorities. Since its incorporation from King County in 1999, Sammamish has become a desirable bedroom community set on the eastside of the Puget Sound region, to raise families and enjoy a more natural character than is offered in many other suburban communities. While incorporation has provided Sammamish more ability to control its own destiny from the perspective of community building, urban form, and transportation network investments, historical decisions made by King County continue to influence the City today. This TMP provides the opportunity for Sammamish to proactively shape its transportation vision and goals as described in the City's Comprehensive Plan.

The City 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 while maintaining fiscal sustainability and community character. Input from the Sammamish community and direction from the City Council support this vision and this TMP proposes a prioritized list of projects that advances this vision.



This TMP includes five chapters:

The City of Sammamish's first ever Transportation Master Plan (TMP) will shape the City for years to come by providing concrete direction on transportation project priorities. This document provides background information about Sammamish's transportation context, the goals of the TMP, community outreach conducted, and priority projects to ensure community mobility.



Chapter 1: Introduction

Describes the context for Sammamish's TMP, in terms of regional setting, other related planning efforts, and trends that shape existing and future mobility needs.



Chapter 2: Outreach

Describes the community outreach process, methods and timing of outreach, who we heard from and what we heard. Chapters 1 and 2 together provide a framework for the issues and opportunities to be addressed by this TMP.



Chapter 3: Future Transportation Vision

Describes the City of Sammamish's future transportation vision, based on the goals developed in concert with the community and the policies described in the City's Comprehensive Plan. This chapter frames the City's layered network approach, which seeks to provide mobility and safety for all modes of travel. This chapter describes the City's level of service performance standards for streets and intersections, and planning guidance to accommodate transit, biking, and walking.



Chapter 4: Plan Implementation

Describes the TMP's path to implementation considering reasonably anticipated funding options to achieve Sammamish's vision for its transportation system. The chapter describes 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.



Chapter 5: Technological Advances in 2035 and Beyond

Outlines considerations for Sammamish in planning its transportation system to accommodate future trends in technology and travel.



MAMAMISH COMMONS
801 228TH AVENUE SE





Chapter 01



Introduction

- Why Develop a TMP Now?
- Sammamish History & Context
- Transportation Existing Conditions
 - Vehicular Network
 - Non-Motorized Travel
 - Transit
 - Safety
 - Freight & Truck Mobility
 - Traffic Calming

Why Develop a TMP Now?

The City of Sammamish's first ever Transportation Master Plan (TMP) will shape the City for years to come by providing concrete direction on transportation project priorities. This document provides background information about Sammamish's transportation context, the goals of the TMP, community outreach conducted, and draft priority projects for the TMP.

Sammamish History & Context

Sammamish is located west of the Cascade Mountains in the Puget Sound region, about 20 miles east of Seattle. The City boundary is shown in **Figure 1**. The name Sammamish is derived from two Native American words: samena (hunter) and mish (people) and is situated on the eastern shore of Lake Sammamish, a picturesque body of water. Sammamish is bordered by Issaquah to the south, Redmond to the northwest, and rural King County to the north and east. The eastern border of the City mostly coincides with King County's Urban Growth Area boundary. The City incorporated in August 1999 and annexed the Klahanie neighborhood in January 2016. Incorporation was a seminal event in the City's history, allowing more local control of issues such as land use, development and storm water management. However, historical decisions made by King County continue to influence the City today; examples include the City road network's sometimes rural nature and lack of connections to facilitate movement within and out of the City.

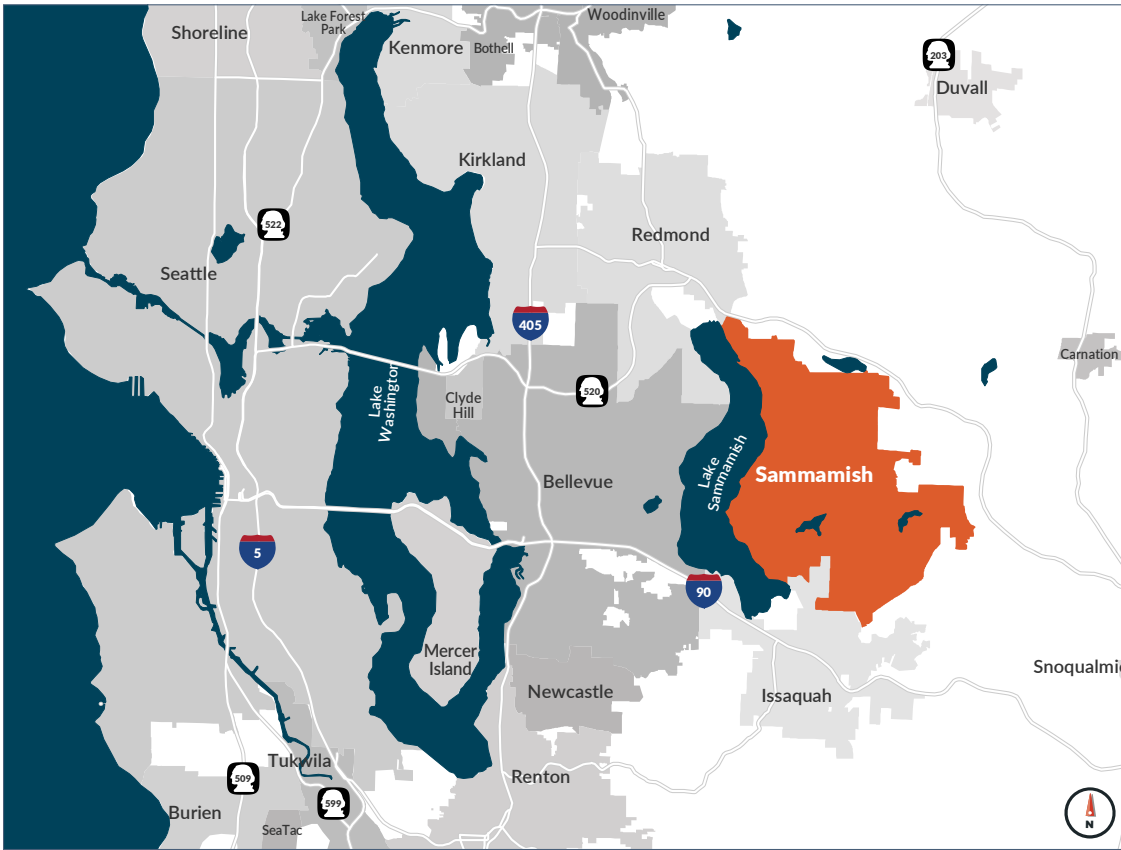


Figure 1. City of Sammamish.



Population Pyramid of Sammamish

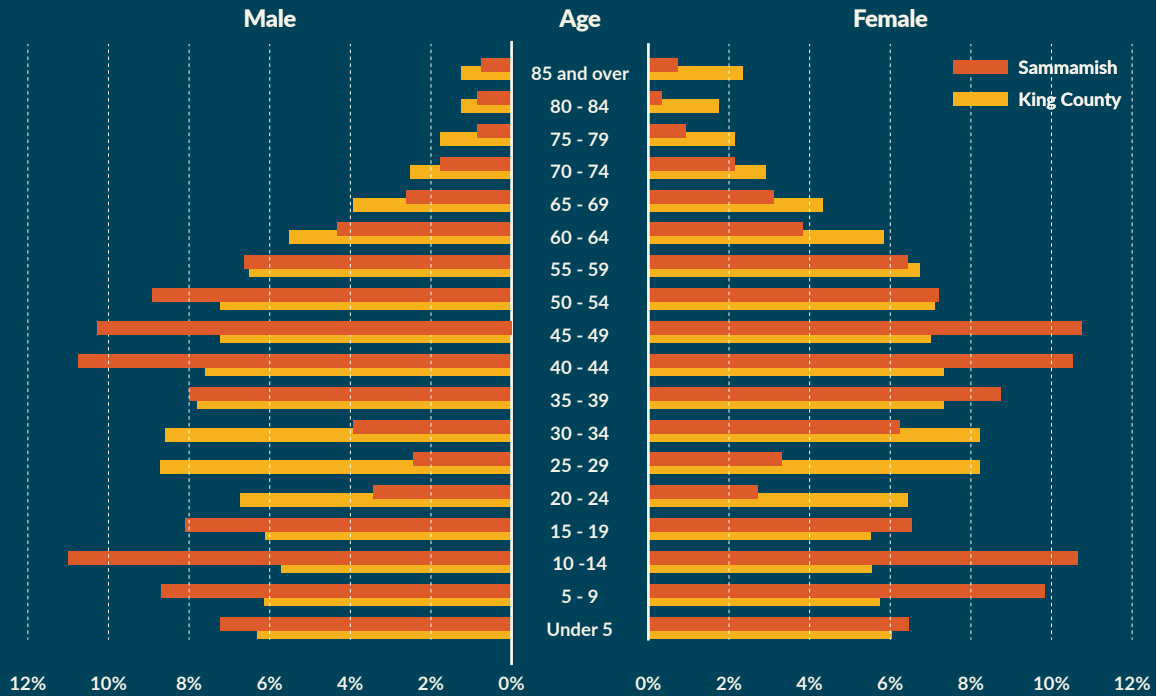


Figure 2. Population Pyramids for Sammamish and King County. Source: US Census Bureau American Community Survey, 2011-2015.

As of 2018, Sammamish had an estimated population of 65,733 residents. The City is known as a bedroom community, whose residents enjoy a high median income, are well educated, and experience low crime and good schools. The City’s housing stock is largely oriented towards families with children, demonstrated by the majority single-family detached residential units and low-density neighborhoods. As shown in **Figure 2**, compared with average age distribution across all of King County, the numbers of young adults under the age of 30, and older adults over the age of 65, are relatively small. Households within the City tend to be larger and the percentage with children constitute over half of the City’s households, which is above the regional average. In addition, children under 18 consistently comprise about a third of Sammamish’s population. **Figure 3** shows a comparison with households across King County. The average household size in the Sammamish is 3.05 persons.

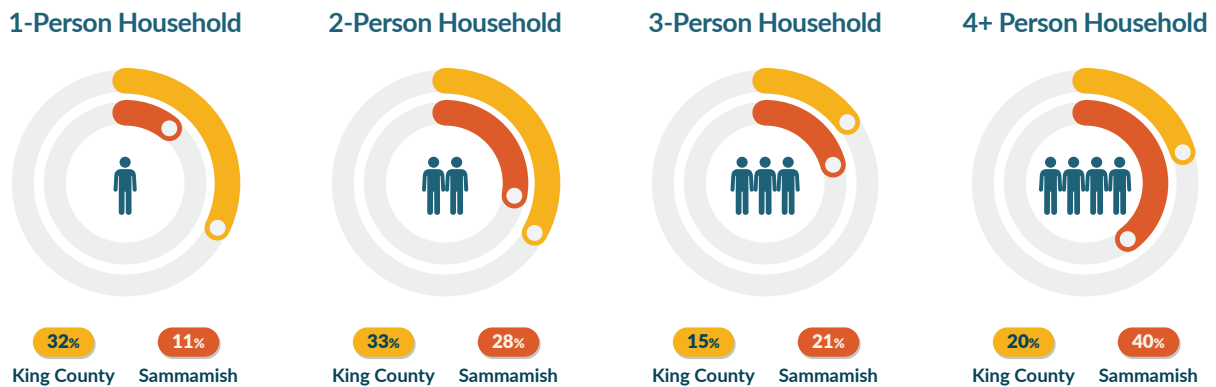


Figure 3. Household Composition for Sammamish and King County. Source: US Census Bureau American Community Survey, 2010-2015.

Sammamish is largely a low-density residential city. Its land area is developed as neighborhoods for the following uses:

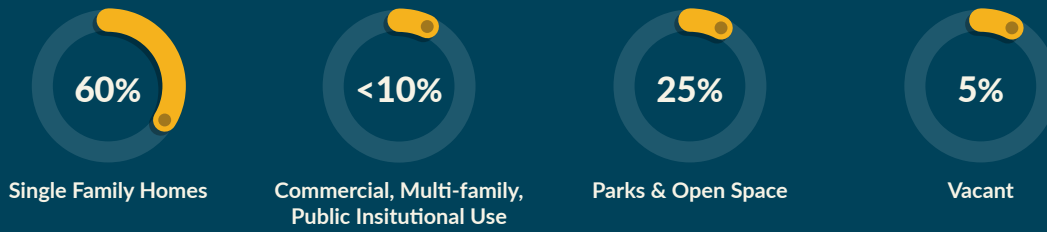


Figure 4 shows the existing land uses within Sammamish. The majority of commercial businesses within the City are located along 228th Avenue SE in one of three locations: Sammamish Highlands at NE 8th Street, Sammamish Town Center at SE 4th Street, or Pine Lake Village at SE 30th Street. The fourth commercial shopping area, Klahanie Center, serves the Klahanie neighborhood.

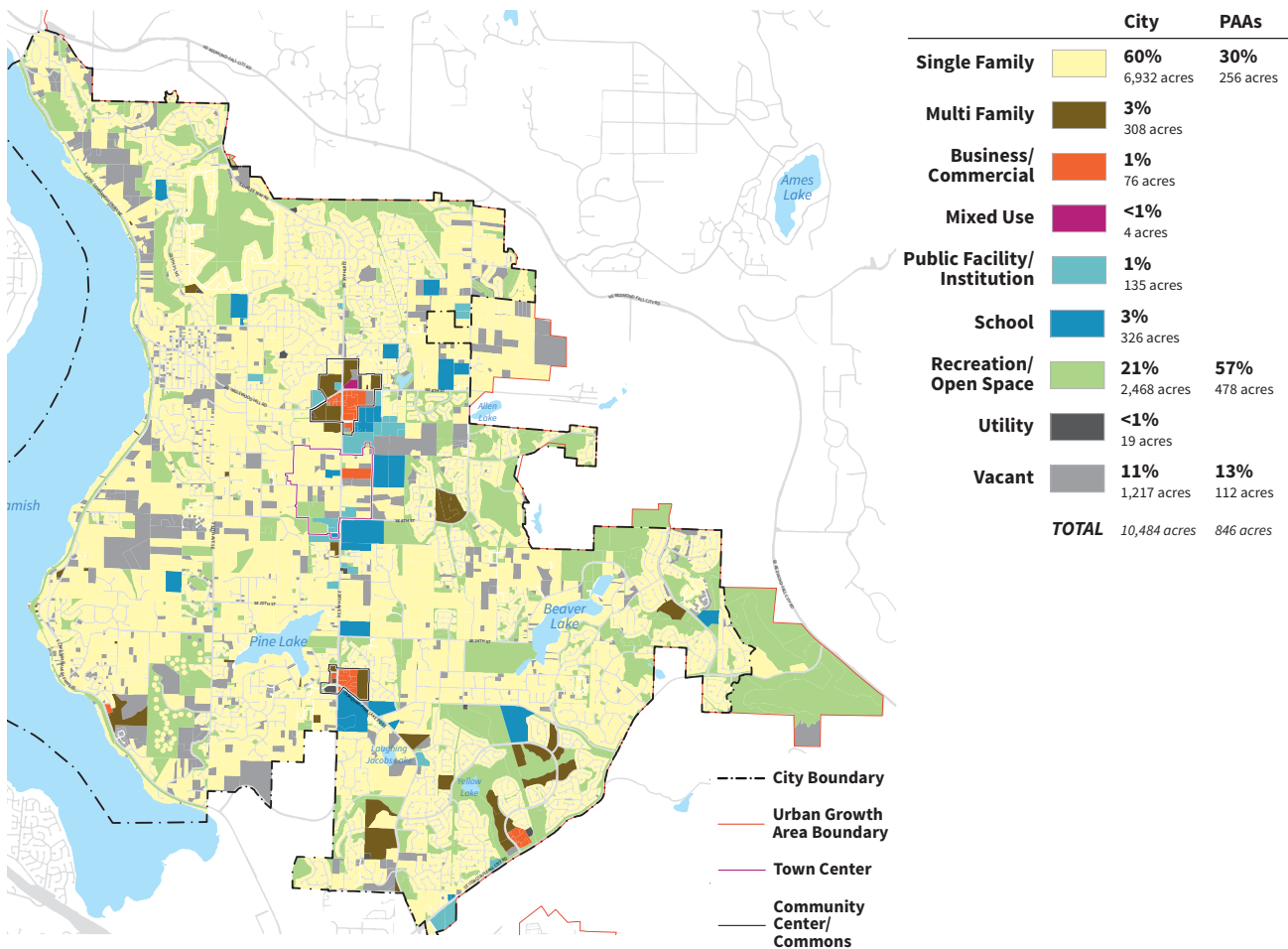


Figure 4. Existing Land Use Map. Source: 2018 Comprehensive Plan

Two large school districts, Lake Washington (second only behind the Seattle School District by student population), and Issaquah divide the City in half along SE 8th street. This has resulted in 18 public schools and a public university that serves Sammamish students. The Issaquah School District plans to open two new elementary schools and a high school in the south end of the City by 2021. There are a large number of schools along 228th Avenue SE: Eastlake High School, Eastside Catholic School, Central Washington University, Skyline High School, Discovery Elementary School, and Pine Lake Middle School, in addition to several private schools for young children. Sammamish struggles with its relatively short but intense peaking of traffic congestion in large part due to its high number of schools, high commuting population, limited access points out of the city, its steep topography, and roads built to outdated standards.

Approximately 21,500 Sammamish residents are employed and over 95 percent of these workers commute to jobs outside Sammamish. Of the approximately 4,500 jobs available in Sammamish, residents fill only 15 percent. This is due to the mismatch between employment opportunities in Sammamish (largely low-wage service/retail jobs) and the wages needed to afford a home in Sammamish. The Washington Office of Financial Management estimated the jobs-to-housing ratio within the City to be 0.4 in 2016, meaning that there are 0.4 jobs for every housing unit in the City. A balanced city has a jobs-to-housing ratio of 1.0 (i.e. one job for every housing unit). A low jobs-to-housing ratio means that residents are commuting outside of the City for employment, which impacts peak hour travel and congestion. Sammamish’s jobs-to-housing ratio is notably lower than neighboring communities’. As shown in **Figure 5**, the jobs-housing ratio was 1.3 in King County, 1.6 in Issaquah, and 3.3 in Redmond.

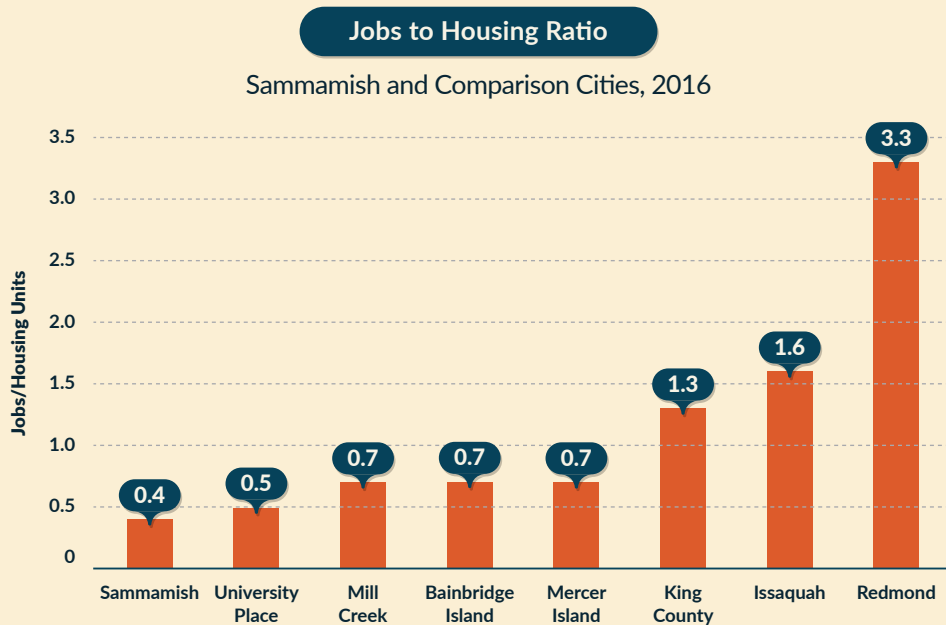


Figure 5. Jobs/Housing Units Ratio for Sammamish and Other Cities. Source: PSRC, 2016; Washington State Office of Financial Management, 2016.

Sammamish Town Center Plan

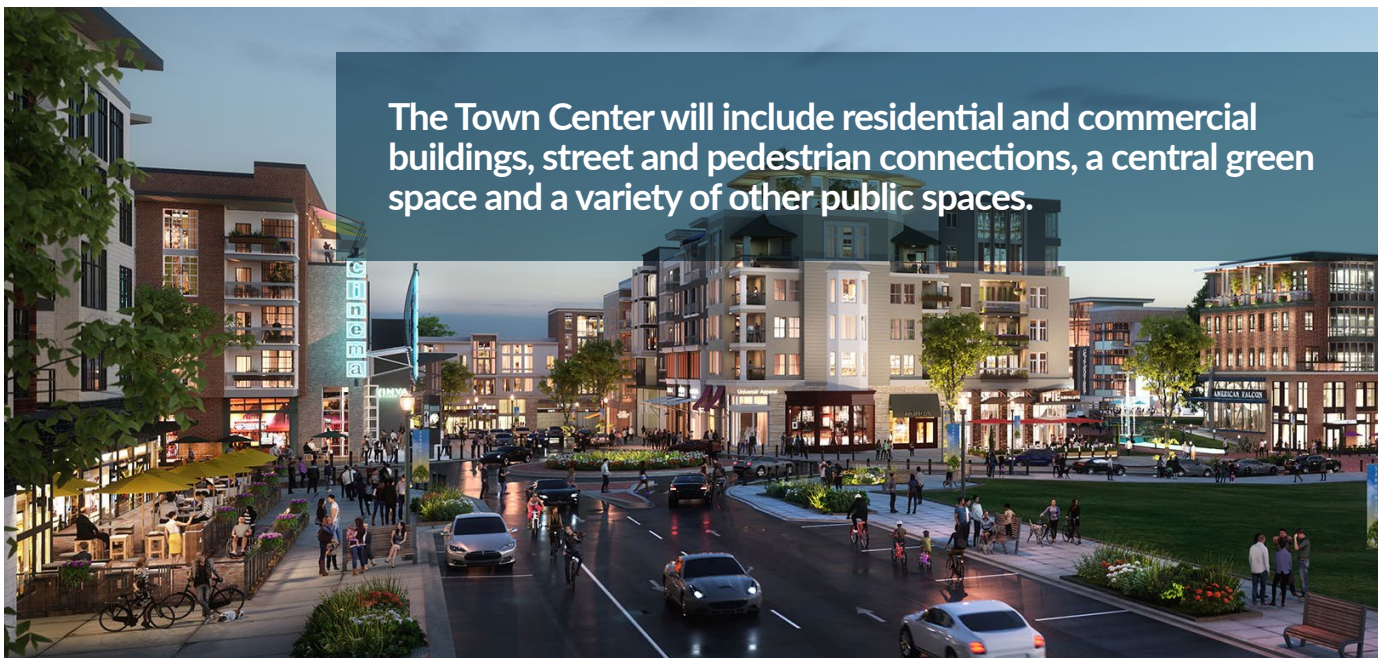
Sammamish's Town Center continues to evolve into a vibrant and urban mixed-use gathering space to live, shop and work. The Town Center will include residential and commercial buildings, street and pedestrian connections, a central green space, and a variety of other public spaces. Natural resources and critical areas will be preserved and enhanced by focusing new development away from these areas and incorporating natural resources, view corridors and sensitive site characteristics as amenities and design elements that reflect the character of Sammamish.

While the proposed complete streets part of the Town Center connections will be included in the TMP's prioritized project list, the costs will not as those improvements will be borne by the developer. The Town Center will be linked to the region through transit and bikeways, and to the rest of the City with pedestrian trails and sidewalks.

Sammamish Parks, Recreation and Open Space Plan

The 2018 Parks, Recreation and Open Space Plan is a six-year guide and strategic plan for managing and enhancing park and recreation services in Sammamish. Currently, over 600 acres of developed parks, preserves, and natural areas are located in Sammamish. Responding to the City of Sammamish's growth in recent years, this Plan strategically guides the community's future growth by preserving open space, improving connectivity and walkability, and investing in both park and recreation facilities. The Plan classifies Sammamish's regional and local trail system, which provides for alternative transportation modes such as walking and cycling.

Establishing a framework for trail design, future alignments and wayfinding will help provide future connections to key destinations in Sammamish. The future priority trail network in Sammamish includes the Emerald Necklace Trail, The Sammamish Commons & Town Center Trail, the Plateau Trail (Utility Corridor Trail), the Town Center to Plateau Trail and the Town Center to Lake Sammamish Trail, as shown in **Figure 6**. The TMP includes nonmotorized improvements in the capital projects list that help further the Plan's vision to make connections between existing trails and parks for pedestrians and bicyclists.



There are a number of State and Regional Plans that influence Samamish’s transportation system. These planning efforts, including King County’s current update to its Planning Policies and regional growth allocations, are considered by this TMP and are summarized in **Appendix A**.



Figure 6. Samamish City Priority Trail Network. Source: 2018 PRO Plan.



The City's automobile network consists of principal and minor arterials, collectors, and local streets.

Transportation Existing Conditions

Vehicular Network

The City's vehicular network consists of principal and minor arterials, collector arterials, neighborhood collectors (non-arterial), and local streets (non-arterial). These are shown in **Figure 7** and described in **Table 1**. The City's roadway network has three dominant features that impact the roadway network's ability to efficiently serve residents:

First, only a few streets provide meaningful connections to the regional network. These include:

- **228th Avenue SE/Sahalee Way NE**, 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 slower, 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** 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 and SE 43rd Way are in Issaquah while SE Issaquah Fall City Road are 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. Projects in the TMP that address these particular bottlenecks will require added levels of coordination among several important jurisdictional stakeholders.

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 problem is attributable to a roadway network that was built incrementally over time by private development, usually in the form of subdivisions centered on cul-de-sac streets. In other cases, streets are blocked by barricades barring through access or are bifurcated by natural features. This lack of connectivity results in drivers having relatively few choices, resulting in a system that is overwhelmed during peak hours, frustrating drivers with long wait times at signals and stop signs. **Figure 8** shows a "street x-ray" developed to show the lack of connectivity in Sammamish's current roadway network.

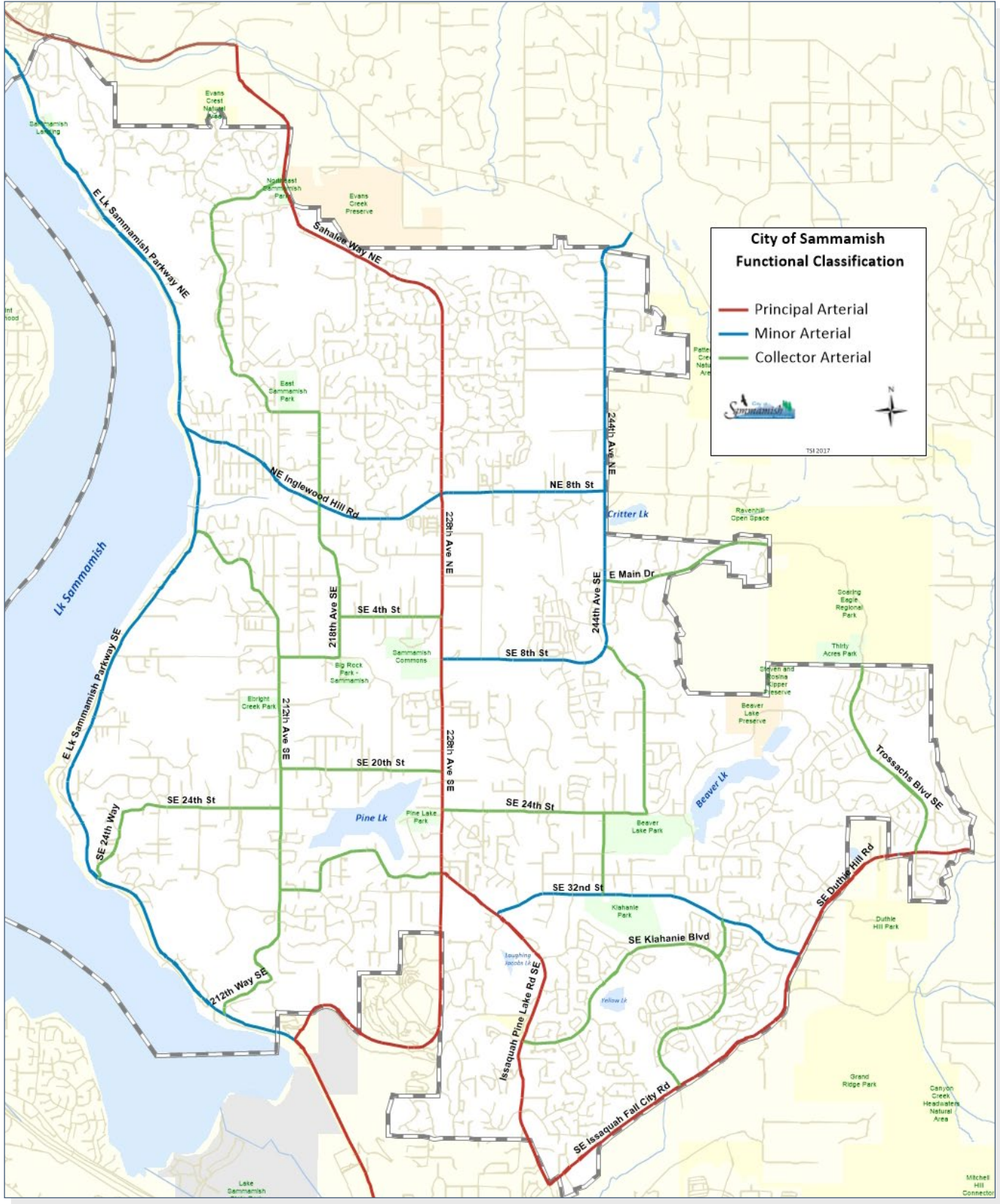


Figure 7. Functional Classification Map. Source: 2018 Comprehensive Plan.







Type	Description	Examples	Photo
Principal Arterial	Principal arterials carry the highest volume of traffic within Sammamish and provide connections to the rest of the region.	Sahalee Way NE 228th Avenue SE SE Issaquah-Pine Lake Road SE Issaquah-Fall City Road SE Duthie Hill Road	
Minor Arterial	Minor arterials are designed for higher volumes but do not carry significant regional traffic. Instead, they provide inter-neighborhood connections.	E Lake Sammamish Parkway NE Inglewood Hill Road NE 8th Street SE 8th Street 244th Avenue NE SE 32nd Street	
Collector Arterial	Collectors distribute trips between local streets and arterials. They serve as transition roadways between commercial and residential areas.	216th Avenue NE 212th Avenue SE SE 20th Street E Main Drive SE 24th Street SE Klahanie Boulevard	
Local Streets	Local streets are the lowest functional classification. They provide circulation within residential neighborhoods.	205th Avenue NE (south of Inglewood Hill Road NE) NE 22nd Street (north of NE 20th Street) NE 5th Place 242nd Drive SE	

Table 1. Functional Classifications. Source: 2018 Comprehensive Plan and Google Street View.

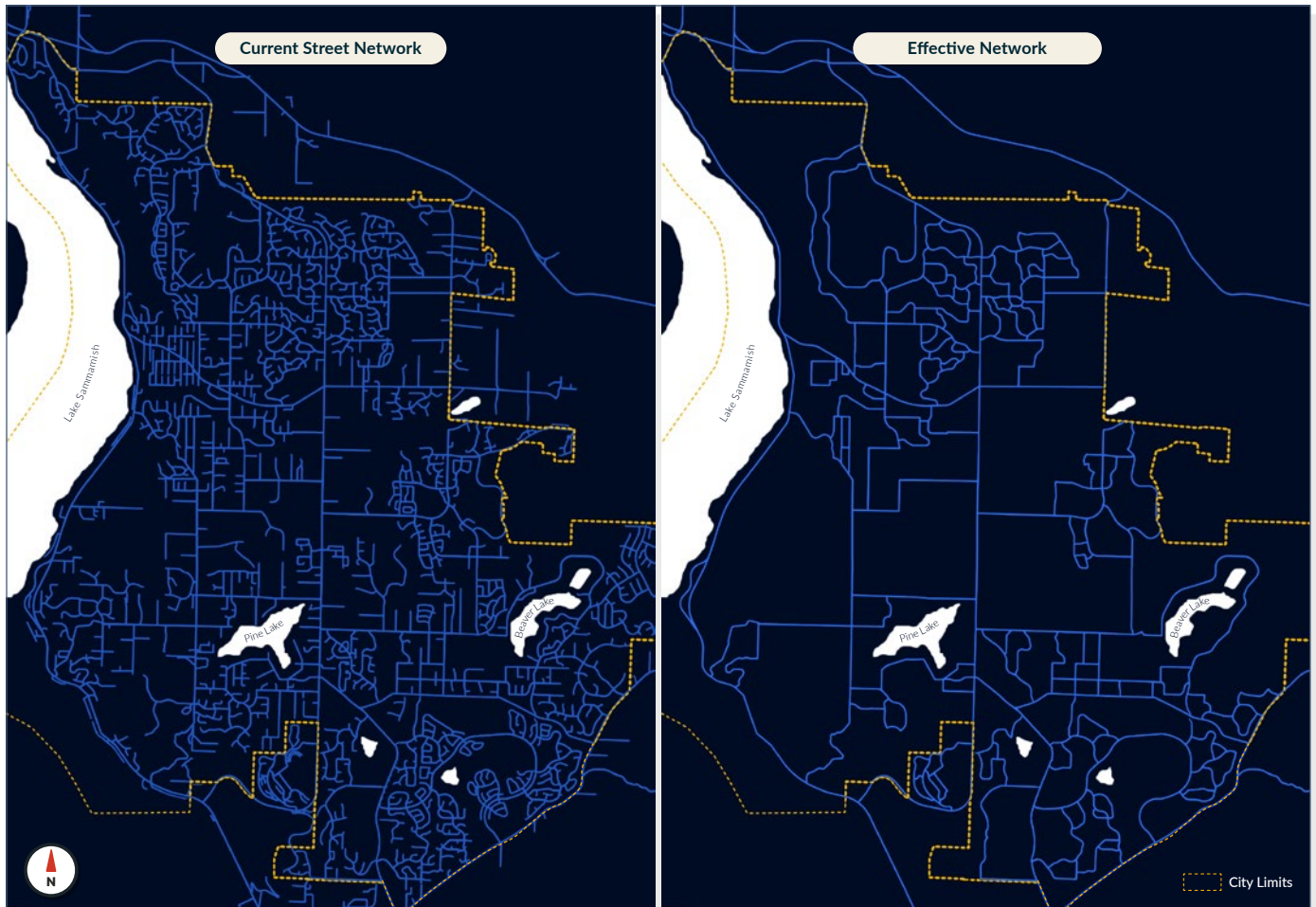


Figure 8. Street X-Ray. This image shows the current street network, left, and the effective network once the disconnected streets are not considered. Source: Blue Zones, 2011.

Lastly, 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 basic amenities like curbs, gutters, sidewalks, bike facilities, and lighting. Instead, these roads only have asphalt travel lanes, unimproved shoulder, and ditches for stormwater conveyance.

Together, the above natural and constructed features, and lack of a sound transportation master plan result in traffic operational challenges in Sammamish.

Traffic Signal & Roundabout Intersection Inventory

An inventory of the signalized and roundabout intersections, and those with four way flashers within and nearby the City of Sammamish was conducted. The locations are illustrated in **Figure 9**, and are the intersections that most directly affect City of Sammamish residents' travel patterns.

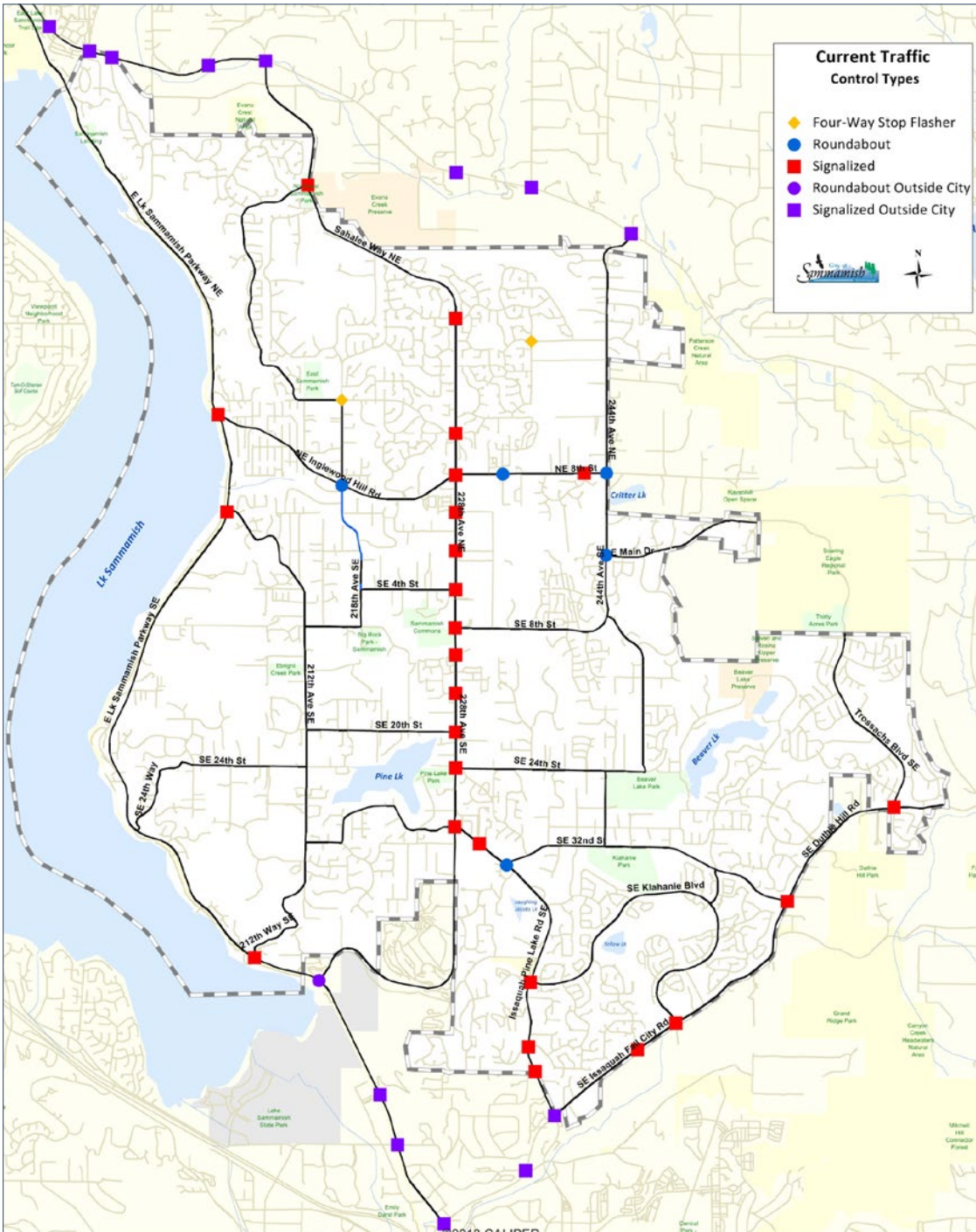


Figure 9. Signal, Roundabout, and Four-Way Flasher Locations. Source: 2018 Comprehensive Plan.



Non-Motorized Travel

According to an analysis in the 2018 Comprehensive Plan, the majority of primary and minor arterial streets have sidewalks, paved shoulders, or shared use paths. However, only half of the roadways classified as local roads have similar facilities. The existing inventory of non-motorized facilities within Sammamish is shown in **Figure 11**.

To better understand on-the-ground challenges for walking and biking in Sammamish, this TMP effort has included stakeholder interviews due to their benefit of direct feedback. These interviews focused on Sammamish residents, service providers (including Issaquah School District, King County Metro, and

others), and City officials. In addition to the stakeholder interviews, the City used tools such as online mapping and workshops to understand residents' preferences for improving non-motorized travel in the City.

While pedestrian facilities are generally lacking throughout the City, stakeholders were particularly concerned about the absence of a welcoming environment for all modes of travel along 228th Avenue SE. While recent enhancements have greatly improved the pedestrian environment on this principal arterial, crossing 228th Avenue SE remains a challenge for pedestrians given the long distances between controlled crossings. Moreover, sections of the corridor remain unimproved. See **Figure 10** for examples of unimproved and improved sections of 228th Ave SE.



Figure 10. Unimproved Section (top) and improved Section (bottom) of 228th Avenue SE. Source: Google Maps.

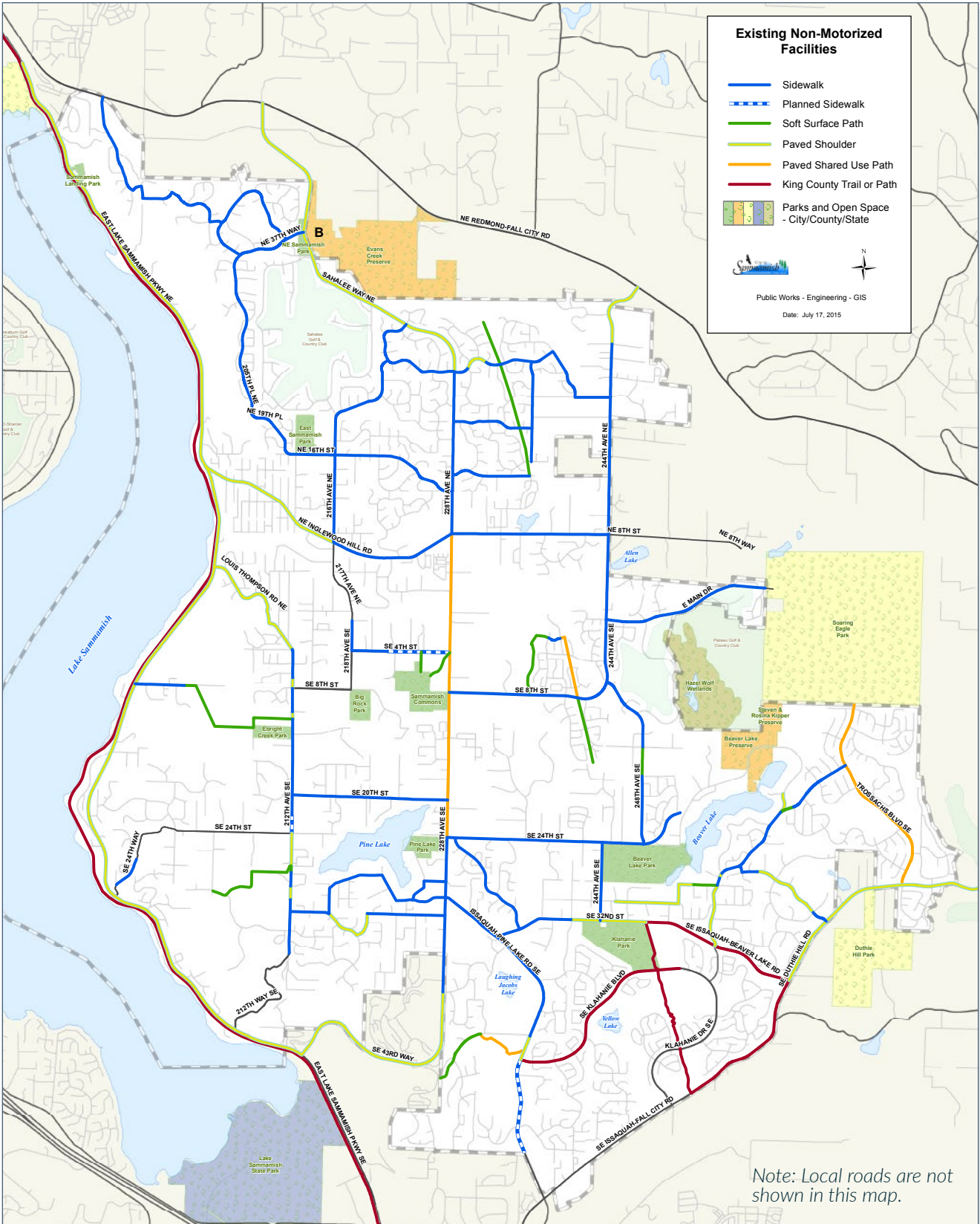


Figure 11. Non-motorized Facilities. Source: 2018 Comprehensive Plan.

Beyond challenges crossing the 228th Avenue corridor, stakeholders indicated that infrastructure generally exists for walking and biking in central Sammamish, but that major gaps exist in other areas of the City. Sidewalk gaps and bike lane gaps impact residents' ability to access parks, stores, and other public spaces by any mode but driving. Moreover, the disconnected nature of the City's street network funnels everyone (regardless of mode) onto a small number of arterial corridors, when quieter local streets would be more inviting for people walking, pushing a stroller, or riding a bike.

Sammamish's topography was also cited as a challenge, limiting the practicality of cycling and walking for many residents. Though much of the community is located on a plateau, there are dips and hills that discourage casual

walkers and bikers. With the exception of King County's East Lake Sammamish Trail, topography and concerns over safety on the bike routes in Sammamish leading to Issaquah or Redmond also limit the number of bike commuters.

Relatively few children in Sammamish walk, bike, or ride the bus to school. Parents tend to drop-off and pick-up their kids from elementary and middle schools, with many high schoolers driving themselves to school. The lack of complete, high amenity non-motorized facilities (notwithstanding the East Lake Sammamish Trail) certainly contribute to this trend. Other eastside communities have leveraged a robust non-motorized network to create a culture of walk/bike access to schools.



Transit

The City of Sammamish is not a transit agency and does not operate any public transit routes or facilities. Instead, King County Metro and Sound Transit currently provide transit service to Sammamish. King County Metro Routes 216, 219, and 269 and Sound Transit Route 554 all travel along the 228th Avenue corridor, including stops at the South Sammamish Park-and-Ride.

Sammamish residents have expressed concern about the difficulty of using transit in Sammamish. Transit usage by Sammamish residents is limited by the few routes, the relatively infrequent service, the limited number of destinations served, and the lack of service during off-peak periods. Below, is a summary of existing services:

- King County Metro Routes 216 and 219 run from Bear Creek Park & Ride in east Redmond along 228th Avenue and Issaquah-Pine Lake Road SE to the Issaquah Highlands Park-and-Ride before heading to Downtown Seattle along I-90. They connect Sammamish with the Issaquah and Downtown Seattle markets. They run westbound to Issaquah Highlands Park-and-Ride and Downtown Seattle in the morning and run eastbound back to Sammamish in the evening with 20-minute headways. These routes only operate on weekdays.
- King County Metro Route 269 connects Issaquah Transit Center to the Overlake Park & Ride, stopping at the South Sammamish Park & Ride. It is a bidirectional route running at 20-30 minute headways during the AM and PM peak periods. During off-peak periods, this route runs every 30 minutes, providing more reliable bus service to the community throughout the day. The 269

is the only route in Sammamish that provides Saturday service. King County Metro Route 269 connects Issaquah Transit Center to the Overlake Park & Ride, stopping at the South Sammamish Park & Ride. It is a bidirectional route running at 20-30 minute headways during the AM and PM peak periods.

- Sound Transit Route 554 provides early morning and late-night weekday service to the South Sammamish Park & Ride. Heading to Downtown Seattle, the routes stops twice before 6 AM heading to Sammamish, the route stops five times after 7 PM.

Sammamish has three Park-and-Ride facilities, one with 54 spaces at Sammamish Hills Lutheran Church, the South Sammamish Park-and-Ride, with 265 spaces, and SE Klahanie Boulevard and 244th Place SE (30 spaces). Sammamish residents also have the options to use Park-and-Ride facilities outside Sammamish, including the Issaquah Transit Center at 17th Avenue NW and Newport Way (94 spaces), Issaquah Highlands Park-and-Ride at Highlands Drive NE and NE High Street (1,010 spaces), and the Bear Creek Park-and-Ride at NE Union Hill Road and 178th Place NE (283 spaces). Existing transit routes and the one permanent Park & Ride within the City are shown in **Figure 12**.

Compared to other cities in the Puget Sound region, the direct impact of Sound Transit 3 will be minimal in Sammamish. The only improvement within Sammamish city limits is the North Sammamish Park-and-Ride that will provide approximately 200 stalls for riders. The North Sammamish Park-and-Ride will primarily serve Sammamish residents in the northern portion of the City and facilitate bus commutes to the nearest LINK Light Rail station at Marymoor Park.



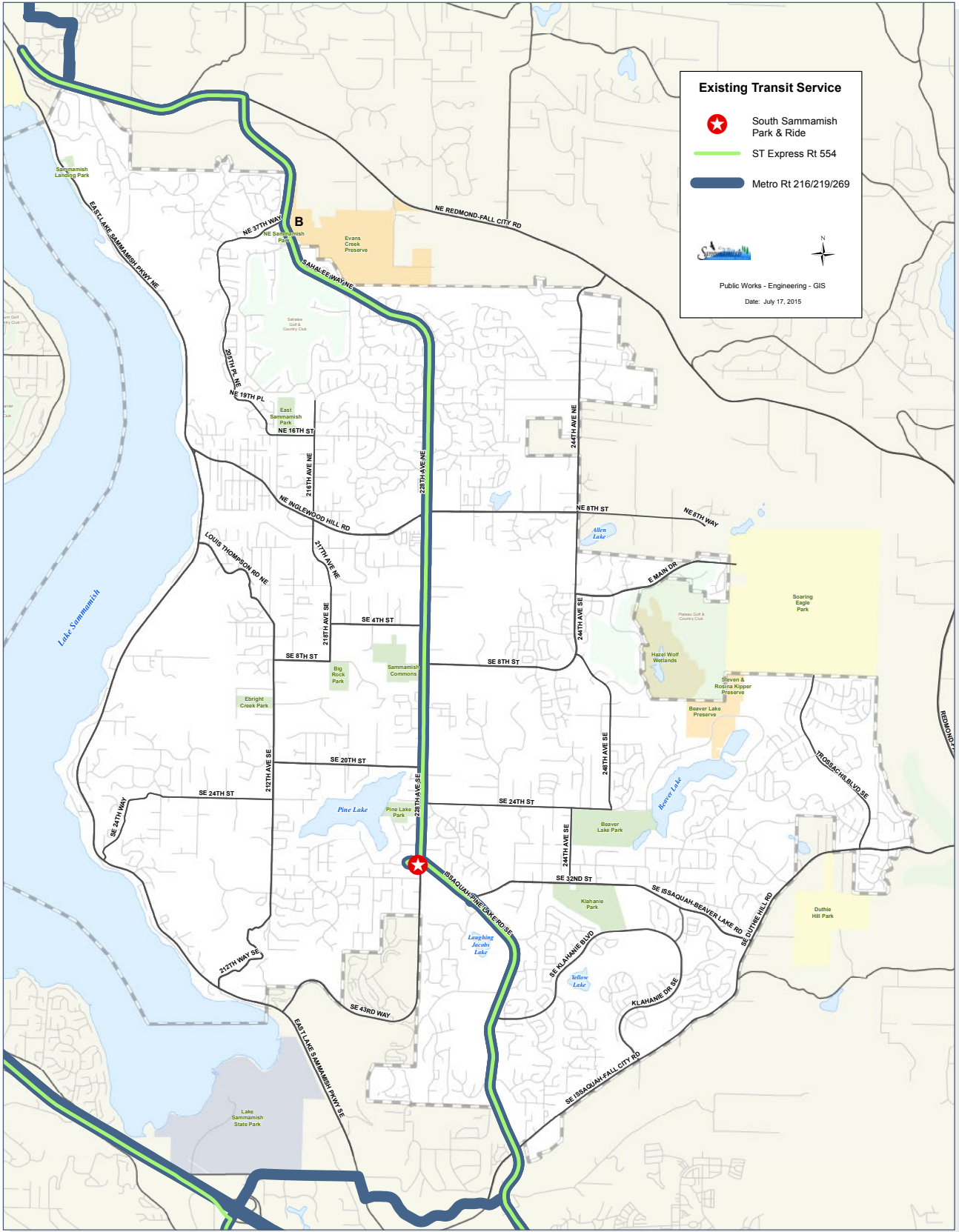


Figure 12. Transit Facilities. Source: 2018 Comprehensive Plan

Safety

Between 2014 and 2018 there were a total of 1,351 traffic collisions reported in Sammamish. **Figure 13** shows the location and type of each reported collision. Of note, 49 (4%) of the collisions involved pedestrians or bicyclists and 378 (28%) resulted in injuries. One fatality was reported in the collision statistics.

Approximately three-quarters of the reported collisions occurred on Principal or Minor Arterials. While these roadways only account for 15 percent of the total roadway miles within the City, they tend to carry the lion share of traffic volumes. The collision rate per 100 million vehicle miles (MVM) traveled was calculated to compare relative frequency of collisions across the City. Overall, the following corridors exhibited elevated collision histories:

- **Highest collision rate:** 228th Avenue SE between SE 8th Street and SE 24th Street had the highest collision rate in the City (256 collisions per MVM); followed by 228th Avenue NE between NE 8th Street and SE 8th Street
- **Most injuries:** NE Inglewood Hill Road between East Lake Sammamish Parkway and 228th Avenue NE had the highest rate of injury collisions
- **Most collisions involving bikes/pedestrians:** Again, 228th Avenue NE between NE 8th Street and SE 8th Street and 228th Avenue between SE 8th Street and SE 24th Street led on this measure, followed by East Lake Sammamish Parkway between NE Inglewood Road and 212th Way SE

Safety is a main priority of the City and the TMP will identify and prioritize capital projects that will enhance safety as well as address congestion. This collision data analysis will be used to determine where safety investments could occur to reduce the risk of severe injury and fatal collisions for all modes of transportation, including bicycles and pedestrians. Traffic safety can be addressed through street design, targeted enforcement, targeted investment, and meaningful community engagement.



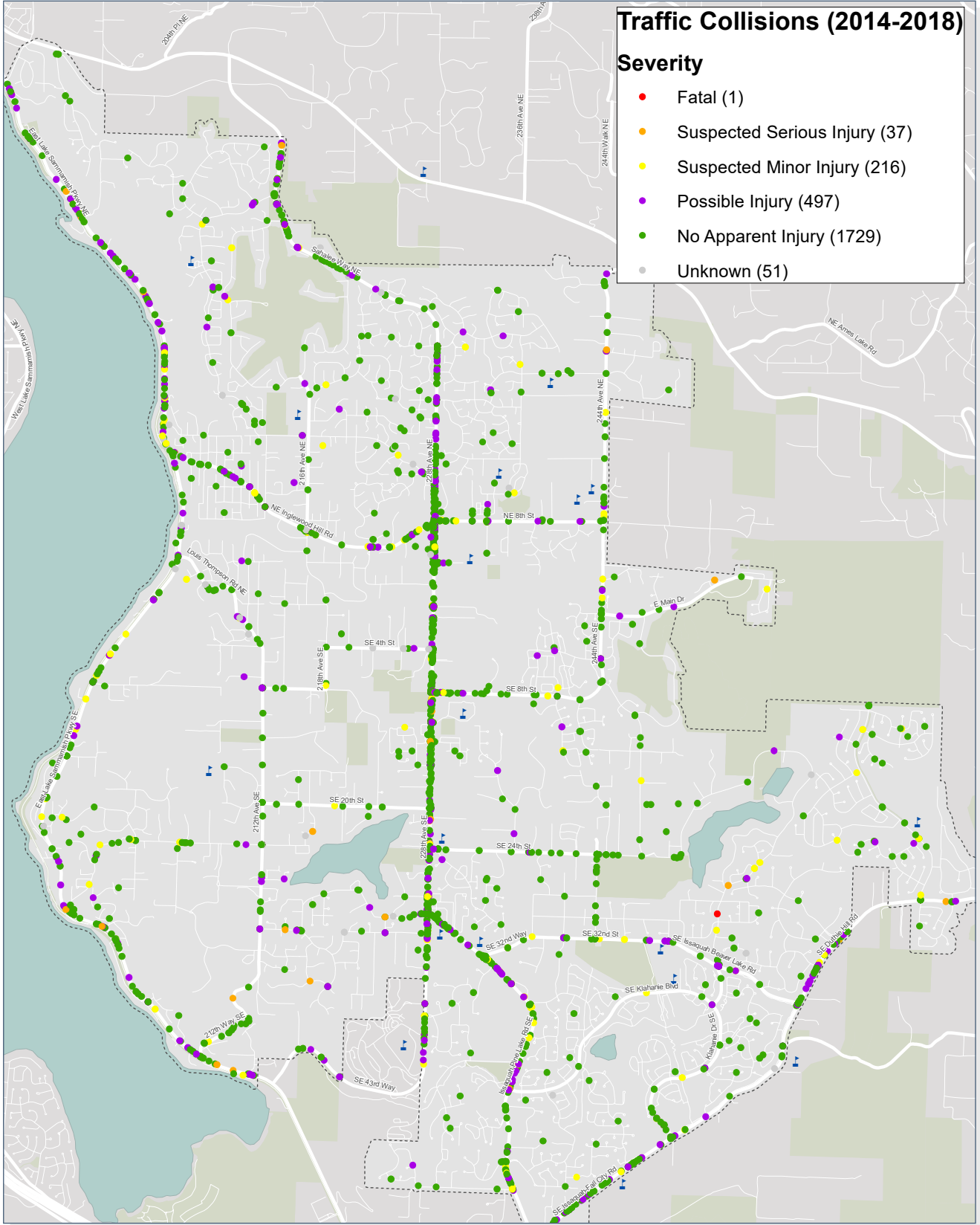


Figure 13. Traffic Collisions. Source: 2018 Comprehensive Plan.

Freight & Truck Mobility

Sammamish has no major freight generators (such as warehouses or distribution facilities), nor do any interstates or major state roads run through the City. Pass-through freight truck trips associated with FedEx sorting facilities in Issaquah and UPS sorting facilities in Redmond run along East Lake Sammamish Parkway. Local freight associated with retail moves along 228th Avenue and Sahalee Way. The currently designated freight routes are shown in **Figure 14**.



Figure 14. Freight Routes. Source: 2018 Comprehensive Plan.



Sammamish has no major freight generators, nor do any interstates or major state roads run through it.





Traffic Calming

As population and employment in the Sammamish region continue to grow, City streets are experiencing increased traffic pressure.

City policy can accommodate growth in a way that can protect neighborhoods from unsafe impacts of traffic through the following measures:

- Develop standards to improve the function, safety, and appearance of the City street system;
- Develop facilities for pedestrians and bicyclists as alternative travel modes to the automobile;
- Protect the quality of life in residential neighborhoods by limiting vehicular traffic and monitoring traffic volumes on collector streets;
- Encourage improvements in vehicular and pedestrian traffic circulation within the City;
- Meet LOS standards on the arterial system to mitigate impacts of new growth and serve existing and planned land uses; and
- Maintain the public street system to promote safety, comfort of travel, and cost-effective use of public funds.

Traffic calming programs serve to deter through-traffic on local residential streets, protect neighborhoods from vehicular traffic moving at excessive speeds, and discourage parking unrelated to residential activities. Traffic calming features include digital speed boards, traffic circles, chokers, speed humps and curb bulb-outs.







Chapter 02



Outreach

- Outreach Process
- TMP Public Outreach
- Who We Heard From
- Issues and Opportunities

Outreach

Development of the City’s first TMP offered a significant opportunity to engage Sammamish residents in a meaningful way as the City works toward improved mobility options, a connected transportation network, and targeted investments. The outreach goals and outcomes were as follows:

- Obtain a strong and well-rounded understanding of community transportation priorities.
- Use robust data and input to inform the prioritization of capital projects.
- Build stronger relationships with community members to set the stage for future conversations on transportation projects and issues.
- Effectively establish a new online engagement platform for this project and future City projects.
- Implement a statistically valid survey to provide decision makers with a high level of confidence in the input received and either confirm or complement public input already received.

The Project Team, consisting of City staff and project consultants, conducted outreach in the summer of 2017 and the spring, summer, and fall 2019 as shown in **Figure 15**. Efforts included in-person meetings and outreach events, online surveys, and a statistically valid mailed survey.

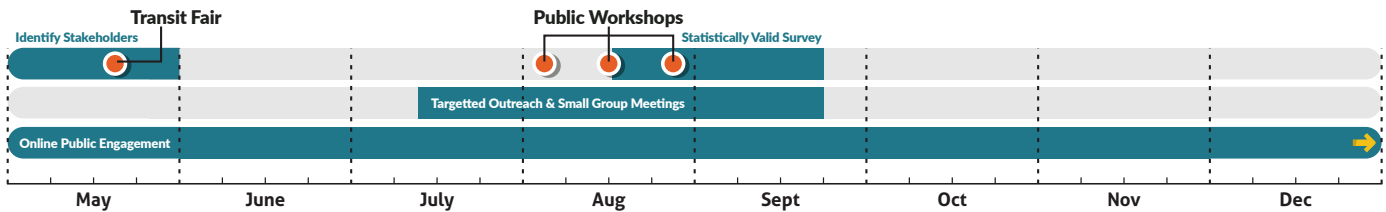


Figure 15. Outreach Schedule

Outreach Process

The Project Team’s in-person efforts were based on the idea that sometimes there are barriers to getting residents to participate, so the Project Team went to where the public already was. 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 the project

team was able to collect first-hand information from the public on the TMP and proposed future transportation projects. **Figure 16** shows the outreach methods used for the TMP. To supplement this information, a statistically valid survey was conducted by a third-party research firm intended to collect information from a random sampling of the public. The two approaches are described below, and full results can be found in the appendices of this document.

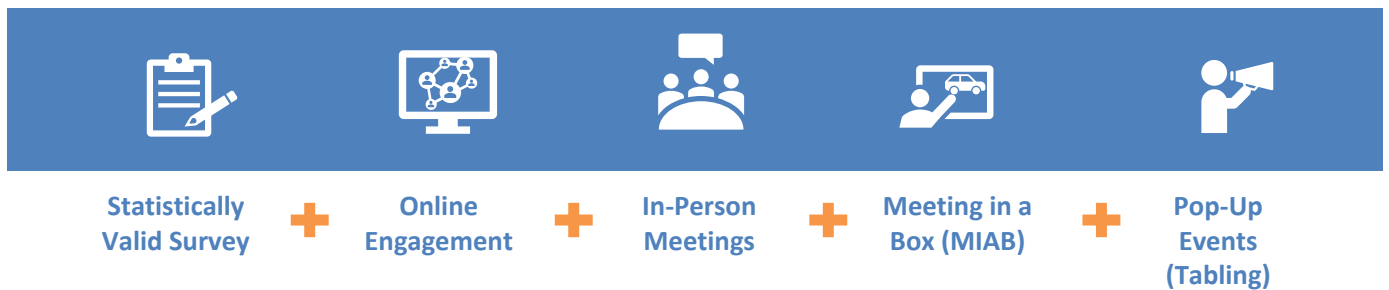


Figure 16. Outreach Methods

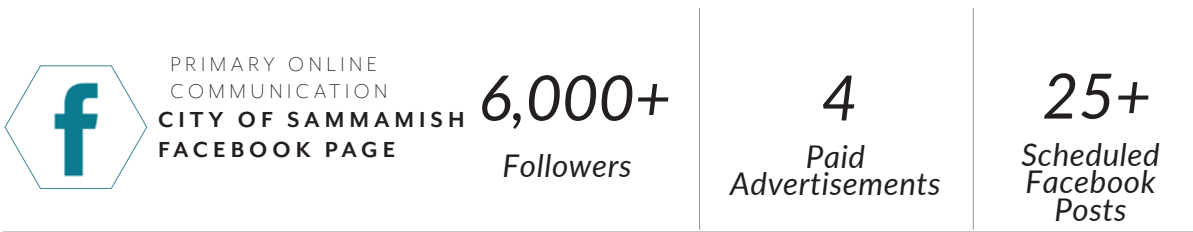


TMP Public Outreach

To achieve the goals and outcomes outlined above, a marketing roadmap was developed consisting of direct communications, in-person meetings, workshops, tabling events, online engagement, and innovative tools such as a Meeting-in-a-Box.

The strategy for interacting with the community was to get broad input on mobility goals (via quick polls and Connect Sammamish, the City’s online engagement platform) and then get specific input on potential projects throughout the community (via public

workshops, Connect Sammamish, and a statistically valid survey). This approach was comprehensive in nature and produced results that the Project Team relied upon when developing the TMP. Such a strategic approach was intended to give the City Council confidence that the content presented in the final TMP was backed by strong, broad, and timely community input. An overview of outreach efforts employed is described below, and a summary of the total marketing reach is found in **Figure 17**.



The **Pop-Up Events** were held at a Farmers Market, National Night Out, and Party on the Plateau. The Pop-Ups were attempts at forming connections with the public who may not actively participate in their local municipality. Besides distributing material regarding the workshops, the team had a quick-poll to quickly engage the participant and gather high level data regarding transportation trade-offs.



The Online Approach consisted of primary and secondary media sources. The TMP Project Team updated Connect Sammamish to serve as the main news platform and tried to reach as many people as possible online. **Facebook** served as the main online source with the most posts, while **Twitter** and the **City’s Newsletter** promoted the TMP.



In effort to reduce barriers to participation the TMP Project Team created an online alternative for those who may not be able to attend the meetings and still want to engage. **Connect Sammamish** also served as the main source for pushing out information regarding the Workshops and updates with the TMP.

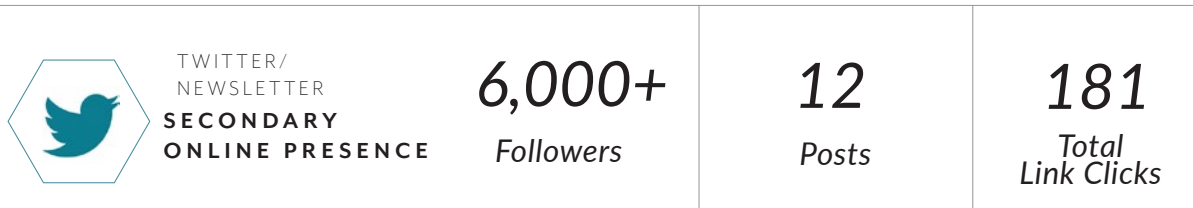


Figure 17. TMP Marketing Efforts for Public Outreach



Stakeholder Meetings

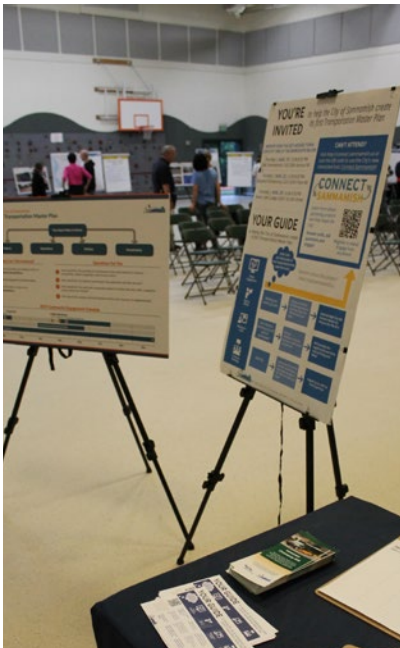
- Small group settings with organizational leaders to discuss transportation issues.
- Participants were encouraged to disseminate information on the TMP to their organization and colleagues (Meeting-in-a-Box).
- Key to stakeholder meetings was the understanding that face-to-face interaction builds stronger relationships

Public Workshops

- Staff presentations set the foundation for the community's understanding of the TMP.
- Interactive exercises were utilized to gather direct community feedback and suggestions for new projects.
- Community voted on projects that they support or oppose.
- Staff were available to discuss traffic concerns with the attendees.
- Promotion of other tools (e.g. Meeting-in-a-Box) and meetings for further engagement with residents.

Online Engagement

- Connect Sammamish and online Open Participation Survey
- Quick Polls, Q&A Tools, News Feeds ("TMP Thursdays," "Transportation Tuesdays," Sammamish e-Newsletter), Mapping Exercises
- Social Media
- Project prioritization, mobility goals, and community preferences



TMP Statistically Valid Survey (SVS)

The City of Sammamish 2019 Transportation Master Plan Survey gave residents the opportunity to provide their opinion about the transportation needs and priorities of the Sammamish community. The City of Sammamish contracted with 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. **Table 2** shows respondent characteristics for the randomly selected sample and Open Participation samples.

The majority of respondents were between 35-54 years of age for both surveys; the statistically valid survey included a high percentage of respondents who own homes in Northwest and Southwest Sammamish.

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.

Characteristic	Population Norm	Probability Sample		Open Participation	
		Unweighted Data	Weighted Data	Unweighted Data	Weighted Data
Housing					
Rent Home	13.7%	6.7%	13.0%	2.0%	12.5%
Own Home	86.3%	93.3%	87.0%	98.0%	87.5%
Race and Ethnicity					
White alone, not Hispanic	67.0%	68.7%	66.9%	64.0%	66.3%
Hispanic and/or other race	33.0%	31.3%	33.1%	36.0%	33.7%
Age					
18-34	19.6%	5.8%	18.7%	5.6%	18.6%
35-54	53.0%	48.6%	52.5%	61.5%	51.8%
55+	27.4	45.6	28.8	32.9	29.6
Sammamish Zone					
Northwest	25.9	28.9	28.3	NA	NA
Northeast	16.9	14.3	15.1	NA	NA
Southeast	42.1	39.7	41.4	NA	NA
Southwest	15.1	17.0	15.1	NA	NA

Table 2. SVS Survey Results. Sources: 5-year estimates from the 2017 American Community Survey, Geocoded sample list purchased from Go-Dog Direct.



The top four projects most likely to be supported by survey respondents were:

- Issaquah-Pine Lake Road SE Widening: Widen to 3 lanes with median/two-way left turn lane with bike lanes, curb, gutter, sidewalk and improve existing intersections from Klahanie Drive SE to SE 32nd Street.
- 228th Avenue SE Widening: Widen to 5 lanes with median/two-way left turn lane with bike lanes, curb, gutter and sidewalk from Issaquah-Pine Lake Road SE to SE 43rd Way
- 228th Avenue NE/Sahalee Way NE: Coordinate with King County and WSDOT to improve the intersection of SR 202 and Sahalee Way
- Sahalee Way NE: Widen to 3 lanes with median/two-way left turn lane with bike lanes, curb, gutter and sidewalk from NE 25th Way

Who We Heard From During the Full Community Outreach Process

The TMP project team engaged with approximately 400 people in-person at a mixture of workshops, pop-up events, small group meetings, and meetings-in-a-box over the outreach period and approximately 850 people completed the statistically valid survey by either mail or online. While specific demographic information was not collected during the in-person public participation events, the statistically valid survey results provide respondent characteristics, an example of which is shown in **Table 2**.

What We Heard Overall

Several themes and priority projects became apparent after synthesizing the information collected during the TMP outreach efforts. 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. Nine projects were generated during the write-in phase that were unique to all the proposed projects. Below is a summary of themes that were derived from the TMP outreach effort.

- 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.

Issues & Opportunities

The technical analysis and community outreach identified a number of issues and opportunities to be addressed by this TMP. As the following chapters outline a Future Transportation Vision and how this TMP can be implemented over time, the following aspects of Sammamish's transportation system today should remain front of mind in thinking about future investments:

- A limited number of streets currently provide meaningful connections to the regional network.
- Those street's direct 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.
- 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 a number of 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

03



Future Transportation Vision

- Modal Networks
- Vehicles
 - Streets & Intersections
 - Connectivity
- Other Modes
 - Transit
 - Biking
 - Walking

The City of Sammamish’s TMP provides the framework to guide transportation investments over the next 20-30 years in accordance with the community’s vision and goals. **Table 3** describes the seven goals and performance metrics used to evaluate discrete transportation projects throughout the City. A project’s score in meeting these goals was an important factor in determining high priority investments, as were other crucial determinants, including concurrency, public input and professional judgement.

This chapter describes Sammamish’s vision for its future transportation network, including needed infrastructure. As identified in this Plan, most of the improvements are focused on the development of a ‘layered’ transportation network, which emphasizes safely accommodating all modes of travel.

Goal #	Goal	Metric
 1	The system should be efficient, maximizing its capacity by synchronizing traffic signals, staggering work and school schedules, and encouraging transit	Improves or eliminates a congestion choke point to LOS standard under current or future conditions
 2	Regional destinations should be easier to access, with more transit and less congestion on commute routes	Improves connection to the regional transportation system (i.e. transit, trails, I-90 and SR 202) and major urban and employment centers
 3	It should be easier to get places on foot, by bike, or by car, with connected streets and trails, and improved bike connections	Reduces distance between origins and destinations by filling in gaps (including non-motorized gaps) and creating a new connection
 4	Transportation system management should be fiscally sustainable, controlling investment costs, finding grants, and increasing local ability to pay	Project is within the City's direct control and is eligible for outside funding
 5	Transportation should be safe and welcoming, with better street crossings, calmed traffic to slow speeds, and increased traffic enforcement	Addresses location with a history of injury/fatal collisions
 6	The rights-of-way and trails should look great, enhancing the character that makes Sammamish unique	Provides for a unique and welcoming travel experience
 7	Community input is reflected in project prioritization	Project is supported by community input

Table 3. Transportation Vision Goals for the City of Sammamish

The City 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 while maintaining fiscal sustainability and community character.

Modal Networks

It can be a challenge for a single roadway to 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 of Sammamish 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. In such a system, individual travel modes are prioritized on different facilities throughout the overall network where the need is the greatest. **Figure 18** illustrates the concept of a layered network.



Figure 18. Layered Network Concept

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. The following sections review the existing networks for each mode, describe the City's vision for how those modes are served, and describes the types of infrastructure that would be needed to achieve that vision.

Vehicles

Most residents and workers in Sammamish 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 of Sammamish classifies its roadways as either Principal Arterials, Minor Arterials, Collector Arterials, Neighborhood Collectors, 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.



Streets & Intersections

The City uses a standard method called Level of Service (LOS) to measure the performance of its street system. For intersections, this methodology measures driver delay, for example, how long someone must wait at a stop sign or a traffic light. **Table 4** shows a breakdown of how intersection level of service is measured and **Figure 19** illustrates these concepts.

LOS	Average Control Delay (seconds/vehicle)		General Description
	Signalized & Roundabouts	Unsignalized	
A	≤10	≤10	Free Flow
B	>10-20	>10-15	Stable Flow (slight delays)
C	>20-35	>15-25	Stable Flow (acceptable delays)
D	>35-55	>25-35	Approaching unstable flow (tolerable delay)
E	>55-80	>35-50	Unstable flow (intolerable delay)
F	>80	>50	Forced flow (congested and queues fail to clear)

Table 4. Intersection Level of Service Classifications

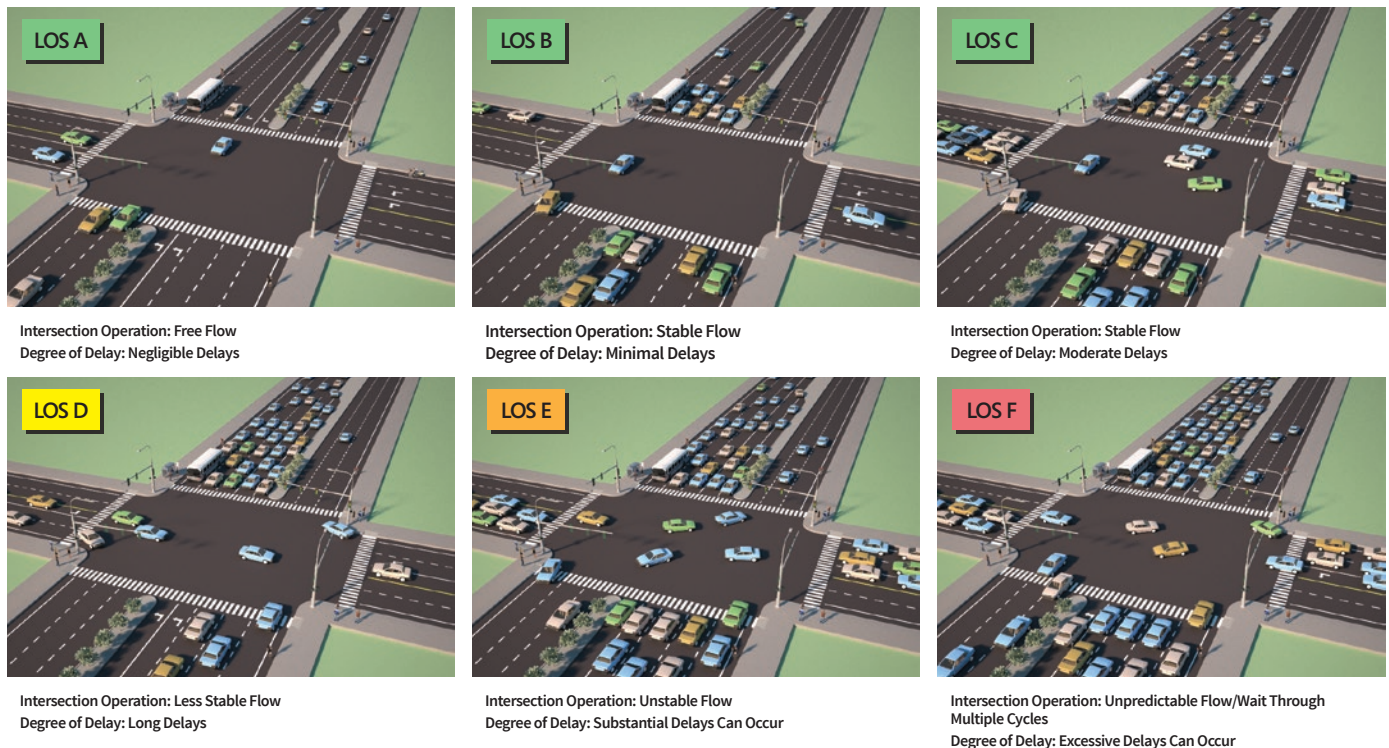


Figure 19. LOS Standards

To ensure that the City continues to support the mobility of its residents, Sammamish has set peak hour LOS standards for its 43 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 are as follows:

- Concurrency intersections on Principal Arterials – LOS D or better, unless LOS D cannot be met with three approach lanes in any direction. In those cases, LOS E is the standard
- Concurrency intersections on Minor Arterials/Collector Arterials – LOS C or better

Likewise, the City has set standards for maintaining traffic flow on its principal and minor arterials (excluding East Lake Sammamish Parkway). This is measured by comparing the volume of traffic on a given roadway segment or corridor to the estimated capacity of that segment or corridor, based on key roadway characteristics, such as the number of lanes, medians, and signal treatments, such as an Intelligent Transportation System (ITS) and flashing yellow arrows. This is described as a volume-to-capacity ratio, or V/C. The City’s standard for segments and corridors applies to the same AM and PM peak hours considered for the concurrency intersections and is summarized as follows:

- Individual concurrency segments – V/C no higher than 1.4
- Concurrency corridors – V/C no higher than 1.1

Figure 20 shows the concurrency corridor and intersections in the City of Sammamish, including the LOS standard for each concurrency intersection in the City. **Figure 21** shows existing level of service deficiencies along concurrency roadways and intersections during either the AM or PM peak hours (the traffic counts used to estimate these existing levels of service are shown in the Appendix). These deficiencies are planned to be addressed by the projects in the 2020-2025 Transportation Improvement Plan. How these intersections and roadway segments are anticipated to operate in 2035 is shown in **Figure 22** and **Figure 23**. This assumes that the 2020-2025 Transportation Improvement Plan projects are constructed as planned. These figures show that additional capital investment, beyond what is included in the 2020-2025 Transportation Improvement Program, would be required to meet the City’s level of service standards for intersections and roadways with growth expected by 2035. The expected growth in Sammamish and across the region by 2035 will generate higher vehicular volumes and delay on City roadways than is seen today. The method and full results of the intersection and segment LOS analyses used to create these maps are contained within the Appendix.

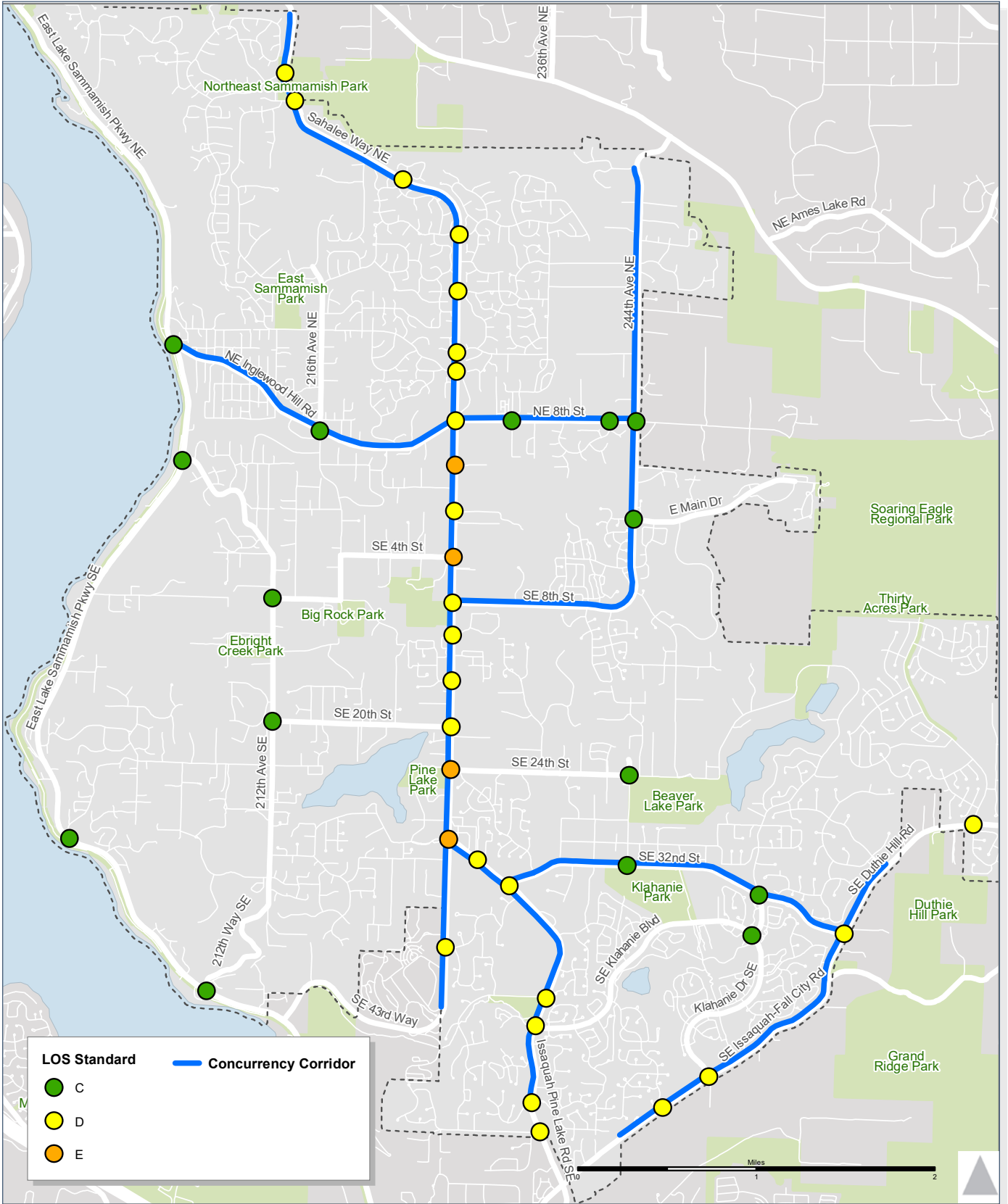


Figure 20. LOS Standard for each Concurrency Intersection

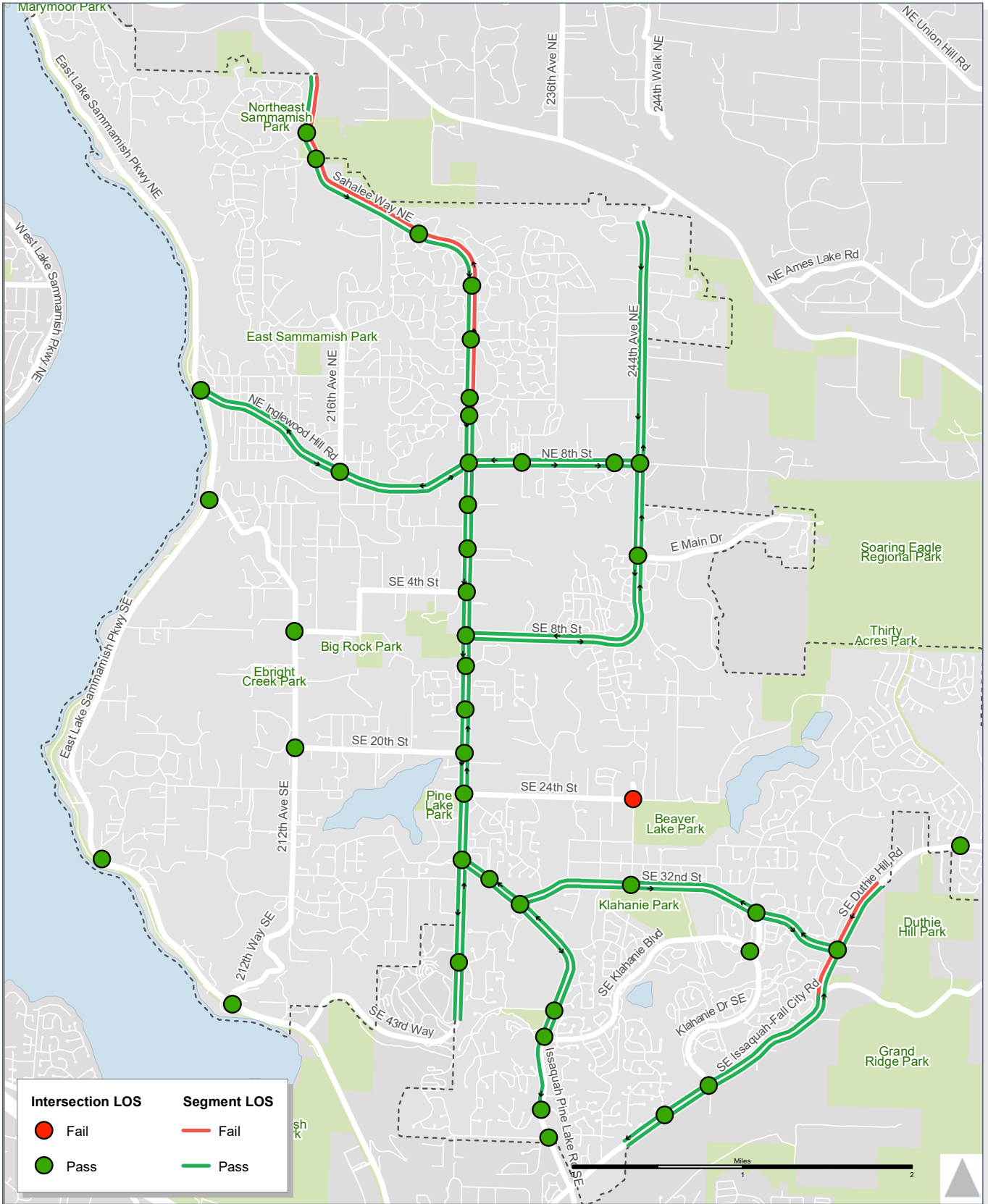


Figure 22. Anticipated Future 2035 LOS on Concurrency Corridors during the AM Peak Hour

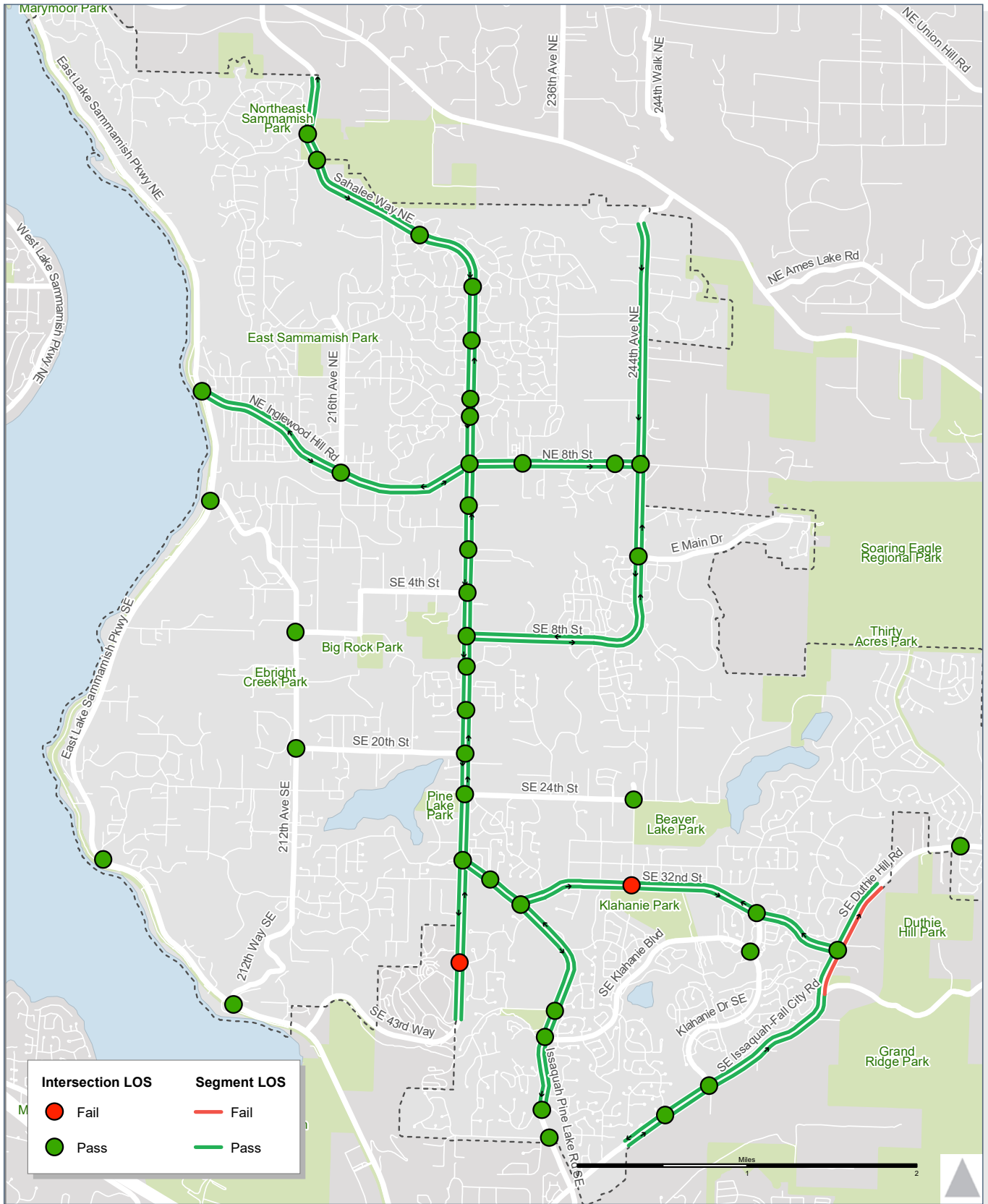


Figure 23. Anticipated Future 2035 LOS on Concurrency Corridors during the PM Peak Hour



Connectivity

The efficient movement of people and goods, referred to as mobility, is an important focus of any transportation system. Increased mobility not only increases access to jobs, shopping, and recreation, but can also benefit the City's economy and residents' quality of life.

Mobility is often thought of in the context of connectivity, the directness and density of connections between locations. A well-connected street grid disperses traffic flow and provides safe and convenient access for all, no matter the mode of travel. Connectivity is a particular challenge in Sammamish, given the piecemeal nature of residential development that occurred before the City incorporated. Additional challenges include Sammamish's location primarily on a plateau, which results in a limited number of direct connections in and out of the City due to topography and environmental constraints.

Within the City, barriers to mobility are either a result of existing infrastructure barriers or a lack of infrastructure. Other features of the City's existing street network are cul-de-sacs and dead streets, which are prevalent within the residential areas across the City. Currently, few local streets provide connections between collector arterials and principal arterials; refer back to **Figure 8** for the street X-ray of Sammamish, which shows this lack of connections. In fact, a 2017 count performed by the City determined that there are at least 702 cul-de-sacs in Sammamish. As a whole, the lack of connections hinders mobility, increases the length of each trip, costing time, creates more pollution, and most importantly, slows down first responders in emergency situations. **Figure 24** shows existing disconnects in the transportation system that hinder mobility.

As part of the TMP planning effort, all existing road barricades, gates, dead-end streets, and other connectivity issues were reviewed for potential inclusion in the prioritized project list (Chapter 4). The community provided input on the various potential connectivity projects, which was used to refine the prioritized project list. Connectivity projects that did not make it to the prioritized project list are shown at the end of Chapter 4 as they are important future projects for the City or private development to undertake.

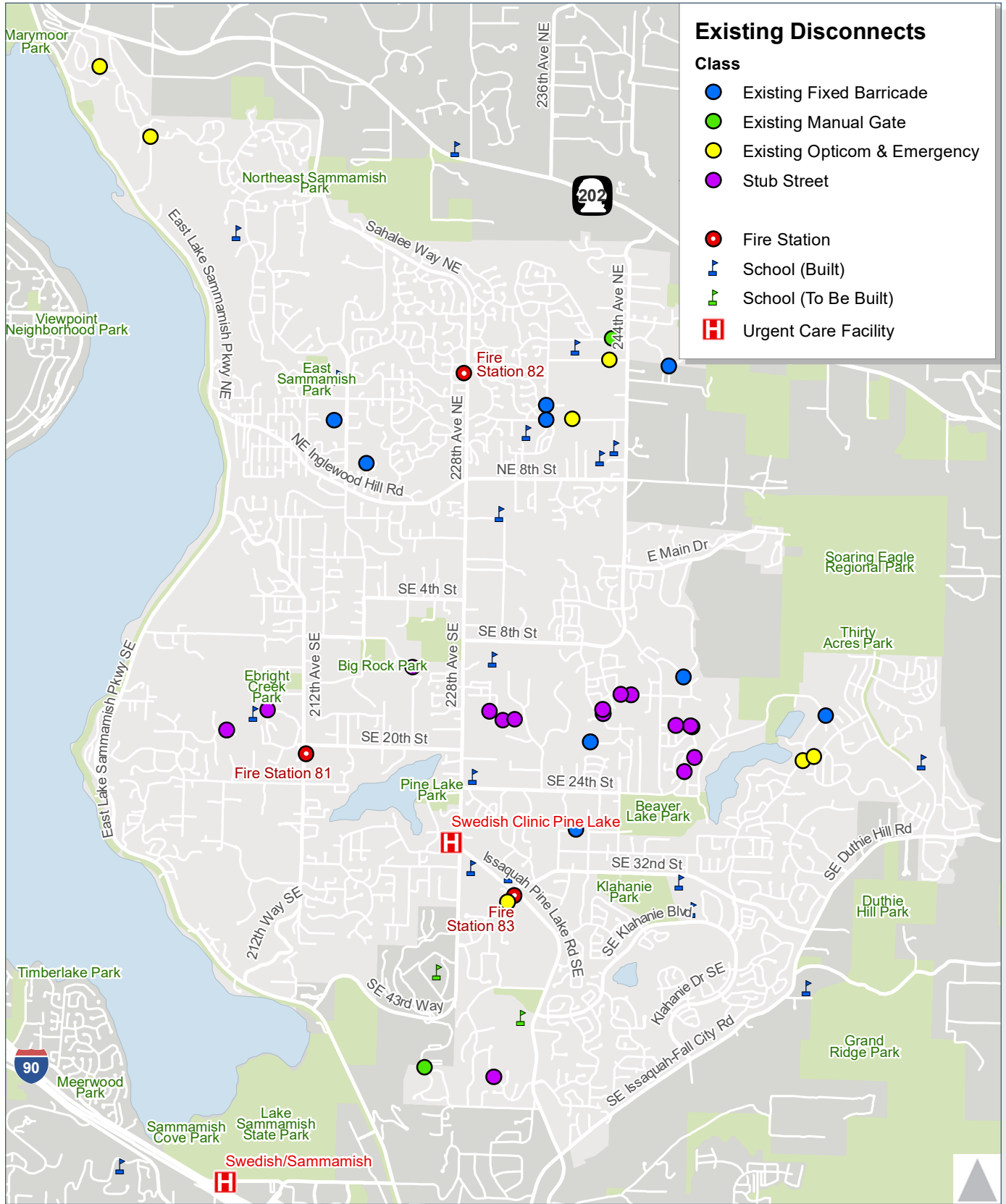


Figure 24. Potential New Connections that have been reviewed

Transit, Bike, and Walk Modes

Although vehicular LOS is a major consideration in the TMP, the City recognizes the importance of accommodating all modes of transportation. Thus, in addition to the LOS concurrency standards for intersections, roadway segments, and corridors, the City has established planning guidelines, called multimodal level of service (MMLOS). Providing an efficient and safe environment for all transportation network users is a major focal point of this TMP and the MMLOS guidelines identify ways to create more efficient transit service and comfortable pedestrian and bicycle environments. The MMLOS guidelines are not a part of the City’s concurrency program, but will assist the City in identifying future projects that can best serve transit, walking, and biking modes.

Transit LOS Guidelines

Transit operations are out of the direct control of the City of Sammamish, but the City can still aim to create corridors that are welcoming to transit and coordinate with King County Metro for better transit service citywide. The City can support transit use by offering:

- Street lighting
- Bus shelters and benches
- Safe pedestrian routes for accessing transit stops
- Dedicated street right-of-way for accommodating transit, such as queue jump lanes
- Intelligent Transportation System (ITS) signal upgrades to provide transit priority

Sammamish’s transit LOS guidelines are defined based on the amenities, access, and service frequencies discussed above. **Table 5** presents the LOS guidelines for transit within the City of Sammamish. The City can reach the green, most aspirational LOS level by providing transit supportive amenities at major stops, installing sidewalks and marked crosswalks at all stops, and accommodating frequent, all day transit service.

LOS	Transit Stop Amenities	Pedestrian Access	Weekday Frequency of Service
Aspirational	High Level	Sidewalks and marked crosswalks serving stops	All day service. Peak service 15 minutes or less, midday 30 minutes or less
Acceptable	Some amenities	Sidewalks and marked crosswalks serving some stops	All day service. Peak service 30 minutes or less, midday service 60 minutes or less
Needs Improvement	Little or no amenities	General lack of sidewalks and marked crosswalks	Service only during the commute hours

Table 5. Transit Level of Service Guidelines

While the City itself does not operate transit, these amenities can encourage residents and employees to use transit and therefore gain additional service hours from King County Metro and Sound Transit. **Figure 12** shows the transit lines that currently run through Sammamish; note that all lines are centered around 228th Avenue, the major north-south corridor in Sammamish.

Bike LOS Guidelines

Many citizens have expressed interest in seeing more extensive bicycle infrastructure throughout Sammamish, and in particular connecting to major corridors and trails within the City. Connecting to these routes from other areas of the City can be challenging due to the lack of existing bicycle infrastructure, the relatively disconnected street network, and topography. Key mobility corridors for bicyclists would be best served with separated bicycle facilities, while buffered/striped bike lanes and shared lane markings would suffice on other streets.

Level of traffic stress (LTS) is the current state of the practice in planning bicycle facilities. This approach provides a framework to design for the intended users of the system. **Figure 25** describes the four typical categories of cyclists, each of which requires different levels of accommodation to feel comfortable using the system.

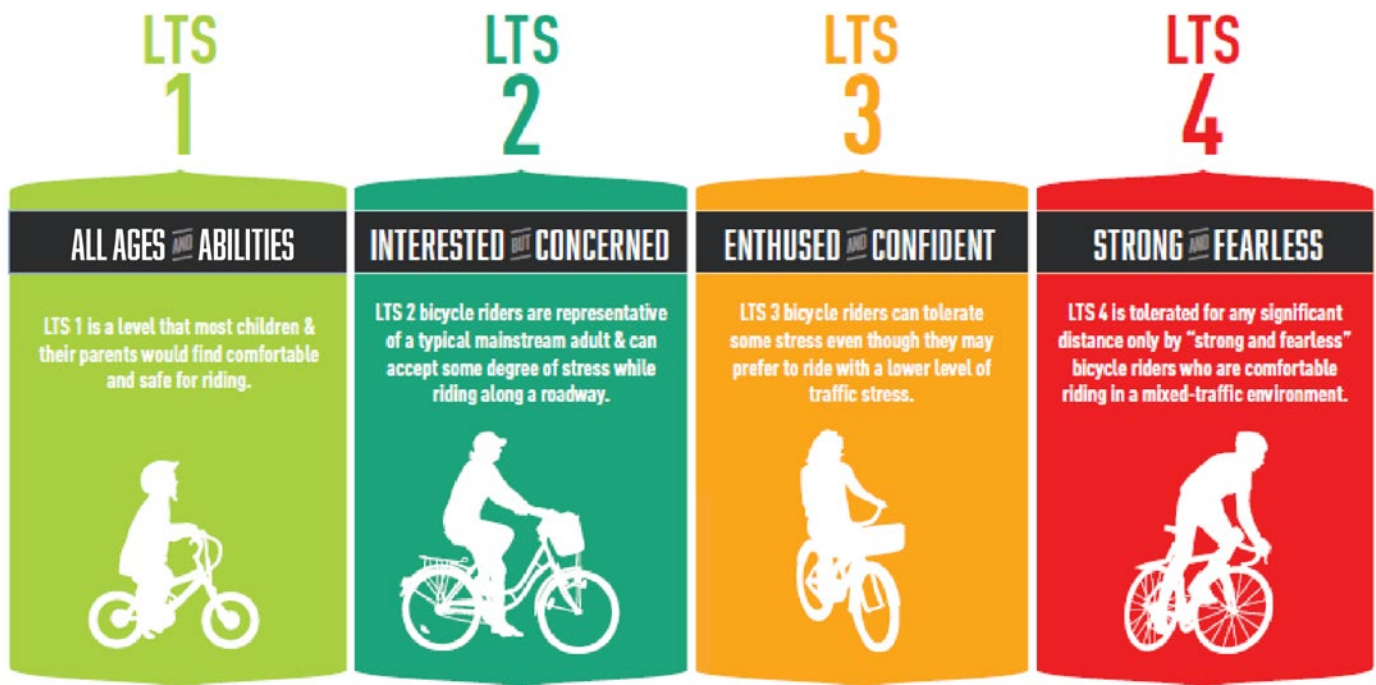


Figure 25. The Four Categories of Cyclists

Figure 26 shows the level of accommodation that the City aspires to provide. LTS 1 facilities are very low stress: they are intended to be welcoming to cyclists of all abilities and levels, and generally include separate facilities, such as off-street trails and leveraging low-speed, low volume residential streets. The next level of accommodation is LTS 2, which is the category that describes most cyclists, and generally can be met by installing striped or buffered bike lanes on lower speed arterials and collectors. The highest level of traffic stress planned for in the City's bikeway network is LTS 3. It is generally achieved through provision of bike lanes on arterial streets. The City's bikeway network does not plan for LTS 4 facilities, as these are not welcoming for a large segment of the biking population.

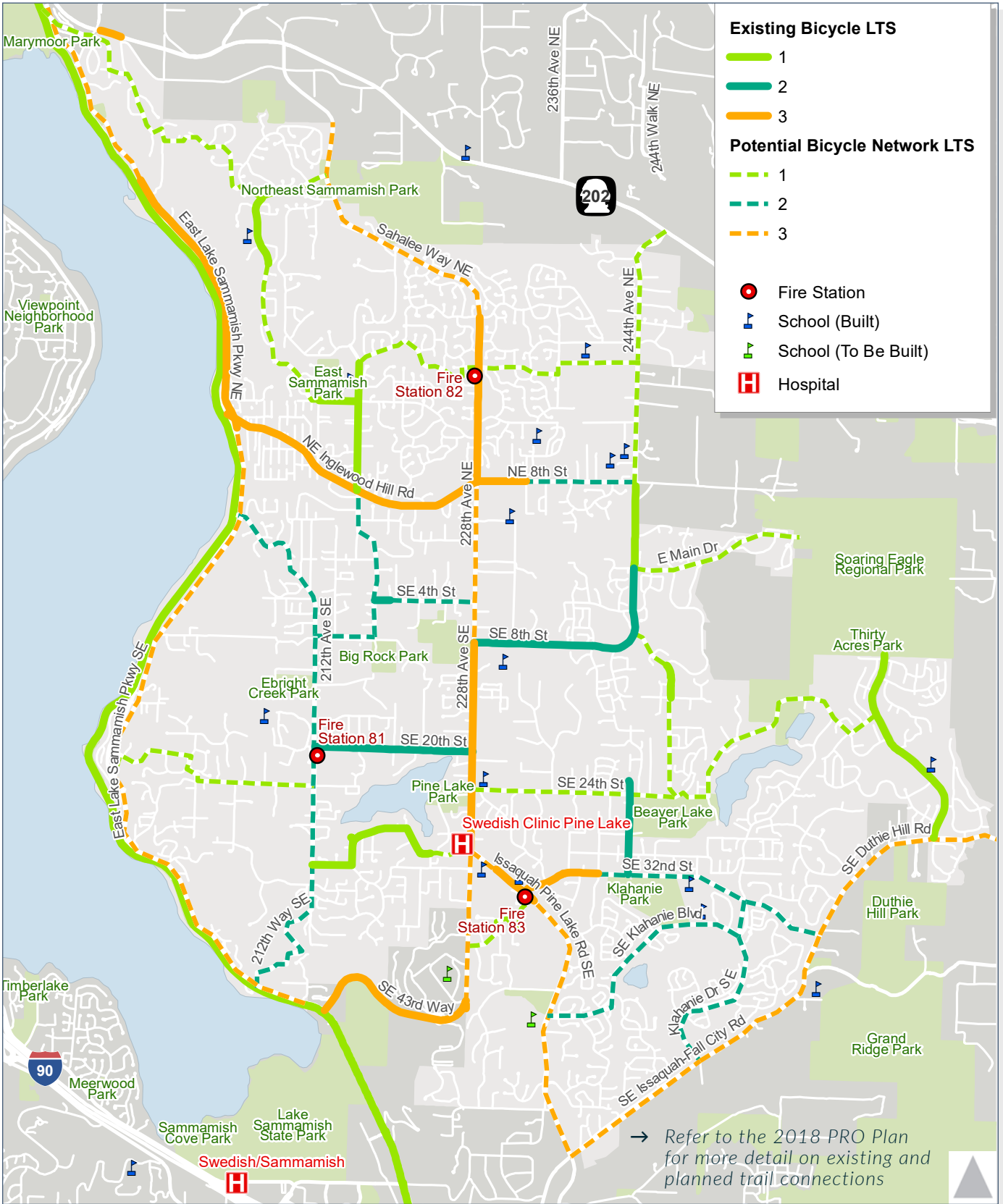


Figure 26. Existing and Potential Bike Network

Pedestrian LOS Guidelines

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 throughout the City which 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. **Figure 27** shows the City’s pedestrian priority network and highlights the City’s intended level of service for pedestrian facilities (which generally apply to arterials). **Table 6** defines these Pedestrian LOS guidelines.

LOS	Within Pedestrian Priority Network
Aspirational	Provides facility where indicated in Pedestrian Priority Network, with a buffer
Acceptable	Provides facility provided on one side of the street
Needs Improvement	No pedestrian facility

Table 6. Pedestrian LOS Guidelines – Sidewalk Provision

Figure 28 shows locations where pedestrian facilities would be needed to meet the pedestrian LOS guidelines described above. The locations shown represent sections identified specifically along the Pedestrian Priority Network, and do not represent all sidewalk gaps in the city.

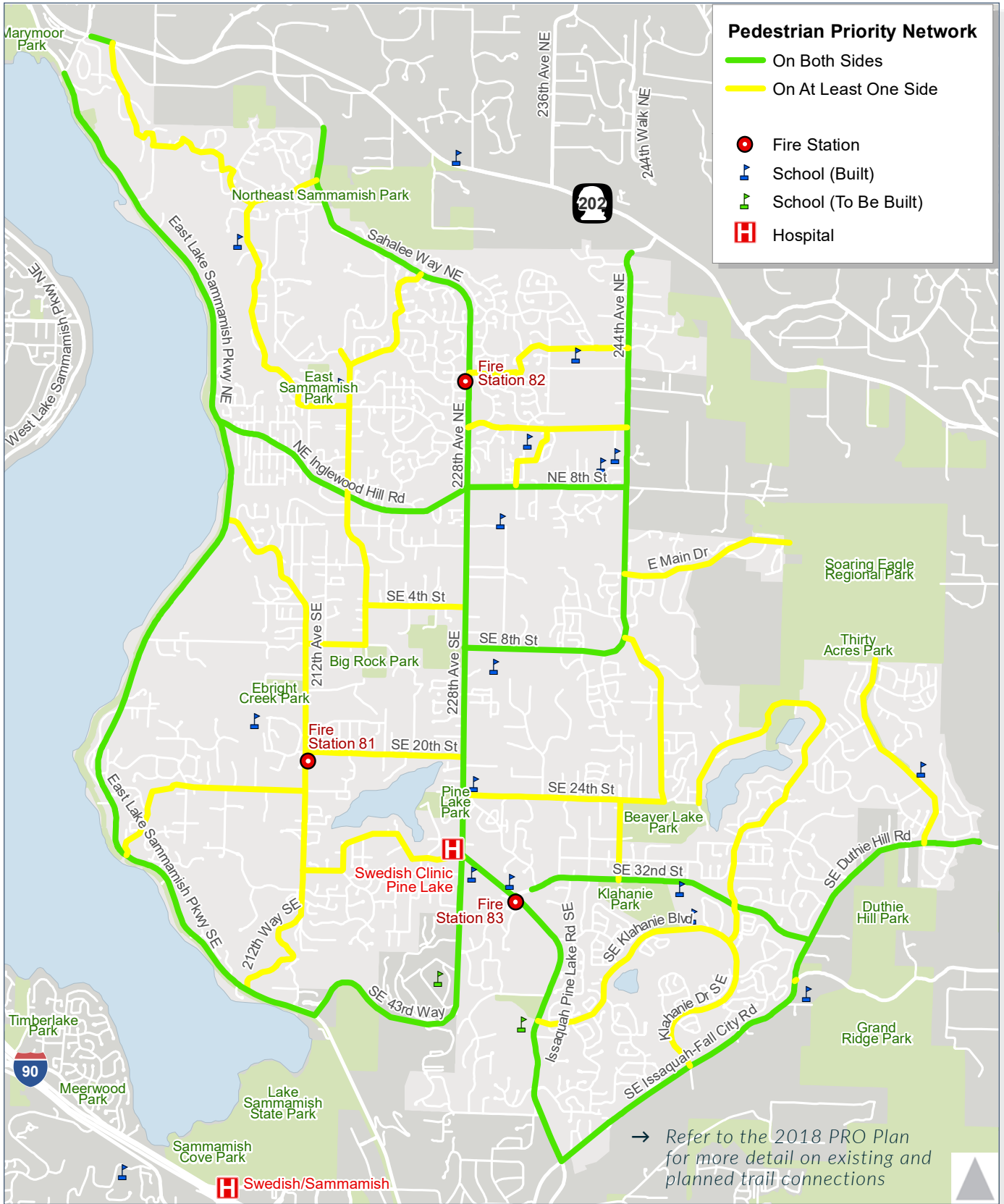
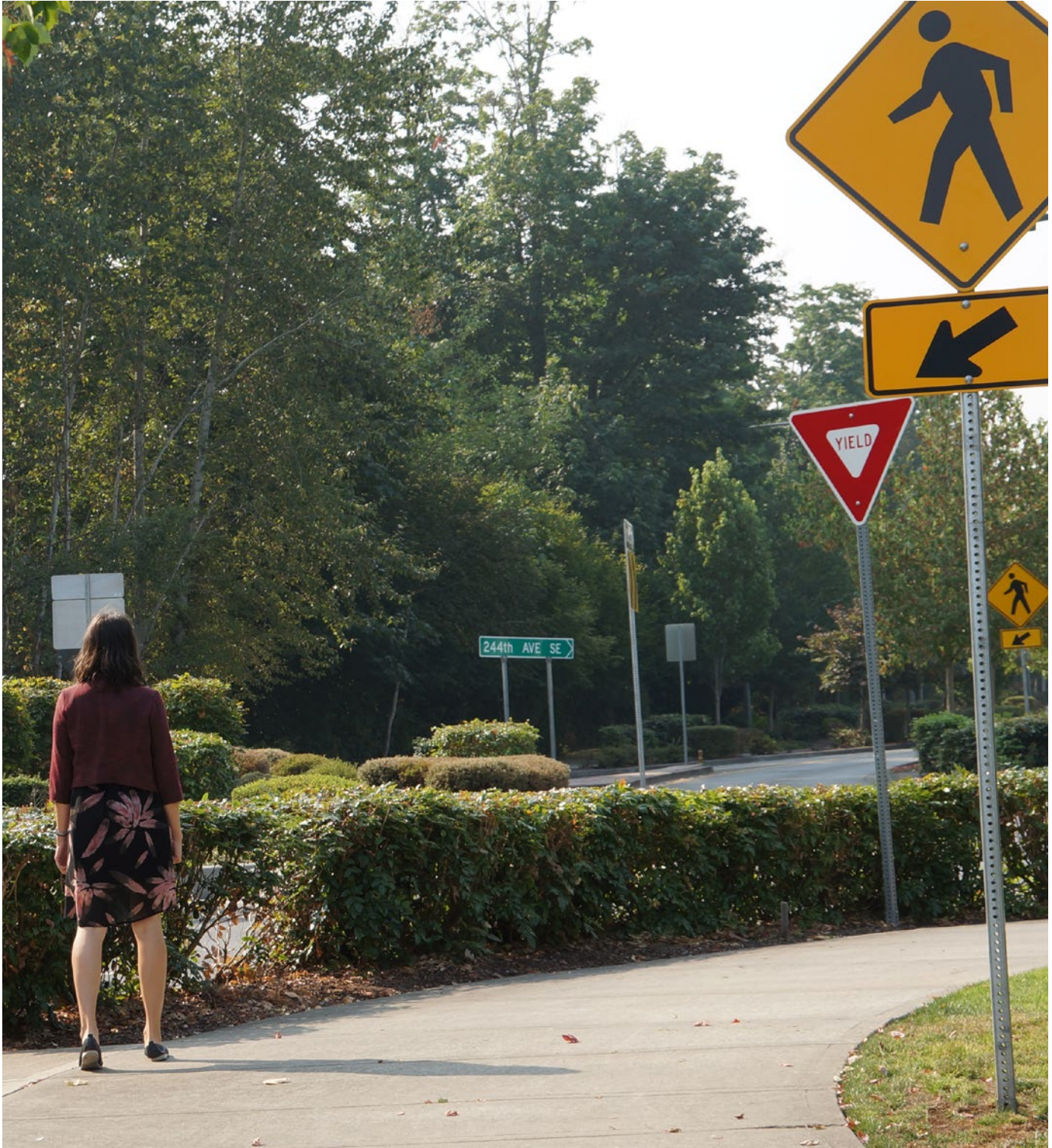


Figure 27. Pedestrian Priority Network



Figure 28. Sidewalk Gaps along the Pedestrian Priority Network

In addition to the presence of pedestrian facilities along a corridor, the City also emphasizes the importance of safe pedestrian crossings. The City is looking to provide enhanced crossings, such as high visibility crosswalks and/or crossings with Rectangular Rapid Flashing Beacons (RRFBs) at regular intervals, particularly downtown and within a half mile of schools.





MAMAMISH COMMONS
801 228TH AVENUE SE





Chapter
04



Plan Implementation

- Anticipated Funds Available
- Ongoing Projects and Programs
- Prioritized Project List
- Unconstrained Project List





Plan Implementation

The previous chapter describes the City’s proposed guidelines for accommodating different modes of travel and the current needs in the transportation system to achieve these guidelines. This chapter describes the recommended prioritized TMP project list, which seeks to address these needs, while being mindful of likely City resources over the next 20 years.

Anticipated Funds Available

To arrive at a recommended project list, the top performing projects that fit within the City’s reasonably anticipated financial constraints over the next 20 years were identified. While funding available for transportation over the next two decades cannot be forecast with certainty, a conservative estimate is that future annual budgets will be similar to the average of the six year period from 2013 to 2018. Using this approach, the amount anticipated to be available for transportation capital projects is approximately \$7 million

per year. Thus, an approximate financial constraint for the TMP is \$140 million (in 2020 dollars) over the next 20 years. This is summarized in **Figure 29**. The remainder of this chapter discusses programmatic investments and then includes two sets of potential future transportation project lists: a prioritized list and a full list including the non-prioritized projects. 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.

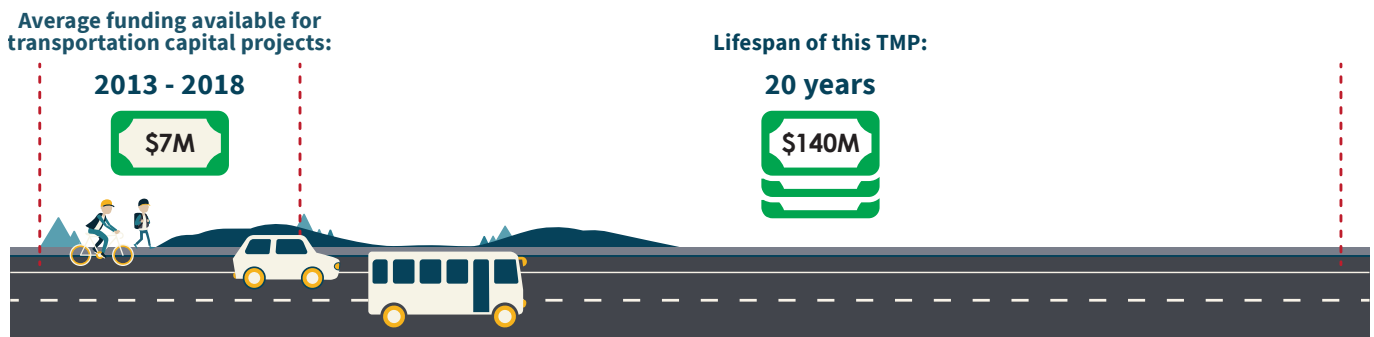


Figure 29. Estimated Funding Available for Projects Over the Next 20 Years.



On-going Programs and Projects

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 Sammamish residents moving. These programs and efforts are housed in each annual Transportation Improvement Plan (TIP) and include the vital programs listed in **Table 7** (excerpted from 2020 – 2025 TIP).

No.	Approx. TIF Eligibility (%)	Project No.	Project	2020	2021	2022	2023	2024	2025	6-Year Total
25	0	TR-B	Non-motorized Transportation Projects Sidewalks, trails, bikeways and paths, etc.	750,000	750,000	750,000	750,000	750,000	750,000	4,500,000
26	0	TR-C	Sidewalk Projects Various sidewalk projects, includes gap projects, extensions, safety improvements.	160,000	160,000	160,000	160,000	160,000	160,000	960,000
27	0	TR-D	Intersection and Safety Improvements Intersection/other safety improvements, including channelization, signing, signalization, and/or other traffic control devices.	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
28	0	TR-E	Neighborhood CIP Safety improvements including gap projects, bike routes, pedestrian safety and school zone safety.	100,000	100,000	100,000	100,000	100,000	100,000	600,000
29	0	TR-F	Street Lighting Program Provide street lighting at high priority locations with significant safety issues that can be addressed through better street lighting.	15,000	15,000	15,000	15,000	15,000	15,000	90,000
30	0	TR-G	School Zone Safety Improvements In conjunction with Issaquah & Lake Washington School Districts, provide safety improvements in the City's various school zones.	50,000	50,000	50,000	50,000	50,000	50,000	300,000

Table 7. On-going Programs and Projects

Funds in the programs listed in the **Table 7** be used to partially support other capital projects identified elsewhere in the TMP, including the Prioritized Projects List.

Additionally, the City has an on-going pavement reconstruction program, which constitutes a methodical approach to addressing failing transportation infrastructure throughout Sammamish. The reconstruction program should not be confused with the City's on-going pavement overlay and repair program. The reconstruction program addresses roadways that have needs exceeding typical maintenance efforts, but that are not subject to capacity enhancement. This program varies in costs per year, but can be up to \$2M in any given year, meaning that as much as \$40M may be invested in the reconstruction program over the planning horizon of the TMP. Such costs should be accounted for when discussing the transportation capital program in Sammamish.

Prioritized Project List

This section presents the recommended list of priority TMP capital investments. The benefit of prioritizing potential future transportation projects is that it aids future funding discussions and centralizes all necessary information, such as community input and priorities, to facilitate easier deliberations for decision makers.

The projects in this list were scored and prioritized based on the seven priorities described in the Future Transportation Vision section and outlined in the pages below. **Figure 30** shows a map of these prioritized projects. This section outlines the complete streets projects, followed by projects that create new connections and non-motorized projects. Note that all costs are in 2020 dollars.



Recommended 20-Year Project List

This is a placeholder for the final project package,
as decided by Sammamish City Council



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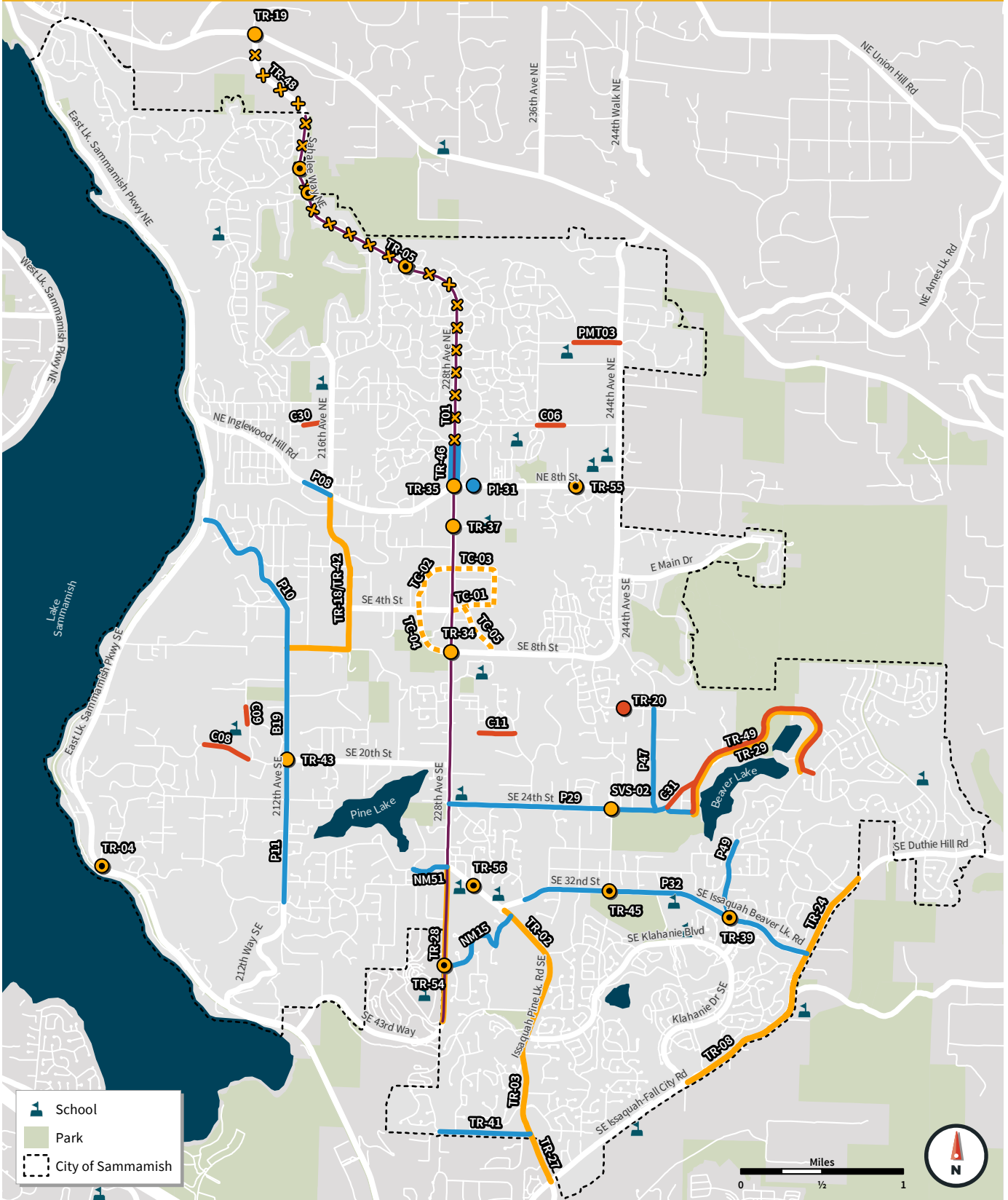
Recommended 20-Year Project List

This is a placeholder for the final project package,
as decided by Sammamish City Council



Figure 30. Map of Prioritized Projects Categorized by Project Type

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Complete Streets Projects

Required Concurrency Projects 

- TR-04:** East Lake Sammamish Parkway SE & SE 24th St Intersection
- TR-05:** Sahalee Way NE from North City Limits to NE 12th Place, including concurrency failing intersections and other intersection improvements
- TR-39:** 256th Ave SE/E Beaver Lake Drive SE & Issaquah Beaver Lake Road Intersection
- TR-45:** SE 32nd Street & 244th Avenue SE Intersection
- TR-48*:** Sahalee Way From SR 202 to North City Limits
- TR-54:** 228th Avenue SE & SE 40th Street Intersection
- TR-55:** 242nd Ave NE & NE 8th Street Intersection
- TR-56:** Issaquah-Pine Lake Road & 230th Lane SE/231st Lane SE Intersection

Town Center Connections 

- TC-01:** SE 4th Street Extension
- TC-02:** Town Center NW Connector
- TC-03:** Main Street/Town Center NE Connector
- TC-04:** Town Center SW Connector
- TC-05:** Town Center SE Connector

Other Complete Streets Investments 

- TR-02:** Issaquah-Pine Lake Road From Klahanie Boulevard to SE 32nd Street
- TR-03:** Issaquah-Pine Lake Road From SE 48th Street to Klahanie Boulevard
- TR-08:** Issaquah-Fall City Road From Klahanie Drive SE to Issaquah-Beaver Lake Road
- TR-18/TR-42:** SE 8th Street/218th Avenue SE From 212th Avenue SE to Inglewood Hill Road NE
- TR-19*:** Sahalee Way & SR 202 Intersection
- TR-24:** SE Duthie Hill Road from SE Issaquah-Beaver Lake Road to "The Notch"
- TR-27*:** Issaquah-Pine Lake Road From E Issaquah-Fall City Road to SE 48th Street
- TR-28:** 228th Avenue SE From Issaquah-Pine Lake Road to SE 43rd Way
- TR-34:** 228th Avenue SE & SE 8th Street Intersection
- TR-35:** 228th Avenue NE & NE 8th Street/NE Inglewood Hill Road Intersection
- TR-37:** 228th Avenue NE & NE 4th Street Intersection
- TR-43:** 212th Avenue SE & SE 20th Street Intersection
- TR-49:** West Beaver Lake Drive from 24th Street to SE Belvedere Way
- SVS-02:** SE 24th Street & 244th Avenue SE Intersection

Transit Project 

- T01:** 228th Avenue Transit Signal Priority

New Connections 

- C06:** NE 14th Street Connection Between 236th Avenue NE and 241st Avenue NE
- C08:** NE 19th Street Connection Between east of 203rd Avenue SE and SE 20th Street
- C09:** 208th Avenue SE Connection Between south of SE 12th Street and SE 16th Street
- C11:** SE 18th Place Connection Between 231st Avenue SE and west of 235th Ave SE
- C30:** NE 14th Street Connection Between 216th Avenue NE and 212th Avenue NE
- C31:** 251st Avenue SE Connection Between 251st Avenue SE and W Beaver Lake Drive SE
- PMT03:** NE 22nd Street Connection Between 244th Avenue NE and 239th Avenue NE
- TR-20:** SE 14th Street Extension Between Lawson Park Plat and 248th Ave SE
- TR-29:** SE Belvedere Way Connection Between E Beaver Lake Drive and SE Belvedere Way

Non-Motorized Projects 

- B19:** 212th Avenue SE Active Transportation Improvements: From SE 8th Street to SE 24th Street
- NM15:** SE 40th Street/234th Ave SE Sidewalk Improvement From 228th Avenue SE to Issaquah-Pine Lake Road SE
- NM51:** SE 30th Street Sidewalk Improvement From 228th Avenue SE to 224th Avenue SE
- P08:** NE Inglewood Hill Road Sidewalk Improvement From 213th Place NE to 216th Avenue NE
- P10:** Louis Thompson Road NE Active Transportation Improvements From East Lake Sammamish Parkway to SE 8th Street
- P11:** 212th Avenue SE Sidewalk Improvement From SE 24th Street to SE 34th Street
- P29:** SE 24th Street Active Transportation Improvements: From 228th Avenue SE to Beaver Lake Drive
- P32:** SE 32nd Street Active Transportation Improvements: From 235th Place SE to 251st Ave SE
- P47:** 248th Avenue SE Active Transportation Improvements: From SE 24th Street to SE 14th Street
- P49:** E Beaver Lake Drive SE Sidewalk Improvement From SE 32nd Street to E Beaver Lake Drive SE
- PI-31:** NE 8th Street Crossing at the Regency and Saffron Retail Centers
- TR-41:** SE 48th Street Issaquah-Pine Lake Road SE to 227th Place SE From Issaquah-Pine Lake Road SE to 227th Place SE
- TR-46:** 228th Avenue Bike Lane NE 12th Street to NE 8th Street

* Project extends beyond city limits and will require coordination with other jurisdictions.



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Complete Street Projects

Complete streets are streets that are designed and operated to enable safe use and support mobility for all users. This may include improvements to the vehicle network, such as adding travel lanes or improving intersections, but may also include improving sidewalks or constructing bike lanes. These projects are detailed in the following pages.

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Goals

- 

The system should be efficient, maximizing its capacity by synchronizing traffic signals, staggering work and school schedules, and encouraging transit
- 

Regional destinations should be easier to access, with more transit and less congestion on commute routes
- 

It should be easier to get places on foot, by bike, or by car, with connected streets and trails, and improved bike connections.
- 

Transportation system management should be fiscally sustainable, controlling investment costs, finding grants, and increasing local ability to pay.
- 

Transportation should be safe and welcoming, with better street crossings, calmed traffic to slow speeds, and increased traffic enforcement.
- 

The rights-of-way and trails should look great, enhancing the character that makes Sammamish unique.
- 

Community input is reflected in project prioritization.

Project Name

Project Description

Timeline <..... When the project will be completed

Cost <..... Estimated cost for the project

Goals Met

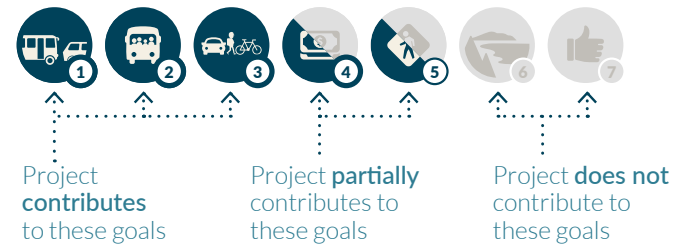
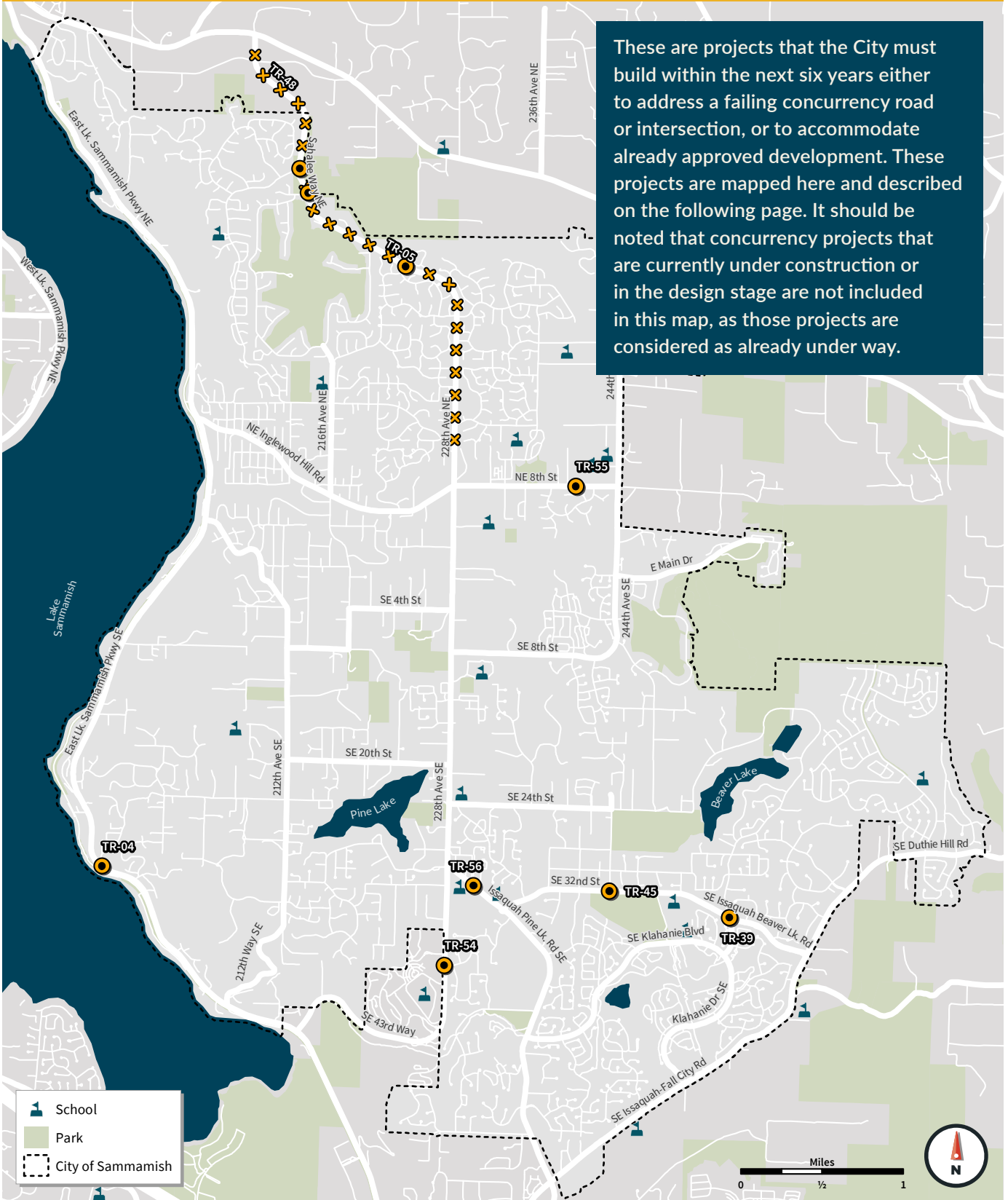




Figure 31. Required Concurrency Projects

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These are projects that the City must build within the next six years either to address a failing concurrency road or intersection, or to accommodate already approved development. These projects are mapped here and described on the following page. It should be noted that concurrency projects that are currently under construction or in the design stage are not included in this map, as those projects are considered as already under way.

TR-04: East Lake Sammamish Parkway SE & SE 24th St Intersection

Construct a traffic signal with turn lanes, curb, gutter and sidewalk at the East Lake Sammamish Parkway SE and SE 24th Street intersection. A one-lane roundabout is an alternative being considered as well.

Timeline: 2021-2026

Goals Met:

Cost: \$4,032,000 - \$5,376,000



TR-05: Sahalee Way NE from North City Limits to NE 12th Place

Widen Sahalee Way NE to three lanes with median or two-way left turn lane, buffered bike lanes, curb, gutter and sidewalk from NE 12th Way to NE 36th Street. From NE 36th Street to NE 37th Street, widen to a five lane cross-section. From NE 37th Street to North City Limits, widen to a four lane cross-section with median. This includes the possibility of adding “climbing” lane as needed. Paired with this project are multiple intersection improvements, including the installation of a signal at the Sahalee Way and NE 28th Place intersection, a possible by-pass lane at the Sahalee Way and NE 37th Street intersection, and improving sight distance at the Sahalee Way and NE 36th Street intersection.

Timeline: 2021-2026

Goals Met:

Cost: \$77,283,000 - \$103,044,000



TR-39: 256th Ave SE/E Beaver Lake Drive SE & Issaquah Beaver Lake Road Intersection

Construct a permanent roundabout at the 256th Avenue SE/E Beaver Lake Drive SE and Issaquah Beaver Lake Road intersection.

Timeline: 2021-2026

Goals Met:

Cost: \$1,775,000 - \$2,366,000



TR-45: SE 32nd Street & 244th Avenue SE Intersection

Install all-way stop control at the intersection of SE 32nd Street and 244th Avenue SE.

Timeline: 2021-2026

Goals Met:

Cost: \$135,000 - \$180,000



TR-48: Sahalee Way from SR 202 to North City Limits

Widen Sahalee Way from SR 202 to North City Limits as necessary to extend double northbound left turn lanes; this will include widening to four or five lanes, adding at least one additional southbound travel lane or climbing lane. All project improvements are outside of city limits, and will require coordination with other municipalities.

Timeline: By 2035

Goals Met:

Cost: \$21,969,000 - \$29,292,000



TR-54: 228th Avenue SE & SE 40th Street Intersection

Create a left turn lane on the 228th Avenue SE approaches and reduce the median on the SE 40th Street approaches at the intersection of 228th Avenue SE and SE 40th Street.

Timeline: 2021-2026

Goals Met:

Cost: \$729,000 - \$972,000



TR-55: 242nd Ave NE & NE 8th Street Intersection

Add westbound right turn pocket at the 242nd Avenue NE and NE 8th Street intersection. This includes widening the NE 8th Street approaches.

Timeline: 2021 - 2026

Goals Met:

Cost: \$1,928,000 - \$2,570,000



TR-56: Issaquah-Pine Lake Road & 230th Lane SE/231st Lane SE Intersection

Rechannelize and restripe 230th Lane and 231st Lane and extend the westbound left turn pocket on Issaquah Pine Lake Road at the intersection of Issaquah-Pine Lake Road and 230th Lane SE/231st Lane SE.

Timeline: 2021 - 2026

Goals Met:

Cost: \$108,000 - \$144,000



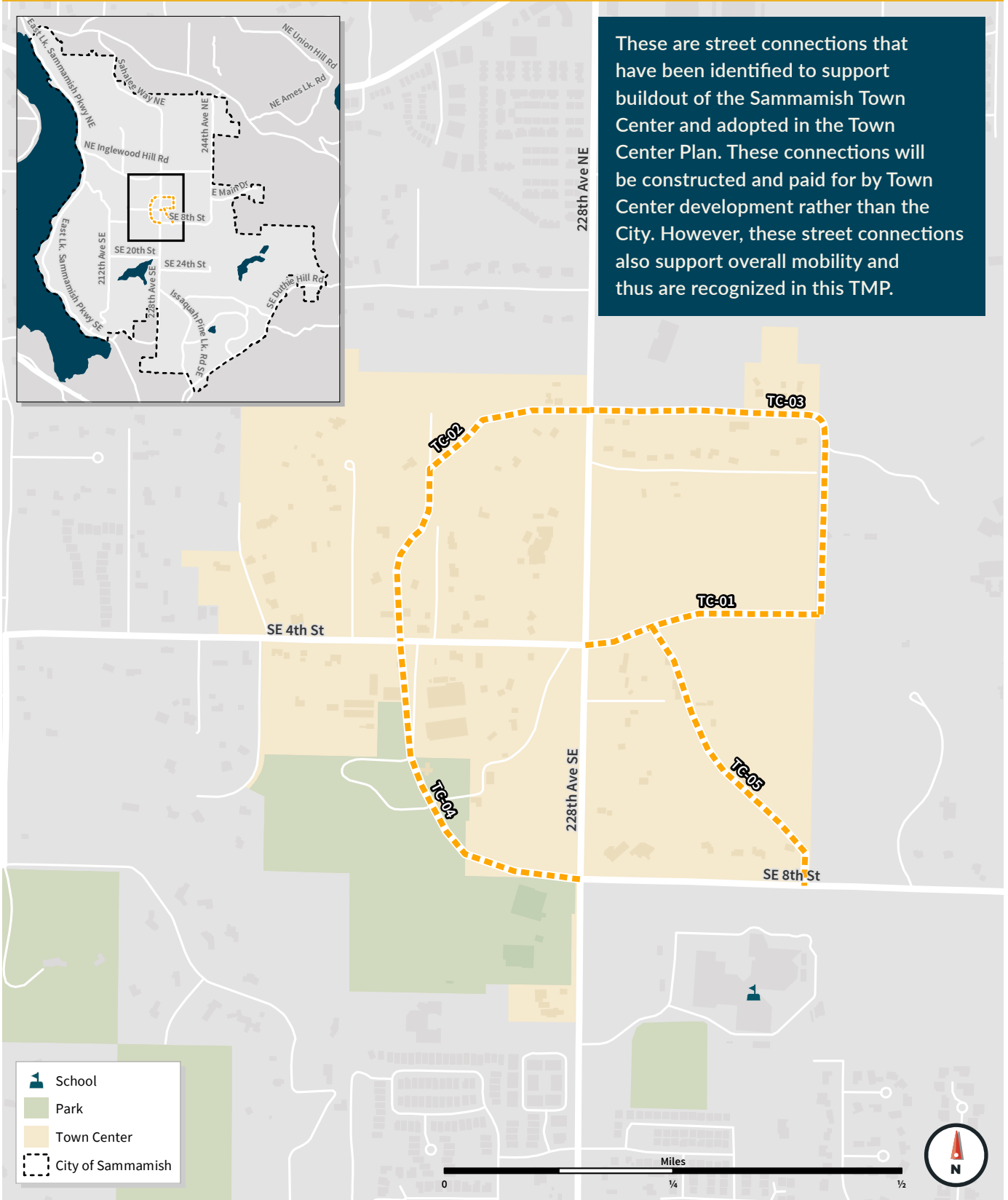
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Figure 32. Town Center Connection Projects

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These are street connections that have been identified to support buildout of the Sammamish Town Center and adopted in the Town Center Plan. These connections will be constructed and paid for by Town Center development rather than the City. However, these street connections also support overall mobility and thus are recognized in this TMP.

TC-01: SE 4th Street Extension

Widen SE 4th Street to 3 lanes with median or two-way left turn lane with bike lanes, curb, gutter and sidewalk from 228th Ave SE to the proposed Main St NE Connector. This project also includes adding an eastbound right turn lane at the intersection of SE 4th Street and 228th Avenue SE.

Timeline: By 2035

Goals Met:



TC-02: Town Center NW Connector

Construct a connector road from the intersection of Main Street and 228th Avenue SE through the northwestern portion of the Town Center development to the intersection of 225th Place SE and SE 4th Street. This project includes modifications to include a west leg at the intersection of Main Street and 228th Avenue SE.

Timeline: By 2035

Goals Met:



TC-03: Main Street/Town Center NE Connector

Extend Main Street from 228th Avenue SE southeastward along the northeastern portion of the Town Center development to the SE 4th Street Extension. This includes providing infrastructure at the southern tip of the connector road for future expansion to the east.

Timeline: By 2035

Goals Met:



TC-04: Town Center SW Connector

Extend 225th Place SE from SE 4th Street southeastward through the Town Center development to the intersection of 228th Avenue SE and SE 8th Street.

Timeline: By 2035

Goals Met:



TC-05: Town Center SE Connector

Construct a connector road from roughly 500 feet east of the SE 4th Street and 228th Avenue SE intersection southward to SE 8th Street. Includes the installation of a traffic signal at the intersection of Town Center SE Connector and SE 4th Street.

Timeline: By 2035

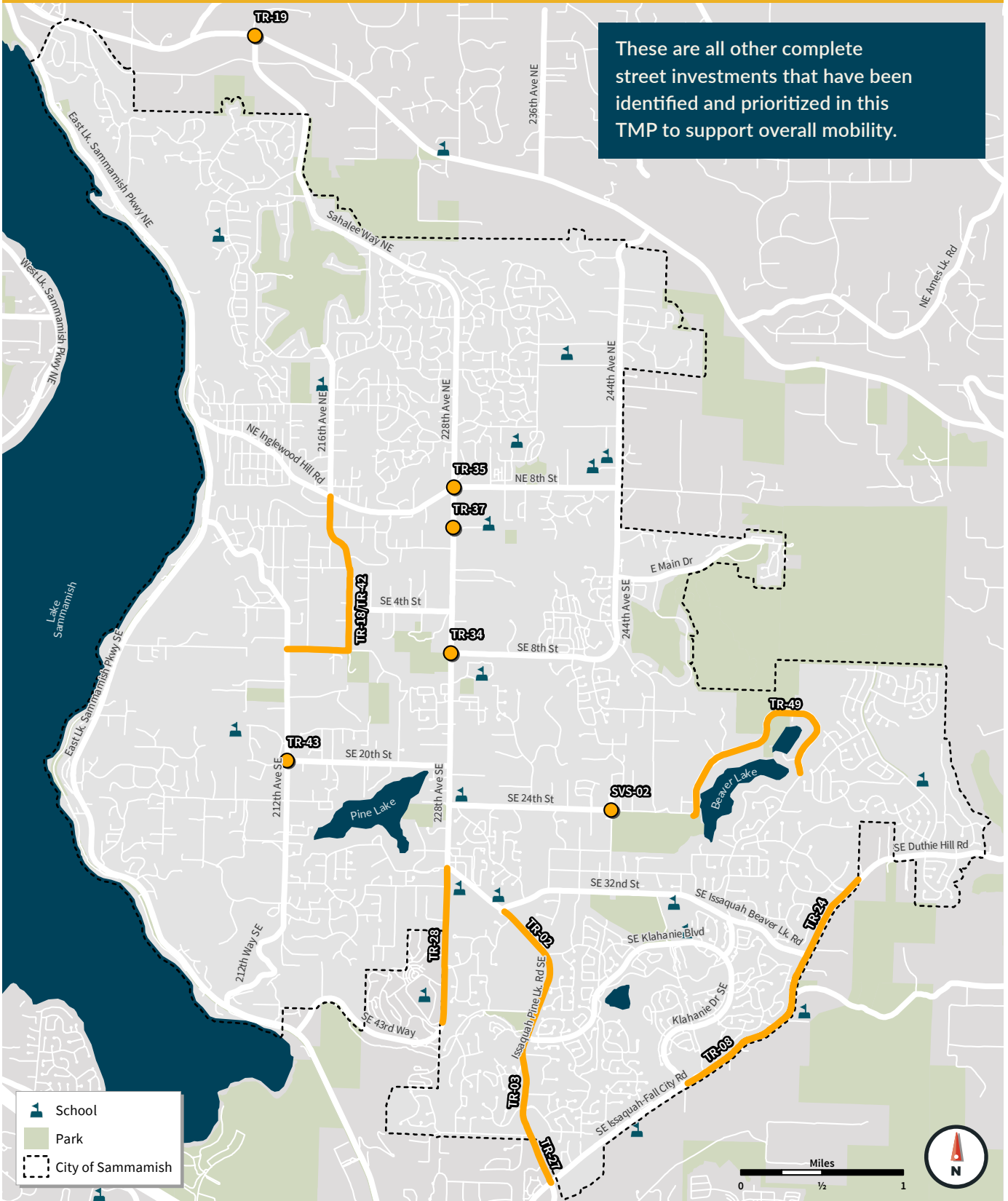
Goals Met:



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Figure 33. Other Complete Streets Investments



TO BE UPDATED PENDING COUNCIL DECISION

TR-02: Issaquah-Pine Lake Road From Klahanie Boulevard to SE 32nd Street

Widen Issaquah-Pine Lake Road to 3 lanes with a median or two-way left turn lane from Klahanie Drive SE to SE 32nd Street. This project also includes adding bike lanes, curb, gutter, sidewalk and improving the existing roundabout at the intersection of Issaquah-Pine Lake Road and SE 32nd Street.

Timeline: By 2035

Goals Met:

Cost: \$17,658,000 - \$23,544,000



TR-03: Issaquah-Pine Lake Road From SE 48th Street to Klahanie Boulevard

Widen Issaquah-Pine Lake Road to 5 lanes with a median or two-way left turn lane from SE 48th Street to Klahanie Boulevard. This project includes adding striped or buffered bike lanes, curb, gutter and sidewalk

Timeline: By 2035

Goals Met:

Cost: \$29,261,000 - \$39,014,000



TR-08: Issaquah-Fall City Road From Klahanie Drive SE to Issaquah-Beaver Lake Road

Widen Issaquah-Fall City Rd to 3 lanes with a median or two-way left turn lane from Klahanie Drive SE to Issaquah-Beaver Lake Road SE. This project includes adding striped or buffered bike lanes, curb, gutter and sidewalk.

Timeline: By 2035

Goals Met:

Cost: \$20,406,000 - \$27,208,000



TR-18/TR-42: SE 8th Street/218th Avenue SE From 212th Avenue SE to Inglewood Hill Road NE

Widen SE 8th Street/218th Avenue with a median or two-way left turn lane from 212th Avenue SE to Inglewood Hill Rd NE. This includes adding striped bike lanes, curb, gutter and sidewalk where needed.

Timeline: By 2035

Goals Met:

Cost: \$19,681,000 - \$26,242,000



TR-19: Sahalee Way & SR 202 Intersection

Coordinate with King County and WSDOT to improve and widen the intersection of SR 202 and Sahalee Way to a two-lane roundabout. All project improvements are outside of city limits and will require coordination with other municipalities.

Timeline: By 2035

Goals Met:

Cost: TBD. This project is outside the City and will need to be coordinated with other agencies.



TR-24: SE Duthie Hill Road from SE Issaquah-Beaver Lake Road to “The Notch”

Widen to 3 lanes with median/two-way left turn lane with striped or buffered bike lanes, curb, gutter and sidewalk on the west side and an 8 foot shoulder on the east side from SE Issaquah-Beaver Lake Rd to “Notch”. SE Duthie Hill Road & 266th Avenue SE (High Country) Intersection Improvement.

Timeline: By 2035

Goals Met:

Cost: \$12,268,000 - \$16,357,000



TR-27: Issaquah-Pine Lake Road From E Issaquah-Fall City Road to SE 48th Street

Widen Issaquah-Pine Lake Road to 5 lanes with a median or two-way left turn lane from E Issaquah-Fall City Road to SE 48th Street. This project includes adding striped or buffered bike lanes, curb, gutter and sidewalk. All project improvements are outside of city limits and will require coordination with other municipalities.

Timeline: By 2035

Goals Met:

Cost: \$12,926,000 - \$17,234,000



TR-28: 228th Avenue SE From Issaquah-Pine Lake Road to SE 43rd Way

Widen 228th Avenue SE to 5 lanes with median or two-way left turn lane from Issaquah-Pine Lake Road SE to SE 43rd Way. This project also includes adding striped or buffered bike lanes, curb, gutter and sidewalk/boardwalk.

Timeline: By 2035

Goals Met:

Cost: \$31,255,000 - \$41,632,000



TR-34: 228th Avenue SE & SE 8th Street Intersection

Improve intersection level of service by widening/adding lanes and improving left-turn signalization for all approaches or installing a two-lane roundabout with pedestrian improvements.

Timeline: By 2035

Goals Met:

Cost: \$31,255,000 - \$41,632,000



TR-35: 228th Avenue NE & NE 8th Street/NE Inglewood Hill Road Intersection

Improve intersection level of service at the 228th Avenue NE & NE 8th Street/NE Inglewood Hill Road intersection by widening and adding lanes or installing a two-lane roundabout.

Timeline: By 2035

Goals Met:

**Cost: \$1,849,000 - \$2,464,000 (Signal),
\$7,863,000 - \$10,484,000 (Roundabout)**



TR-37: 228th Avenue NE & NE 4th Street Intersection

Improve intersection level of service at the 228th Avenue NE and NE 4th Street intersection by widening and adding lanes or installing a two-lane roundabout.

Timeline: By 2035

Goals Met:

Cost: \$8,082,000 - \$10,776,000



TR-43: 212th Avenue SE & SE 20th Street Intersection

Install a one-lane roundabout at the intersection of 212th Avenue SE and SE 20th Street.

Timeline: By 2035

Goals Met:

Cost: \$2,522,000 - \$3,363,000



TR-49: West Beaver Lake Drive from 24th Street to SE Belvedere Way

Reconstruct as necessary to include shoulders, a multi-use pathway or sidewalks.

Timeline: By 2035

Goals Met:

Cost: \$24,191,000 - \$32,255,000



SVS-02: SE 24th St & 244th Ave SE Intersection

Implement all-way stop control at the intersection of SE 24th Street and 244th Avenue SE.

Timeline: By 2035

Goals Met:

Cost: \$135,000 - \$180,000





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New Connection Projects

In order to increase connectivity and reduce congestion on the few arterials in Sammamish, the City reviewed all connectivity issues, including barricades, gates, dead-end streets, and future connections. Based on review and community input, the City is evaluating several projects that would create new roadway connections to address traffic congestion. These new roadway connections may be as simple as removing a gate or physical barricade or may necessitate constructing a new roadway to complement the existing network. Regardless of the connection type, each new roadway connection will also require constructing complementary safety, capacity and traffic calming elements to ensure that these new connections positively impact the areas in which they are implemented.

Depending upon the location of each connectivity project, considerations for preserving or enhancing community character will be made. Before any barricade or gate removal connectivity project can be initiated, City Council must provide direction to City staff, pursuant to Resolution R2014-577, which will commence a planning and design process that includes significant community outreach. These projects are mapped in [Figure 34](#) and described in the following pages.

TO BE UPDATED PENDING COUNCIL DECISION

Goals

-  1 The system should be efficient, maximizing its capacity by synchronizing traffic signals, staggering work and school schedules, and encouraging transit
-  2 Regional destinations should be easier to access, with more transit and less congestion on commute routes
-  3 It should be easier to get places on foot, by bike, or by car, with connected streets and trails, and improved bike connections.
-  4 Transportation system management should be fiscally sustainable, controlling investment costs, finding grants, and increasing local ability to pay.
-  5 Transportation should be safe and welcoming, with better street crossings, calmed traffic to slow speeds, and increased traffic enforcement.
-  6 The rights-of-way and trails should look great, enhancing the character that makes Sammamish unique.
-  7 Community input is reflected in project prioritization.

Project Name

Project Description

Timeline <..... When the project will be completed

Cost <..... Estimated cost for the project

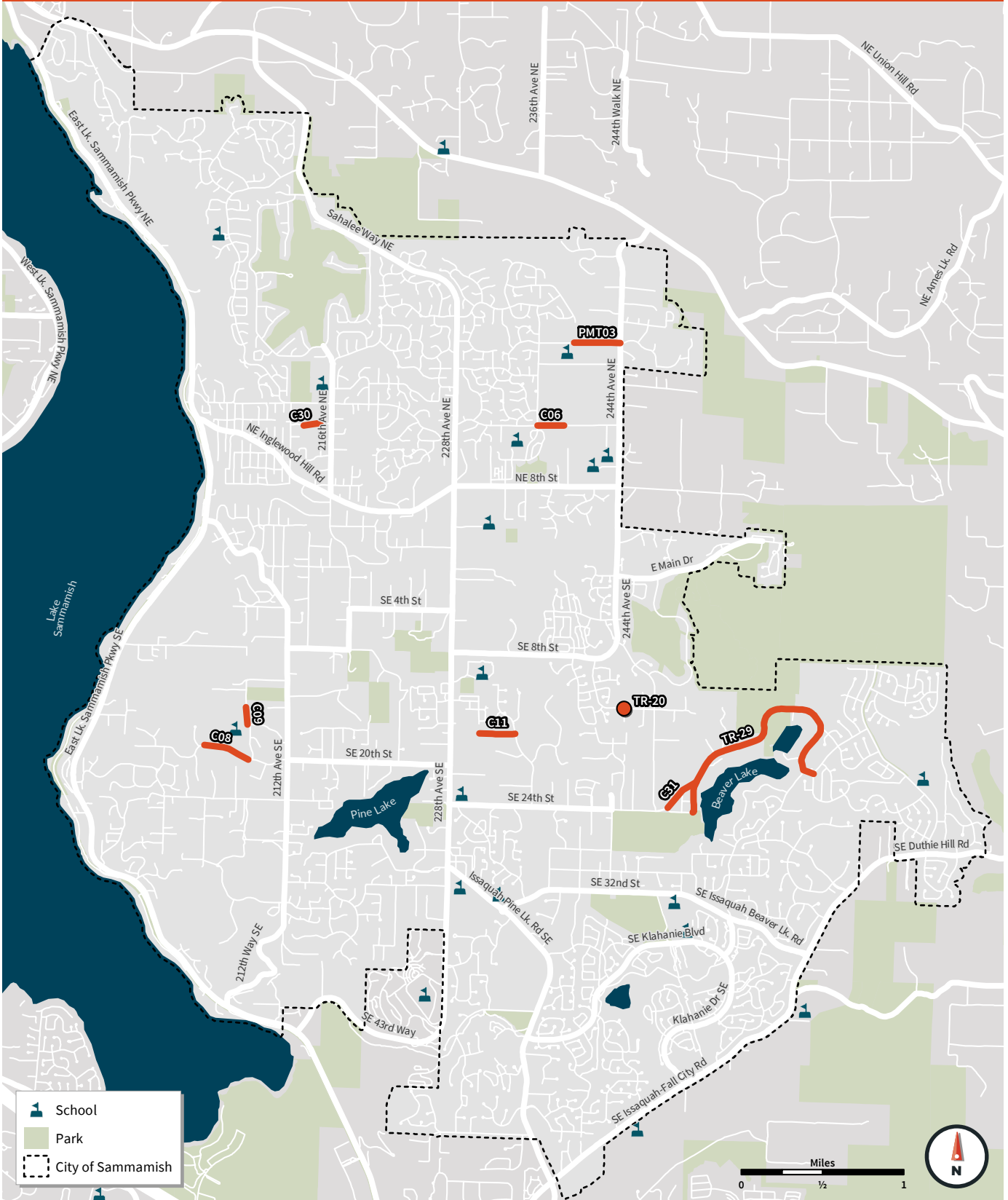
Goals Met





Figure 34. New Connection Projects

TO BE UPDATED PENDING COUNCIL DECISION



C06: NE 14th Street Connection 2: Between 236th Avenue NE and 241st Avenue NE

Add a new roadway connection between 236th Avenue NE and 241st Avenue NE, including complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$8,709,000 - \$11,612,000



C08: NE 19th Street Connection Between east of 203rd Avenue SE and SE 20th Street

Add a new roadway connection between east of 203rd Avenue SE and SE 20th Street, including complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$7,158,000 - \$9,544,000



C09: 208th Avenue SE Connection Between south of SE 12th Street and SE 16th Street

Add a new roadway connection from just south of SE 12th Street to SE 16th Street, including complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$10,464,000 - \$13,953,000



C11: SE 18th Place Connection Between 231st Avenue SE and west of 235th Ave SE

Add a new roadway connection between 231st Avenue SE and just west of 235th Avenue SE, including complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$2,171,000 - \$2,894,000



C30: NE 14th Street Connection 1 Between 216th Avenue NE and 212th Avenue NE

Add a new roadway connection between 216th Avenue NE and 212th Avenue NE, including complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$4,153,000 - \$5,538,000



C31: 251st Avenue SE Connection Between 251st Avenue SE and W Beaver Lake Drive SE

Add a new roadway connection between 251st Avenue SE and W Beaver Lake Drive SE, including complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$2,817,000 - \$3,756,000



PMT03: NE 22nd Street Connection Between 244th Avenue NE and 239th Avenue NE

Add a new roadway connection between 244th Avenue NE and 239th Avenue NE, including complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$4,548,000 - \$6,063,000



TR-20: SE 14th Street Extension Between Lawson Park Plat and 248th Ave SE

Add an extension of SE 14th Avenue SE between Lawson Park Plat and 248th Ave SE, with walking path on north side of street. This will include complementary safety, capacity and traffic calming enhancements.

Timeline: By 2035

Goals Met:

Cost: \$1,913,000 - \$2,550,000



TR-29: SE Belvedere Way Connection Between E Beaver Lake Drive and SE Belvedere Way

Add a new roadway connection between E Beaver Lake Drive and SE Belvedere Way. Roadway connection will include complementary safety improvements along E Beaver Lake Drive from the new connection to SE 24th Street.

Timeline: By 2035

Goals Met:

Cost: \$25,163,000 - \$33,551,000



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Transit Capital Investments

Frequent and reliable transit service is an important part of creating a connected and accessible transportation network. However, many transit-related services are in the hands of other agencies. Coordinating with other agencies and jurisdictions to create new transit service or projects can present many complications that increase the cost and uncertainty of new projects and elongate the time to implement. Although several transit projects were considered during development of the TMP, including many submitted by community members via public workshops and online engagement, only one is included as part of the prioritized project list. Many others are included in the unconstrained project list as potential future investments. This project is mapped in [Figure 35](#) and described in the following pages.

TO BE UPDATED PENDING COUNCIL DECISION

Goals

- 1  The system should be efficient, maximizing its capacity by synchronizing traffic signals, staggering work and school schedules, and encouraging transit
- 2  Regional destinations should be easier to access, with more transit and less congestion on commute routes
- 3  It should be easier to get places on foot, by bike, or by car, with connected streets and trails, and improved bike connections.
- 4  Transportation system management should be fiscally sustainable, controlling investment costs, finding grants, and increasing local ability to pay.
- 5  Transportation should be safe and welcoming, with better street crossings, calmed traffic to slow speeds, and increased traffic enforcement.
- 6  The rights-of-way and trails should look great, enhancing the character that makes Sammamish unique.
- 7  Community input is reflected in project prioritization.

Project Name

Project Description

Timeline <----- When the project will be completed

Cost <----- Estimated cost for the project

Goals Met

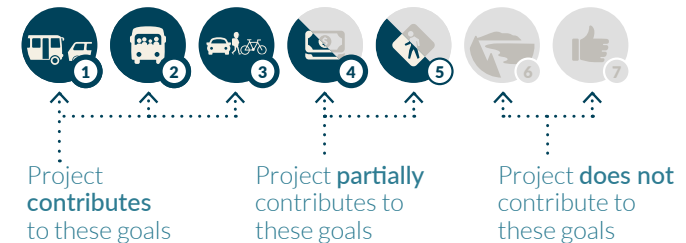
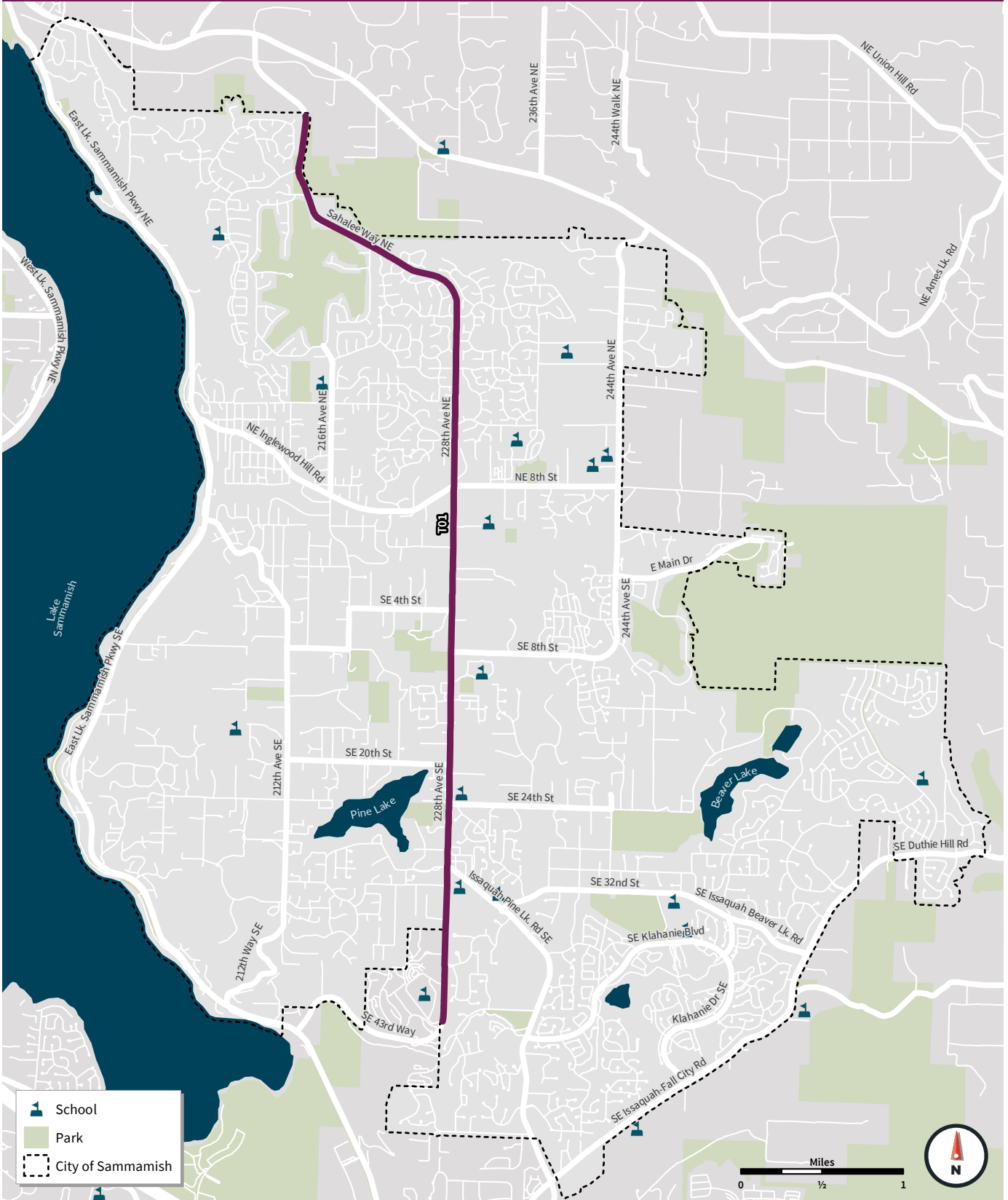




Figure 35. 228th Avenue Transit Signal Priority Project

TO BE UPDATED PENDING COUNCIL DECISION



T01: 228th Avenue Transit Signal Priority

Implement transit signal priority for signalized intersections along 228th Avenue and Sahalee Way to allow buses to go through a light before vehicles on minor approaches. This project supports King County Metro increasing the frequency of buses throughout the day and week, such as weekend service.

Timeline: By 2035

Goals Met:

Cost: \$1,090,000 - \$1,453,000



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Non-Motorized Projects

Unlike the complete streets projects, many of which include non-motorized elements, the non-motorized projects focus exclusively on constructing transit access, pedestrian and/or bicycle improvements. Special emphasis and priority for these improvements were placed on streets near schools; concentration of businesses; and the larger, more popular City parks. These projects are mapped in [Figure 36](#) and described in the following pages.

TO BE UPDATED PENDING COUNCIL DECISION

Goals

- 

The system should be efficient, maximizing its capacity by synchronizing traffic signals, staggering work and school schedules, and encouraging transit
- 

Regional destinations should be easier to access, with more transit and less congestion on commute routes
- 

It should be easier to get places on foot, by bike, or by car, with connected streets and trails, and improved bike connections.
- 

Transportation system management should be fiscally sustainable, controlling investment costs, finding grants, and increasing local ability to pay.
- 

Transportation should be safe and welcoming, with better street crossings, calmed traffic to slow speeds, and increased traffic enforcement.
- 

The rights-of-way and trails should look great, enhancing the character that makes Sammamish unique.
- 

Community input is reflected in project prioritization.

Project Name

Project Description

Timeline <-----..... When the project will be completed

Cost <-----..... Estimated cost for the project

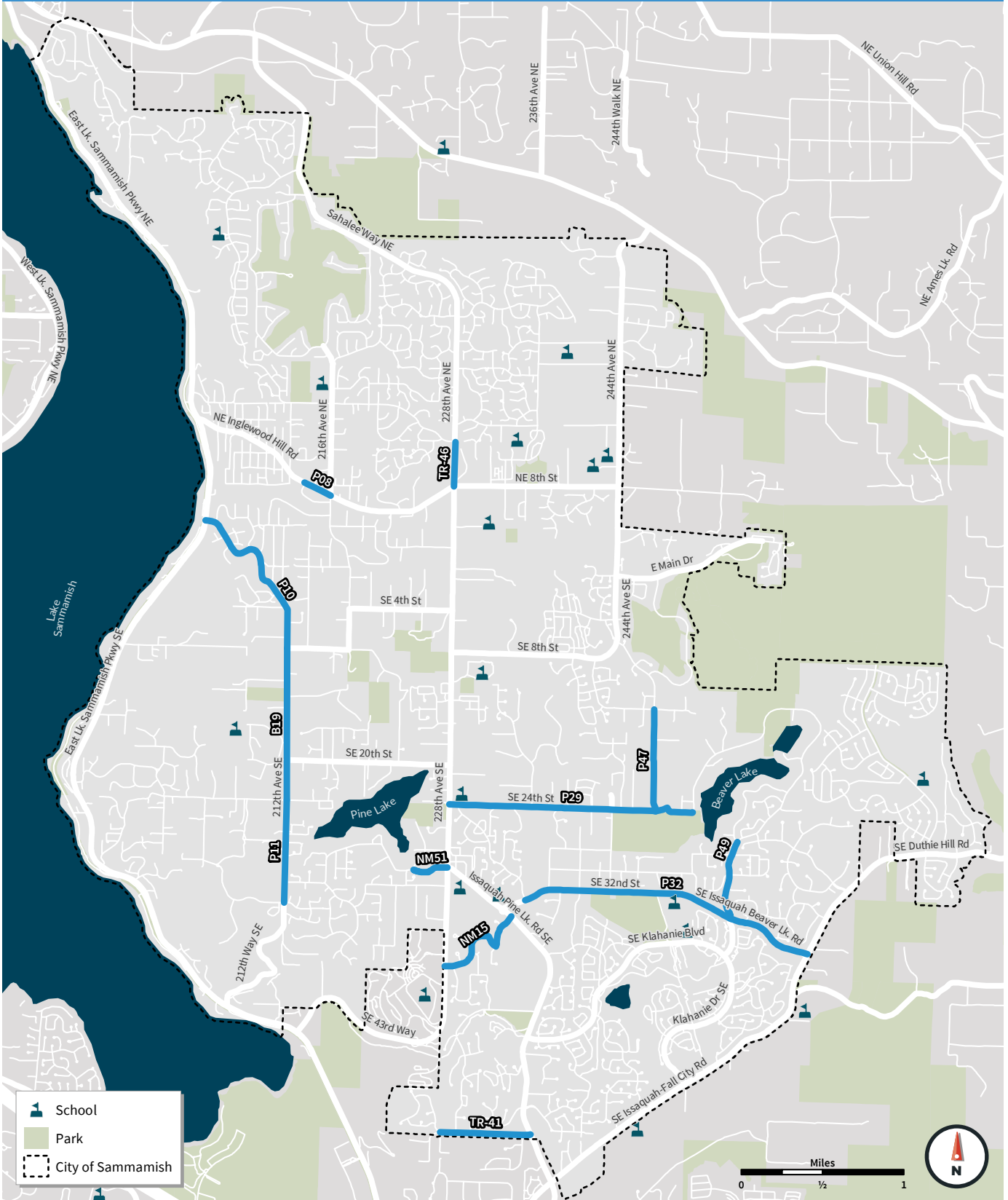
Goals Met





Figure 36. Non-Motorized Projects

TO BE UPDATED PENDING COUNCIL DECISION



B19: 212th Avenue SE Active Transportation Improvements From SE 8th Street to SE 24th Street

Add sidewalk on one side and striped bike lanes on both sides of 212th Avenue SE from SE 8th St to SE 24th Street.

Timeline: By 2035

Goals Met:

Cost: \$40,166,000 - \$53,555,000



NM15: SE 40th Street/234th Ave SE Sidewalk Improvement From 228th Avenue SE to Issaquah-Pine Lake Road SE

Add sidewalk on one side of SE 40th St from 228th Avenue SE to Issaquah-Pine Lake Road SE.

Timeline: By 2035

Goals Met:

Cost: \$3,414,000 - \$4,551,000



NM51: SE 30th Street Sidewalk Improvement From 228th Avenue SE to 224th Avenue SE

Add sidewalk on one side of SE 30th Street from 228th Avenue SE to 224th Avenue SE.

Timeline: By 2035

Goals Met:

Cost: \$160,000 - \$214,000



P08: NE Inglewood Hill Road Sidewalk Improvement From 213th Place NE to 216th Avenue NE

Fill any sidewalk gaps on one side of NE Inglewood Hill Road from 213th Place NE to 216th Avenue NE.

Timeline: By 2035

Goals Met:

Cost: \$247,000 - \$330,000



P10: Louis Thompson Road NE Active Transportation Improvements From East Lake Sammamish Parkway to SE 8th Street

Add sidewalk and striped bike lanes on Louis Thompson Road NE from East Lake Sammamish Parkway NE to SE 8th Street.

Timeline: By 2035

Goals Met:

Cost: \$18,794,000 - \$25,058,000



P11: 212th Avenue SE Sidewalk Improvement From SE 24th Street to SE 34th Street

Add sidewalk on one side of 212th Avenue SE from SE 24th Street to SE 34th Street.

Timeline: By 2035

Goals Met:

Cost: \$4,398,000 - \$5,863,000



P29: SE 24th Street Active Transportation Improvements From 228th Avenue SE to Beaver Lake Drive

Add sidewalk on one side and protected bike lanes on both sides of SE 24th Street from 228th Avenue SE to Beaver Lake Dr.

Timeline: By 2035

Goals Met:

Cost: \$17,686,000 - \$23,581,000



P32: SE 32nd Street Active Transportation Improvements From 235th Place SE to 251st Ave SE

Add sidewalk on both sides of the street on SE 32nd Street from 235th Place SE to 251st Avenue SE and add striped or buffered bike lane from 241st Avenue SE to SE Duthie Hill Road.

Timeline: By 2035

Goals Met:

Cost: \$1,406,000 - \$1,874,000



P47: 248th Avenue SE Active Transportation Improvements From SE 24th Street to SE 14th Street

Add sidewalk on one side and a striped bike lane on both sides of 248th Avenue SE from SE 24th Street to SE 14th Street.

Timeline: By 2035

Goals Met:

Cost: \$7,415,000 - \$9,887,000



P49: E Beaver Lake Drive SE Sidewalk Improvement From SE 32nd Street to E Beaver Lake Way SE

Add sidewalk on both sides of E Beaver Lake Drive SE from SE 32nd Street to E Beaver Lake Way SE.

Timeline: By 2035

Goals Met:

Cost: \$3,511,000 - \$4,681,000



PI-31: NE 8th Street Crossing at the Regency and Saffron Retail Centers

Add a pedestrian crossing on NE 8th Street, 600ft east of the intersection of NE 8th Street and 228th Avenue NE.

Timeline: By 2035

Goals Met:

Cost: \$630,000 - \$840,000



TR-41: SE 48th Street Active Transportation Improvements From Issaquah-Pine Lake Road SE to 227th Place SE

Install curb, gutter, sidewalk and a bike sharrow on SE 48th Street from Issaquah Pine Lake Road SE to 227th Place SE.

Timeline: By 2035

Goals Met:

Cost: \$3,562,000 - \$4,750,000



TR-46: 228th Avenue Bike Lane NE 12th Street to NE 8th Street

Improve the roadway segment by adding a striped or buffered bike lane on the east side of 228th Avenue from NE 12th Street to NE 8th Street.

Timeline: By 2035

Goals Met:

Cost: \$2,749,000 - \$3,665,000



Financially 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 Project lists or as considerations for development review.

Table 8 through **Table 11** show 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 considerations in development review. These projects are listed in terms of their project category and score based on the criteria in the Future Transportation Vision Section above. The 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 2020 dollars. **Table 12** shows other future considerations brought up by the public that the city is not currently pursuing. Whether through questions of feasibility or need, these projects are not currently being considered as possibilities for any near-term future project lists, and may or may not be considered in some capacity for the future.



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Table 8. Financially Unconstrained Complete Streets Project List for the City of Sammamish (Projects Not Included in TMP Priority Project List)

Name	Description	Location	Extents		Cost Range	Score
			From	To		
E Lk Sammamish Pkwy SE: From 212th Ave SE to South City Limits	Widen to 3 lanes with median/two-way left turn lane with bike lanes, curb, gutter and sidewalk from 212th Way SE to South City Limits.	E Lk Sammamish Pkwy SE	212th Ave SE	South City Limits	N/A	305
228th Ave NE Widening at NE 8th	Expand the northbound direction to 2 travel lanes with bike lane, curb, gutter, and sidewalk on the east side.	228th Ave NE	NE 8th St	NE 12th St	\$5,611,000-7,481,000	275
244th Ave Widening	Widen to 3 lanes with two-way left turn lane and with bike lanes, curb, gutter, sidewalk from NE 8th St to North City Limits	244th Ave NE	NE 8th St	North City Limits	\$24,188,000-32,251,000	275
SE Duthie Hill Rd: From West side of "notch" to Trossachs Blvd SE	Widen to 3 lanes with median/two-way left turn lane with bike lanes, curb, gutter and sidewalk on the west side and a shoulder on the west side from east side of "Notch" to Trossachs Blvd SE. Will require coordination with other municipalities.	SE Duthie Hill Rd	West side of "notch"	Trossachs Blvd SE	\$4,676,000-6,235,000	245
SE 24th Street: 228th Avenue SE to 244th Avenue SE: From 228th Avenue SE to 244th Avenue SE	Add turn lanes at each intersection on SE 24th St from 228th Ave to 244th Ave.	SE 24th Street: 228th Avenue SE to 244th Avenue SE	228th Avenue SE	244th Avenue SE	N/A	215
256th Ave SE and Klahanie Blvd Intersection Improvement	Install roundabout to improve safety and operations at this intersection.	256th Ave SE/ Klahanie Blvd	-	-	\$1,004,000-1,339,000	195
212th Avenue SE & SE 24th Street Intersection Improvement	Install roundabout at this intersection.	212th Avenue SE & SE 24th Street Intersection Improvement	Intersection	Intersection	N/A	195
212th Ave SE between SE 14th PL and SE 18th PL	Replace 212th Ave SE between SE 14th PL and SE 18th PL at sag location with bridge.	212th Ave SE	SE 14th PL	SE 18th PL	\$12,318,000-16,424,000	155
Soaring Eagle boulevard: Trossachs to Main St.	Connect roadway through Soaring Eagle Regional Park from Trossachs Blvd to Main Street. Would require coordination with King County.	Soaring Eagle Regional Park	Trossachs Blvd	E Main Dr	N/A	155
Bus Pullouts on 228th Ave	Add bus pullouts/shoulders along 228th Ave near any stop where they do not currently exist	228th Ave	NE 37th St	SE 43rd Way	N/A	130

TO BE UPDATED PENDING COUNCIL DECISION



Table 9. Financially Unconstrained New Connections Project List for the City of Sammamish (Projects Not Included in TMP Priority Project List)

Name	Description	Location	Extents		Cost Range	Score
			From	To		
New 231st Ave SE Connection	Add a new roadway connection between South of SE 15th St and SE 18th Pl, including complementary safety, capacity and traffic calming enhancements.	231st Ave SE	South of SE 15th St	SE 18th Pl	\$1,054,000-1,405,000	165
New 196th Ave NE Connection	Add a new roadway connection between East Lake Sammamish Pkwy and NE 42nd Way, including complementary safety, capacity and traffic calming enhancements.	196th Ave NE	East Lake Sammamish Pkwy	NE 42nd Way	N/A	135
New 242nd Ave SE Connection	Add a new roadway connection between SE 16th Pl and SE 15th Pl, including complementary safety, capacity and traffic calming enhancements.	242nd Ave SE	SE 16th Pl	SE 15th Pl	N/A	135
New SE 18th Pl Connection	Add a new roadway connection between 244th Ave SE and 238th Ave SE, including complementary safety, capacity and traffic calming enhancements.	SE 18th Pl	244th Ave SE	238th Ave SE	N/A	135
New Lancaster Way SE Connection to 223rd Avenue SE	Add a new roadway connection between Lancaster Way SE and 223rd Avenue SE. Roadway connection will include complementary safety, capacity and traffic calming enhancements.	Lancaster Way SE	Lancaster Way SE	223rd Avenue SE	N/A	135
New NE 20th St Connection to 244th Ave NE	Add a new roadway connection between 244th Avenue NE and 236th Avenue NE. Roadway connection will include complementary safety, capacity, and traffic calming enhancements.	NE 20th St	236th Ave NE	244th Ave NE	\$10,233,000-13,644,000	135
New NE 14th St Connection 3	Add a new roadway connection at the western edge of NE 14th St, approximately 700 feet south and then approximately 1,300 feet east connecting to an existing private drive and then to 244th Ave NE. Roadway connection will include complementary safety, capacity, and traffic calming enhancements.	NE 14th St	Private Roadway	244th Ave NE	N/A	135
New SE 28th St Connection	Add a new roadway connection between 241st Ave SE and 239th Ave SE. Roadway connection will include complementary safety, capacity, and traffic calming enhancements.	SE 28th St	241st Ave SE	239th Ave SE	N/A	135

TO BE UPDATED PENDING COUNCIL DECISION



TO BE UPDATED PENDING COUNCIL DECISION

Name	Description	Location	Extents		Cost Range	Score
			From	To		
New Roadway Connection to E Beaver-Lk Dr SE at 266th Way SE	Add a new roadway connection between 266th Way SE and E Beaver Lake Drive SE, including complementary safety, capacity and traffic calming enhancements from the new connection to SE 24th St.	New Roadway Connection to E Beaver- Lk Dr SE at 266th Way SE	E Beaver- Lk Dr SE	266th Way SE	N/A	135
New 190th PI NE Connection	Add a new roadway connection between NE 51st St and NE 51st PI, including complementary safety, capacity and traffic calming enhancements.	190th PI NE	NE 51st St	NE 51st PI	N/A	105
New 218th Ave NE Connection	Add a new roadway connection between North of NE 9th St and NE 11th PI, including complementary safety, capacity and traffic calming enhancements.	218th Ave NE	North of NE 9th St	NE 11th PI	N/A	105
New 236th Ave NE Connection	Add a new roadway connection between NE 15th PI and NE 14th St, including complementary safety, capacity and traffic calming enhancements.	236th Ave NE	NE 15th PI	NE 14th St	N/A	105
New NE 20th St Connection	Add a new roadway connection between North of NE 18th St and NE 20th St, including complementary safety, capacity and traffic calming enhancements.	248th PI NE	North of NE 18th St	NE 20th St	N/A	105
New SE 13th St Connection	Add a new roadway connection between 251st Ave SE and Windsor Dr SE, including complementary safety, capacity and traffic calming enhancements.	SE 13th St	251st Ave SE	Windsor Dr SE	N/A	105
New 249th PI SE Connection	Add a new roadway connection between SE 18th St and SE 17th St, including complementary safety, capacity and traffic calming enhancements.	249th PI SE	SE 18th St	SE 17th St	N/A	105
New SE 17th St Connection	Add a new roadway connection between East of 249th PI SE and SE 18th PI, including complementary safety, capacity and traffic calming enhancements.	SE 17th St	East of 249th PI SE	SE 18th PI	N/A	105
New 251st PI SE Connection	Add a new roadway connection between SE 18th St and SE 17th St	251st PI SE	SE 18th St	SE 17th St	N/A	105
New SE 47th Way Connection	Add a new roadway connection between 233rd Ave SE and 231st PI SE, including complementary safety, capacity and traffic calming enhancements.	SE 47th Way	233rd Ave SE	231st PI SE	N/A	105



Table 10. Financially Unconstrained Non-Motorized Project List for the City of Sammamish (Projects Not Included in TMP Priority Project List)

Name	Description	Location	Extents		Cost Range	Score
			From	To		
New 231st Ave SE Connection	Add a new roadway connection between South of SE 15th St and SE 18th Pl, including complementary safety, capacity and traffic calming enhancements.	231st Ave SE	South of SE 15th St	SE 18th Pl	\$1,054,000-1,405,000	165
New 196th Ave NE Connection	Add a new roadway connection between East Lake Sammamish Pkwy and NE 42nd Way, including complementary safety, capacity and traffic calming enhancements.	196th Ave NE	East Lake Sammamish Pkwy	NE 42nd Way	N/A	135
New 242nd Ave SE Connection	Add a new roadway connection between SE 16th Pl and SE 15th Pl, including complementary safety, capacity and traffic calming enhancements.	242nd Ave SE	SE 16th Pl	SE 15th Pl	N/A	135
New SE 18th Pl Connection	Add a new roadway connection between 244th Ave SE and 238th Ave SE, including complementary safety, capacity and traffic calming enhancements.	SE 18th Pl	244th Ave SE	238th Ave SE	N/A	135
New Lancaster Way SE Connection to 223rd Avenue SE	Add a new roadway connection between Lancaster Way SE and 223rd Avenue SE. Roadway connection will include complementary safety, capacity and traffic calming enhancements.	Lancaster Way SE	Lancaster Way SE	223rd Avenue SE	N/A	135
New NE 20th St Connection to 244th Ave NE	Add a new roadway connection between 244th Avenue NE and 236th Avenue NE. Roadway connection will include complementary safety, capacity, and traffic calming enhancements.	NE 20th St	236th Ave NE	244th Ave NE	\$10,233,000-13,644,000	135
New NE 14th St Connection 3	Add a new roadway connection at the western edge of NE 14th St, approximately 700 feet south and then approximately 1,300 feet east connecting to an existing private drive and then to 244th Ave NE. Roadway connection will include complementary safety, capacity, and traffic calming enhancements.	NE 14th St	Private Roadway	244th Ave NE	N/A	135

TO BE UPDATED PENDING COUNCIL DECISION



TO BE UPDATED PENDING COUNCIL DECISION

Name	Description	Location	Extents		Cost Range	Score
			From	To		
New SE 28th St Connection	Add a new roadway connection between 241st Ave SE and 239th Ave SE. Roadway connection will include complementary safety, capacity, and traffic calming enhancements.	SE 28th St	241st Ave SE	239th Ave SE	N/A	135
New Roadway Connection to E Beaver-Lk Dr SE at 266th Way SE	Add a new roadway connection between 266th Way SE and E Beaver Lake Drive SE, including complementary safety, capacity and traffic calming enhancements from the new connection to SE 24th St.	New Roadway Connection to E Beaver- Lk Dr SE at 266th Way SE	E Beaver- Lk Dr SE	266th Way SE	N/A	135
New 190th Pl NE Connection	Add a new roadway connection between NE 51st St and NE 51st Pl, including complementary safety, capacity and traffic calming enhancements.	190th Pl NE	NE 51st St	NE 51st Pl	N/A	105
New 218th Ave NE Connection	Add a new roadway connection between North of NE 9th St and NE 11th Pl, including complementary safety, capacity and traffic calming enhancements.	218th Ave NE	North of NE 9th St	NE 11th Pl	N/A	105
New 236th Ave NE Connection	Add a new roadway connection between NE 15th Pl and NE 14th St, including complementary safety, capacity and traffic calming enhancements.	236th Ave NE	NE 15th Pl	NE 14th St	N/A	105
New NE 20th St Connection	Add a new roadway connection between North of NE 18th St and NE 20th St, including complementary safety, capacity and traffic calming enhancements.	248th Pl NE	North of NE 18th St	NE 20th St	N/A	105
New SE 13th St Connection	Add a new roadway connection between 251st Ave SE and Windsor Dr SE, including complementary safety, capacity and traffic calming enhancements.	SE 13th St	251st Ave SE	Windsor Dr SE	N/A	105
New 249th Pl SE Connection	Add a new roadway connection between SE 18th St and SE 17th St, including complementary safety, capacity and traffic calming enhancements.	249th Pl SE	SE 18th St	SE 17th St	N/A	105



Table 11. Financially Unconstrained Transit Project List for the City of Sammamish (Projects Not Included in TMP Priority Project List)

Name	Description	Location	Extents		Cost Range	Score
			From	To		
Bus Pullouts on 228th Ave	Add bus pullouts/shoulders along 228th Ave near any stop where they do not currently exist	228th Ave	NE 37th St	SE 43rd Way	N/A	130

Table 12. Other Future Considerations

Name	Description	Location	Extents		Cost Range	Score
			From	To		
211th Ave and NE 16th St Right-In-Right-Out Removal	Remove the right-in-right-out barrier to allow LT movements onto and off of 211th.		211th Ave	NE 16th St	N/A	175
Sidewalk along 196th Ave NE	Fill sidewalk gap on both sides of the street between West Lake Sammamish Parkway and East Lake Sammamish Parkway. Will require coordination with other municipalities.	196th Ave NE	West Lake Sammamish Parkway NE	East Lake Sammamish Parkway NE	N/A	160
228th Ave NE Pedestrian Bridge	Pedestrian bridge between McDonald's and Safeway on 228th Ave NE	228th Ave NE			N/A	160
Beaver Lake - Klahanie Park Trail Connection	Pedestrian connection on powerline corridor between Beaver Lake Park and Klahanie Park		Klahanie Park	End of SE 28th Pl	N/A	120
Evans Creek Preserve - Highway 202 Access	Connect Alcott Elementary via a soft surface trail through the North property and an enhanced crosswalk on 202.	Evans Creek Preserve - Highway 202 Access			N/A	105
228th Avenue Reversible Transit Lane	Add reversible transit lane down 228th from NE 28th or NE 25th to SR 202 - single lane/ bus lane/HOV lane	228th Ave NE	SR 202	NE 25th	N/A	210
Sammamish Gondola	Build a Sammamish Gondola Public Transit System for regional connections.		228th Ave NE	NE 8th St	N/A	135
Bike Storage South Sammamish Park & Ride	Add bicycle storage at the South Sammamish Park & Ride	228th Ave SE/ Issaquah Pine Lake Rd SE	-	-	N/A	130

TO BE UPDATED PENDING COUNCIL DECISION

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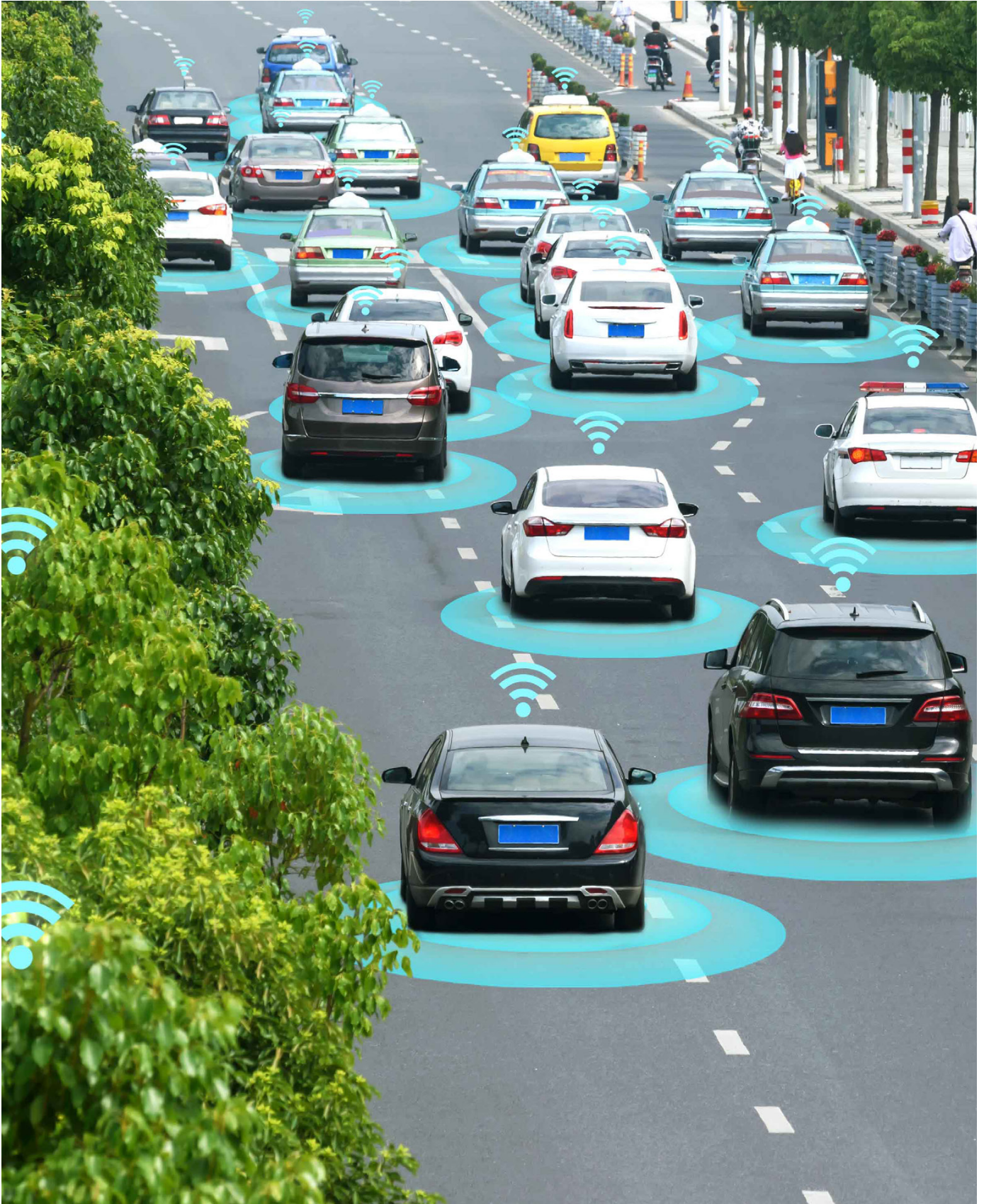


Chapter
05



Technological Advances in 2035 and Beyond

- Autonomous Vehicles (AV) and Connected Vehicles (CV)
- How the City of Sammamish Can Prepare



Technological Advances in 2035 and Beyond

The Sammamish TMP outlines the path for investments in the Sammamish transportation system through 2035, but our commitment to improving the system does not end there. Just as important as the next decade and a half is how the City positions itself for the years beyond that, when new technologies and modes of travel are expected to be in effect. This chapter sets the stage for Sammamish Transportation Planning beyond 2035.

While it is not yet necessary to identify exactly how the City will address each emerging transportation issue we are expected to face, it is prudent to identify emerging issues, discuss the reasonably expected impacts on the Sammamish transportation system, and then identify the various options for incorporating them to obtain the most benefit for Sammamish residents. In some cases, the future technologies can drastically benefit local jurisdictions, but in other cases, future technologies and trends can have negative impacts on communities.

Currently, there are several emerging transportation issues and trends to track, including:

- Autonomous Vehicles (AV) and Connected Vehicles (CV)
- Micromobility services (including their impact on first-mile, last-mile trips)
- Shared Mobility (e.g. car share programs)
- Mobility as a Service (MaaS)
- Big Data (public-private partnerships, deep learning and artificial intelligence systems to predict traffic patterns, congestion, and roadway safety)
- Shifts in parking need and behavior

While the list of topics is large and the list of impacts even larger, this chapter focuses directly on AV and CV technology. This is due to the reasonable expectation of its arrival in Sammamish and the fact that it could have the biggest impact on the Sammamish transportation system and thus warrants deeper discussion and planning.



Autonomous Vehicles (AV) and Connected Vehicles (CV)

AV and CV technology can transform how cities manage, operate, and invest in their streets. Given the revolutionary potential of AVs and CVs, the City of Sammamish should do its best to prepare for the future arrival of this technology on city streets.

AVs are equipped with on-board software and hardware that are capable of driving the vehicle instead of a human operator. They are also referred to as self-driving, driverless, or automated vehicles. Connected vehicles CVs, meanwhile, are able to communicate wirelessly with their surroundings and other vehicles to share and receive information regarding the transportation system. Today, many new vehicles include autonomous technology, such as adaptive cruise control, self-parking capabilities, and vehicle route navigation. These features offer the ability to maintain safe and efficient vehicle spacing and flow and are intended to ultimately operate autonomously without requiring driver attention.

While AV and CV technology are not seen as required components of each other, it is likely that these technologies will begin to converge as they continue to develop and mature. Vehicles with AV technology will greatly benefit from communicating with the roadway infrastructure and users of the transportation network rather than just relying on on-board sensors and a static starting map to understand the conditions of the roadway. Similarly, CVs without automation technology may provide drivers with alerts about upcoming roadway conditions, similar to blind spot warnings, but adding automation will more effectively eliminate potential human error.

This convergence would result in connected autonomous vehicles (CAVs). Highly autonomous CAVs would operate without the direct need of a human operator as well as benefit from communicating with the roadway infrastructure and other users (i.e., bicycles, pedestrians, transit, freight, etc.) to better anticipate forthcoming interactions and roadway conditions.

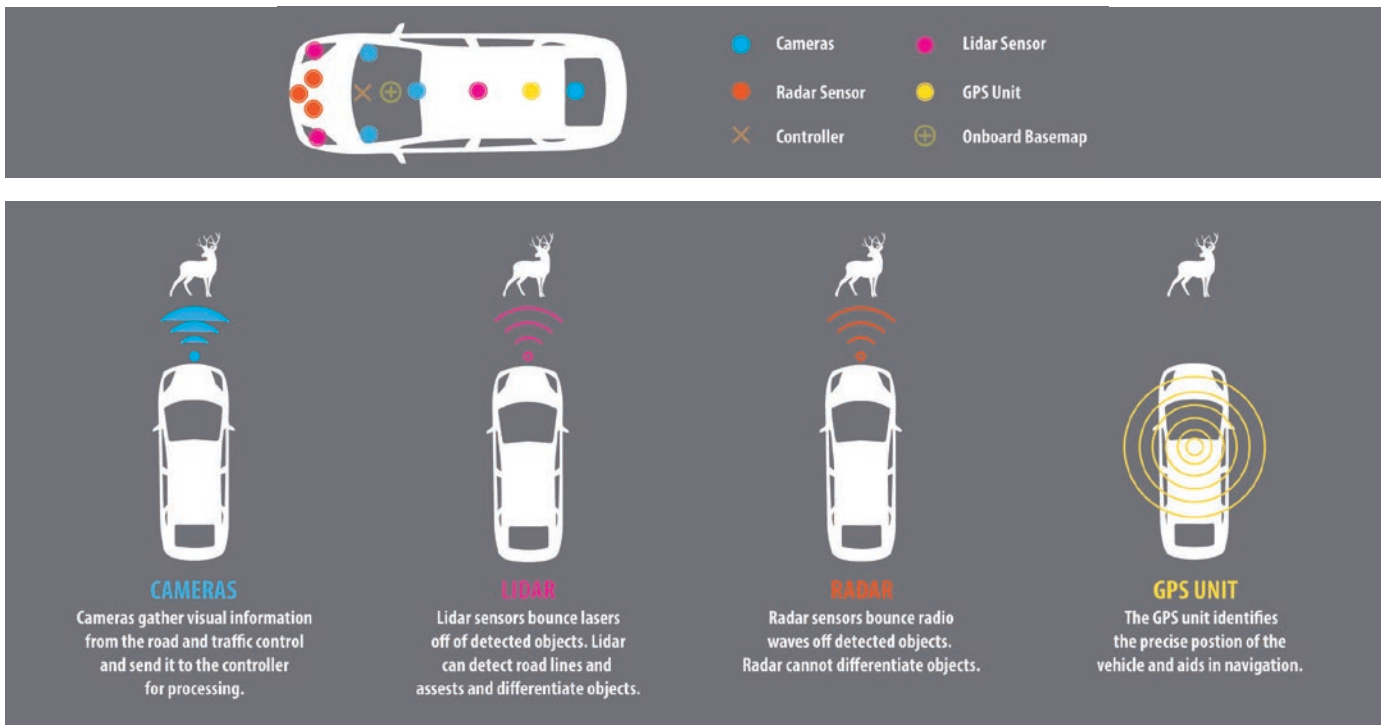


Figure 37. How Automated Vehicles Work



Expected Arrival

AV and CV technology is nascent and not fully adopted anywhere. Some autonomous technology is readily available today, but full automation is still to come. Despite rapid advances in AV and CV technology, there is still substantial uncertainty associated with the implementation of AVs and CVs for public use. Estimates range from several years for a highly autonomous vehicle to never for a fully autonomous vehicle (i.e., without the need for a human driver). Even after highly and fully autonomous vehicles are available, it will likely take some time before they represent a significant percentage of the vehicle fleet.

States and local agencies have the responsibility to develop and enforce rules for testing and operation of AVs on public roadways. In 2018, the Washington State Legislature directed the Washington State Transportation Commission (WSTC) to establish and convene a Work Group which consists of stakeholders representing the public and private sectors related to AVs. It is expected that policy recommendations from this work group will be forwarded to the State Legislature in 2023. While there is still much uncertainty on the arrival of this technology on City streets, the City of Sammamish will track developments at the State level, with particular interest in any recommendations or model ordinances for local jurisdictions.

State and regional coordination are imperative in accommodating AVs on Sammamish roads. Coordination at the state and county levels is needed to ensure a smooth rollout of the technology on local streets. If there is a lack of coordination or poor coordination, it could impact the regulations that are adopted as well as when such regulations may be adopted. Transportation issues do not end at jurisdictional boundaries, meaning that inconsistent or disjointed efforts to accommodate AVs in our region could be detrimental to the safe and reliable operation of this technology in the region. The City of Sammamish will participate in any such regional collaboration efforts to ensure that outcomes are as consistent as possible throughout the region.

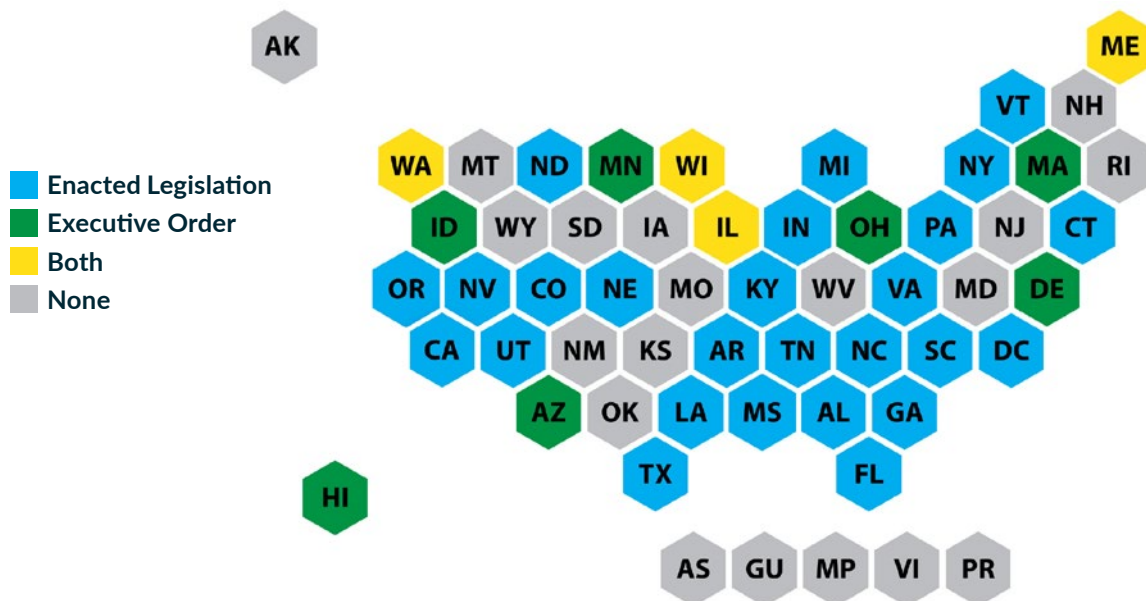


Figure 38. States With Autonomous Vehicles Enacted Legislation and Executive Orders.
 Sources: National Council of State Legislatures.



Impacts

AVs and CVs could result in significant changes in travel. These range from benefits such as reduced collision rates, more stable traffic flow, increased access to mobility, and reduced driving stress. Potential side effects include increased vehicle travel and overall traffic as well as potential greater demand for suburban development.

Consider the potential of AVs and CVs actively managing and optimizing their flow on City streets, reducing congestion by maintaining optimal distancing between all cars on the road and reducing error and delays caused by human operation. Such enhancements in traffic flow could be obtained without much public investment in the road system. Road widening projects to add capacity to Sammamish roadways would suddenly not be necessary. This type of fundamental shift in transportation planning could lead to big savings for the City over time, with the added benefit of better, safer traffic flow.

Specific AV and CV impacts on the City of Sammamish may include:

- Reduced potential for collisions
- Traffic flow benefits
- Increased access and travel options
- Increase in vehicle miles of travel (VMT)
- Reduced parking demand
- Increased curb activity (i.e. pick-ups/drop offs)
- Potential for redevelopment in commercial areas of the City due to reduced parking demand
- Increase in neighborhood cut-through trips
- Decreased transit ridership



How the City of Sammamish Can Prepare

Outlining a pathway to address AVs and CVs will prevent a reactionary approach and reduce the risk of being caught “flat-footed” when the technology is ready to deploy. Such a proactive approach will ensure that the City can minimize negative impacts while ensuring that the community benefits from the technology.

Sammamish should consider undertaking some or all of the following steps in the near- and mid-term to prepare for the arrival of AVs and CVs:

Near Term

- Begin community and stakeholder engagement.
 - › New technology can be confusing or concerning to residents who are unsure about it. Beginning community and stakeholder engagement early will allow time for everyone to understand what the impacts will be and the tools available to cities for addressing them. Early communication will allow for better identification of community concerns and a more deliberate approach to crafting policy and code language to incorporate the community concerns.
- Begin considering how AVs and CVs may fit into the Comprehensive Plan and initiate discussions about how to develop critical policies and priorities for the safe operation of AVs and CVs.
 - › The City’s policy framework will need to be revised to address AVs and CVs on City streets, outlining how the City intends to deal with the new technology and what elements the City wants to limit.
- Track and monitor federal and state developments. Use the City’s contract lobbyists to advocate for Sammamish’s interests.
 - › Much of what determines how and when the technology can be deployed will occur at the state and federal levels. The better the City grasps the issues while they are being considered by lawmakers, the better the City can advocate for its interests.

Mid-Term

- Plan infrastructure needs and build data and computing capacity.
 - › Consider long-term infrastructure needs, such as data storage and processing capacity, to better position the City to support and integrate AV and CV technology.
- Plan the City’s soon-to-come Traffic Management Center (TMC) to accommodate the data, communication, and computing needs of CAVs in the future. This could include fiber optic infrastructure, data management (cloud), etc.
 - › CAVs are estimated to produce nearly 11 Terabytes of data per day. It is estimated that a CAV will upload 25 Gigabytes of data every hour to external networks. CAVs will upload data about everything including its route, its speed, the wear and tear on its components, and even road conditions. The challenge is transmitting the large volume of vital data to the City’s upcoming TMC. Existing copper wire based networks are not sufficient for collecting and reliably transmitting the volume of data a CAV has to offer, which is essential to manage traffic and improve safety.
 - › The City should consider expanding the existing fiber optic network in priority areas to replace existing copper wire based networks.
- Develop an inventory of AV-ready assets, asset gaps, and future upgrades that may be necessary.
 - › Assets may include signs, lights, lane markings, and curb space, so they are reliably detectable and discernible by AV sensors for their safe operation.



- Consider land use impacts and whether AVs and CVs will put pressure on the suburban character of Sammamish, given that they will allow people to live further from job centers.
- › Impacts to the Sammamish transportation system will lead to land use impacts, as transportation and land use are closely tied. The expected reduced burden of driving, reduced travel costs, and optimized travel routing provided by AVs and CVs is likely to increase the desirability of living further from job centers. Sammamish has long been a bedroom community at the edge of the urban growth area; the current growth pressures could be exacerbated as a result of people looking to live further from the more urban areas of King County.
- Plan for impacts to transit.
 - › AVs and CVs are expected to make it easier to travel by car, which will potentially reduce transit ridership. The City will need to closely coordinate with King County Metro on transit investments and service. Furthermore, the City should consider equity when reviewing transit service to ensure that those who cannot afford to use AVs or CVs can still benefit from other mobility options such as transit.

Regardless of the methods taken to prepare for the arrival of AV and CV technology, any level of preparedness for the inevitable arrival of AVs and CVs will greatly serve the Sammamish community.

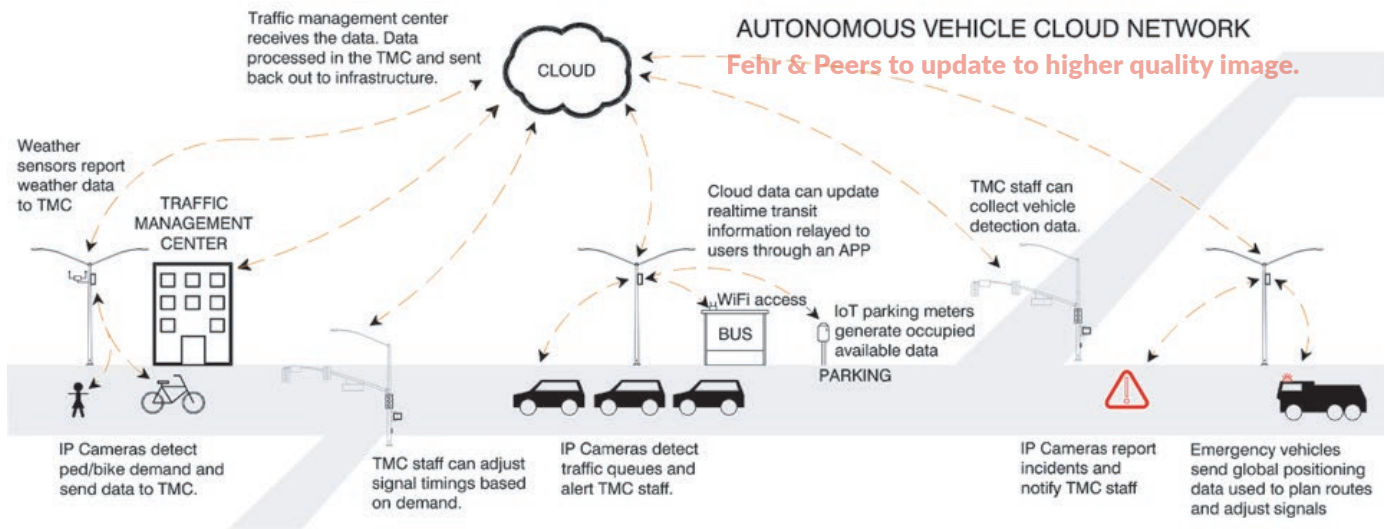


Figure 39. Autonomous Vehicle Cloud Network.



Appendices

Placeholder for Appendices



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