City of Kirkland

Active Transportation Plan

JUNE 7TH 2022

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ACKNOWLEDGMENTS

Adopted at the Kirkland City Council meeting of June 7th, 2022 by Resolution R-5542.

The City of Kirkland would like to thank and recognize the efforts of all community groups and community members who gave their time and energy to bring this plan to life.

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The safe, convenient and comfortable travel of people of all ages and abilities traveling by any combination of foot, bicycle, transit, or motor vehicle shall be accommodated to the maximum extent practical in the scoping, planning, development, and construction, operation and maintenance of all transportation facilities, including the creation of new transportation linkages in order to create a more connected community-wide transportation network.

Kirkland Complete Streets Ordinance

KMC 19.08.055

INTRODUCTION

The City of Kirkland has been making great strides towards becoming a community where it is safe and desirable for people of all ages and abilities to walk, bike and roll for everyday trips.

Since the last update of the Active Transportation Plan (ATP) in 2009 and the adoption of the Transportation Master Plan (TMP) in 2015, a significant amount of policy, planning, and infrastructure progress has been made:

- The City purchased the 5.75 mile Cross Kirkland Corridor (CKC) and constructed a soft surface, interim trail that connects parks, neighborhoods, businesses, and schools along its length from the South Kirkland Park & Ride to Totem Lake. This was the first constructed segment of the broader 42-mile regional trail the Eastside Rail Corridor (Eastrail). Many improvements have been incrementally added to the CKC, including street and neighborhood access points with stair runnels for bicycles, wayfinding, art installations and park amenities. At present, the City is installing the Totem Lake Connector bridge which will provide a seamless connection for the CKC over two major arterials and provide a recognizable landmark.
- Adoption of the first Complete Streets Ordinance in the state, which was amended in 2016 to meet the multimodal transportation goals within the TMP and to reflect more current best practices in Complete Streets policies which include consideration of all transportation modes.
- Installation of pedestrian street crossing improvements including 131 curb extensions, improved lighting at 72 intersections, 63 rapid flashing beacons (RRFBs), and other street calming measures (some of which were completed prior to 2009).
- Completion of sidewalk gaps, with sidewalks present on at least one side of the roadway for 85.78% all principal and arterial streets, and on 99% of school walk-route arterial and collector streets. This includes the 2011 annexed areas of Finn Hill, North Juanita, and Kingsgate which added 7 square miles to the city after the 2009 ATP established goal of completing sidewalks on at least one side for all principal and minor arterial streets by 2016, and completion of walkways on one side of all arterials (Figure 1.25) and collector school walk routes by 2019.
- Installation of over 60 miles of bike lanes, buffered bike lanes, and the City's first two neighborhood greenways. Kirkland is the first community on the east side of Lake Washington to install a permanent neighborhood greenway.
- Installation of bicycle wayfinding signs along the regional Lake Washington Loop.
- Creation of the Neighborhood Safety Program (NSP) which provides dedicated funding to empower communities to identify and prioritize transportation or safety projects in their community and work collaboratively with the City to realize pedestrian and bicycle infrastructure across Kirkland.
- Designation as a Bronze Level Bicycle Friendly Community by the League of American Bicyclists in 2017.

Figure 1.1: League of American Bicyclists logo.

- Designation as a Bronze Level Walk Friendly Community in 2018.

Figure 1.2: Walk Friendly Communities logo.

This plan update outlines new goals, objectives, and strategies for continuing to improve safety and connectivity for people walking, bicycling and rolling so that active transportation trips are a viable and comfortable option to access key destinations. For a full accounting of progress towards the goals and policies established in both the ATP and TMP that the City has achieved at the time of this plan update, see Baseline Report Appendix E.

PLAN PURPOSE

The purpose of the Active Transportation Plan (ATP) is to reaffirm Kirkland's commitment to a multi-modal system of transportation choices by providing network and infrastructure improvement recommendations to enable of people of all ages and abilities to safely walk, bike, and roll in Kirkland. The implementation of these recommendations is intended to increase the number of people using active modes for transportation. Increased numbers of people using active transportation modes have benefits for public health, the environment and reduces traffic congestion. This also addresses a Council goal for more balanced transportation and to reduce reliance on single occupancy vehicles.

The Active Transportation Plan addresses the City Council goal of **Balanced Transportation**:

Reduce reliance on single occupancy vehicles and improve connectivity and multi-modal mobility in Kirkland in ways that maintain and enhance travel times, safety, health and transportation choices.

As part of the public engagement process for the ATP and the Safer Routes to School Action Plan, the City undertook a survey of people who live, work, learn and play in Kirkland. From the results of the Safe and Active Transportation Survey, many people expressed an interest in walking and biking more often if there were safe and convenient networks to do so. **The perception of safety from other roadway users (or lack thereof) was consistently identified as the primary consideration for deciding to walk or bike for a trip.** Additionally, more connected sidewalks, more protected bicycle lanes, and safer crosswalks were identified as the top three improvements that would incentivize people to walk and bike more. Further insights on what we heard from the community is discussed in Chapter 2.

Given safety improvements represent the largest potential for shifting trips from driving alone to walking and bicycling, this plan has **THREE PRIMARY GOALS**:

1. ***Create a safe, connected pedestrian network where walking is a comfortable and intuitive option as the first choice for many trips.***

2. ***Create a connected bicycle network that accommodates people of all ages and abilities to get to destinations such as activity centers, parks, and transit.***

3. ***Encourage and incentivize more people to walk and bike and encourage safe behavior for all users of the transportation system.***

These goals are articulated in this plan with clear objectives and achievable strategies in subsequent sections. The overall approach to achieve safe, connected walking and bicycling networks is prioritizing access to key destinations and providing comfortable facilities for the most vulnerable road users. See Appendix B for a full explanation of the project prioritization.

PEDESTRIAN NETWORK

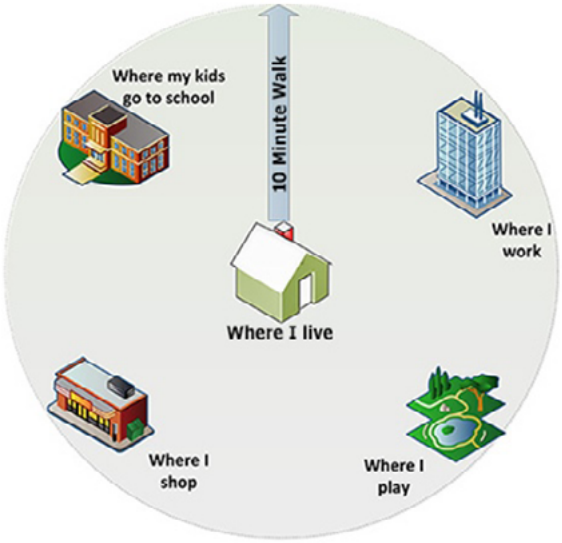
10-Minute Neighborhoods

A 10-minute neighborhood is a community where residents can walk short distances from home to destinations that meet their daily needs. Ten minutes represents how much time it takes a typical pedestrian to comfortably walk ½ mile, a reasonable distance to obtain goods or services. These walkable communities are comprised of two important characteristics:

- Destinations – a walkable community needs places to walk to. Destinations may include places that meet commercial, educational, recreational, or transportation needs; such as grocery stores, convenience retail, clusters of eating & drinking & other specialty retail, schools, and parks.
- Accessibility – the community needs to be able to conveniently get to those destinations. Accessibility includes elements such as the amount and connectivity of sidewalks, along with the location and quality of transit.

The ATP is consistent with the 10-minute neighborhood concept as the focus for the pedestrian network is access to destinations including activity centers, transit, parks and schools within a ½ mile or reasonable 10-minute walk.

The ATP goals and objectives are consistent with Kirkland's Comprehensive Plan and the Transportation Master Plan multimodal level of service standards for walking and bicycling, particularly within the 10-minute neighborhood concept. The Safer Routes to School Action Plans also address these level of service standards for school walk routes.



The 10 Minute Neighborhood Concept

ALL AGES AND ABILITIES BIKEWAY NETWORK

Bikeway comfort is most commonly defined by cyclist type. The Four Types of Cyclists is a categorization of the general population based on perceived level of safety and interest in cycling which was initially developed by Roger Geller in 2006 for transportation cyclists in Portland, OR, and validated on regional and national levels in 2011 and 2015 through survey research developed by Jennifer Dill and Nathan McNeil. The Four Types of Cyclists include Highly Confident, Somewhat Confident, Interested but Concerned, and Non-Bicyclist. Each of these categories represent segments of the population and the corresponding level of bikeway infrastructure that the user group would need to feel comfortable cycling, represented in Figure 1.3.

This plan update places an emphasis on developing a bikeway network designed for "Interested but Concerned" bicyclists, as investments in safe and comfortable bikeway infrastructure encourage a broader segment of the population to consider cycling for everyday trips. By integrating more neighborhood connections using less busy streets, and creating more separation between bicyclists and motor vehicles on busier streets, cycling is less stressful and more inviting for cyclists of **All Ages and Abilities**. This approach directly reflects the community's feedback that safety is a primary consideration for deciding to walk or bike in Kirkland.

Comfort Typology of Bicyclists				
Design User Profile	**Non-Bicyclist**	**Interested but Concerned**	**Somewhat Confident**	**Highly Confident**
Bicycling Preferences	Uncomfortable bicycling in any condition, have no interest in bicycling, or are physically unable to bicycle.	Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separate bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.	Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.	Comfortable riding with traffic, will use roads without bike lanes.
% of General Public	**31-37%**	**51-56%**	**5-9%**	**4-7%**

Figure 1.3: Comfort Typology of Bicyclists[1]

1 Dill, J. McNeil, N. 'Revisiting the Four Types of Cyclists: Findings from a National Survey' Transportation Research Board 95th Annual Meeting, 2016. Note that children and elderly have not been surveyed as a separate category but are understood to have a very low tolerance of roadway stress.

OTHER PROGRAMS AND INITIATIVES SUPPORTING ACTIVE TRANSPORTATION IN KIRKLAND

Policies and programs are identified within the goals and objectives of this plan to support the active transportation networks. Policies and programs include infrastructure recommendations such as lighting improvements, bicycle parking, and wayfinding as well as systematic coordination opportunities with technology and education and encouragement programs. There are other efforts that the City is working on that benefit people walking, rolling, and bicycling, but are addressed through other plans or programs. The following plans may be referenced in the ATP or have some overlap in the plan.

Transportation Master Plan (TMP)

The Transportation Master Plan (TMP) establishes citywide transportation goals and policies, identifies priority transportation needs, and defines actionable projects that can be completed over the 20 year planning horizon of the comprehensive plan. The 2015 TMP charted a multimodal approach for the City of Kirkland with a modal hierarchy to guide planning decisions, and established mode share goals for the Totem Lake Urban Center. As Downtown Kirkland was designated as an Urban Center by King County in 2019, and the City is currently updating the Comprehensive Plan and Transportation Master Plan this year, mode share goals will be established through the TMP rather than through the ATP as a citywide multimodal policy.

Figure 1.4: Bicycles outside of Peter Kirk Elementary (City of Kirkland).

TMP ANNUAL PROGRESS REPORT

The Transportation Master Plan publishes an **Annual Progress Report** to track progress towards established TMP goals. The progress report notes collision rates, completion of walking and biking networks, transit speed and reliability, and the maintenance of signals and roadways with clear infographics. In 2019, the City also produced the first Kirkland Transportation By the Numbers infographic which noted transit ridership, vehicle travel times and volumes, and commute mode split of people who live and work in Kirkland. The City plans to conduct a comprehensive mode share survey in 2023. As mode share goals will be established in the TMP update, regular updates to the By the Numbers infographic will be a useful monitoring tool.

Parks, Recreation and Open Space (PROS) Plan

The Parks, Recreation and Open Space (PROS) Plan is a six-year guide and strategic plan for managing and enhancing park and recreation services. It provides a vision for Kirkland's park and recreation system and establishes a path forward for providing high quality, community-driven parks, trails, open spaces and recreational opportunities. This plan will address trail access and maintenance through parks and green spaces. The City is working together to identify how the ATP and PROS plan recommendations create a connected system.

Safer Routes to School (SRTS) Action Plans

Due to regional growth, more traffic is converging on schools at drop-off and pick-up times. This leads to poor traffic circulation, congestion, inadequate parking, and often unsafe conditions. To address these issues, the City worked in partnership with the Lake Washington School District, law enforcement, design professionals, students, parents, and neighborhoods to identify key steps to make walking, rolling, and riding the bus to school safer and more convenient. The outcome of this process was the development of the Safer Routes to School Action Plans (SRTS) for each neighborhood in Kirkland.

These plans address education and encouragement, enforcement, evaluation and also identify projects based on equity and engagement that better connect kids to schools such as new sidewalks and enhanced crossings.

The Active Transportation Plan was closely coordinated with the development of the SRTS Action Plans in public outreach and project development. The ATP prioritizes projects that overlap with SRTS projects.

Vision Zero Action Plan

In 2015, Council adopted a Vision Zero policy to reduce serious injuries and fatalities in Kirkland by 2035. The Vision Zero Action Plan is being developed to identify safety improvements the City can make to reduce crashes in the city. There are some overlapping recommendations with the ATP but other actions noted only in the Vision Zero Action Plan that will benefit people walking and bicycling by making our streets and communities safer.

Cross Kirkland Corridor (CKC) Master Plan

The Cross Kirkland Corridor (CKC) Master Plan, adopted by the City Council in June 2014, outlines the community's vision for the corridor and will be used to guide development of the trail as well as transit and utility alignment. The plan includes the location of access points, types and locations of amenities, and how road crossings and mixing zones are handled. While the Active Transportation Plan identifies some strategies for assessing the current status of the CKC Master plan and next steps to push implementation forward, the CKC Master Plan retains its own body of work and recommendations.

Neighborhood Greenways Guidelines

Kirkland's Greenways Guidelines, developed in 2017, provide the City with clear recommendations for building out the neighborhood greenway network using best practices. This document is intended to be updated as new best practices are better understood, including lessons learned as the City begins to build out the greenway network.

Neighborhood Greenways are street corridors, where walking and bicycling for all ages and all abilities are the priority modes of travel and driving a motor vehicle is the alternative mode of travel. These are often streets with low speeds and low traffic-volumes that are comfortable alternative to bike lanes on busy arterials. Greenways often have signs, pavement markings and traffic control measures that enhance the comfort and safety of walking and bicycling. As such, driving an automobile on a greenway, by design, is less convenient than driving on the other streets. Greenways are an important tool for implementation of the Active Transportation Plan.

Figure 1.5: Neighborhood Greenway (City of Kirkland Neighborhood Greenways).

Neighborhood Safety Program

The Neighborhood Safety Program (NSP), authorized by the City Council in 2014, was created to re-energize Neighborhood Associations by empowering them to work collaboratively to identify, prioritize and address pedestrian and bicycle safety issues in Kirkland neighborhoods.

Each year there is a total of $350,000 available for projects citywide under $50,000, including $150,000 funded by the voter approved 2012 Streets Levy. Eligible projects include bike facilities, intersection or crosswalk improvements, traffic calming, trail access or streetlights. Projects are restricted to City owned property, including streets, parks, community facilities, and the Cross Kirkland Corridor.

The SRTS Action Plans and the ATP contribute to this process by providing the neighborhood associations more data driven recommendations at the neighborhood scale.

Figure 1.6: A stairway with bicycle runnel provides access to the CKC. This was completed as part of the Neighborhood Safety Program.

Sustainability Master Plan

CITY OF KIRKLAND
SUSTAINABILITY MASTER PLAN

While the Sustainability Master Plan was being developed, the update to the Active Transportation Plan had just begun. As a proxy, the City opted to use the League of American Bicyclists – Bicycle Friendly Community rating and the Walk Friendly Communities rating as guides to communicate how the City will address the sustainability goals for active transportation and for the development of the ATP. The Bicycle Friendly Community and the Walk Friendly Communities ratings include aspects of engineering, education, encouragement and evaluation that are addressed in the goals and objectives in the ATP. The ATP goals and strategies are designed to meet the highest standards for the Walk and Bicycle Friendly Communities ratings.

Transportation Demand Management

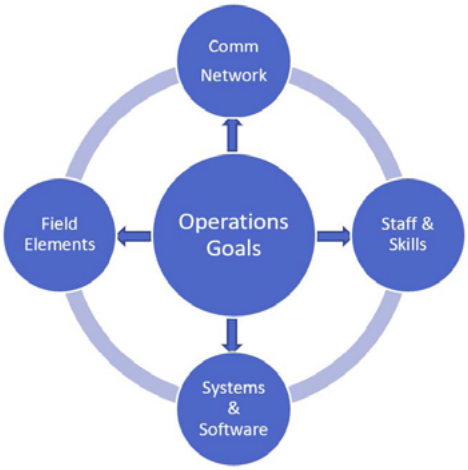
Kirkland has a Transportation Demand Management (TDM) coordinator who works on programs to encourage more people to take alternatives modes to driving alone such as walking, bicycling, carpooling and taking transit. Kirkland's Green Trip Program provides incentives such as transit passes or gift cards for people to reduce drive-alone trips and try other more sustainable modes of travel.

The TDM coordinator also works with major employers to encourage employees to walk, bike and take transit through Commute Trip Reduction (CTR) programs.

kgt Kirkland Green Trip

Intelligent Transportation Systems (ITS) Plan

The Intelligent Transportation Systems (ITS) Plan establishes operational goals of resiliency, reliability and responsiveness and provides a proposed investment plan for capital and maintenance costs to support these operational goals and multimodal goals within the Transportation Master Plan. The ITS plan identifies modal priority along principal arterials, and noted the improved detection of pedestrians and cyclists at intersections as a priority capital project.



Pathway to Transition Plan

The City's Pathway to Transition plan is a document which summarizes the compliance requirements of Title II of the Americans with Disabilities Act (ADA) which outlines actions needed to meet those requirements and the City's self-assessment results. The City's Transition Plan illustrates how and when the City plans to correct identified deficiencies. These address improvements including curb ramps, accessible pedestrian signals and push buttons as well as other essential infrastructure that improves access for persons with disabilities.

1.

GOALS AND OBJECTIVES

1 GOALS AND OBJECTIVES

This ATP update builds on a foundation of the goals, policies, and actions adopted in the 2015 Transportation Master Plan and the 2009 ATP and progress towards those benchmarks.

The following are the goals, objectives and strategies for the 2022 ATP:

Goal 1: Create a safe, connected pedestrian network where walking is a comfortable and intuitive option as the first choice for many trips.

OBJECTIVE 1-1: Prioritize **sidewalk gaps** that connect people to activity centers, transit, parks and the Cross Kirkland Corridor. Include equity measures as part of the prioritization process.

OBJECTIVE 1-2: Complete sidewalk on **both sides** of transit routes and at least one side of all remaining arterials.

OBJECTIVE 1-3: Develop and operationalize a sidewalk repair program that includes periodic inventories to ensure the City maintains current and future sidewalks.

OBJECTIVE 1-4: Increase pedestrian safety at crossings where needed to complete pedestrian networks and provide access to destinations.

Strategy 1-4-1: Assess and prioritize additional crossings or improvements to existing crossings.

Strategy 1-4-2: Continue to utilize a high standard for crossing treatments such as RRFBs or HAWK signals. Explore additional safety measures for crosswalk enhancements.

Strategy 1-4-3: Upgrade crossings to meet accessibility standards such as Americans with Disabilities Act (ADA)-compliant wheelchair ramps, push buttons with auditory or tactile aids for visual and hearing disabilities, or other improvements to accommodate all people.

Strategy 1-4-4: Add sufficient lighting to all remaining light deficient crosswalks and assess any additional lighting needs.

Figure 1.7: Safer crossing with RRFBs in Kirkland (City of Kirkland).

Strategy 1-4-5: Continue to support and monitor the pedestrian flag program.

OBJECTIVE 1-5: Provide additional pedestrian safety improvements at **intersections**.

Strategy 1-5-1: Explore opportunities for raised or painted intersections to increase safety and awareness at intersections with high pedestrian volumes.

Strategy 1-5-2: Identify opportunities to utilize technology and signals to increase pedestrian safety at signalized intersections such as passive detection, leading pedestrian intervals, or pedestrian only “scramble” phases.

Figure 1.8: Pedestrians crossing on Lake St South (City of Kirkland).

OBJECTIVE 1-6: Improve off-road pathways on public right-of-way to increase connectivity and accessibility to the walking and bicycling network.

OBJECTIVE 1-7: Explore opportunities to fund active transportation through public/private partnerships, transportation benefit districts or other innovative opportunities.

OBJECTIVE 1-8: Seek opportunities through tactical urbanism that explore low-cost, creative solutions for providing additional pedestrian safety.

OBJECTIVE 1-9: Improve **lighting** on the CKC, on higher volume streets, and in low light areas or corridors where high pedestrian use is expected.

OBJECTIVE 1-10: Make getting around on foot intuitive by planning and installing a pedestrian **wayfinding** system to and from the CKC and to other destinations.

OBJECTIVE 1-11: Ensure pedestrian facilities can be maintained over time and repaired as needed.

Figure 1.9: Curb bulbout with delineators and a CKC wayfinding sign at intersection of 114th Ave NE and NE 87th St (City of Kirkland).

Figure 1.10: Cross Kirkland Corridor (City of Kirkland).

Figure 1.11: Rectangular Rapid Flashing Beacon (City of Kirkland).

OBJECTIVE 1-12: Enhance pedestrian and bicycle facilities along **Lake Washington Waterfront** and in **downtown**.

OBJECTIVE 1-13: Achieve a Platinum Walk Friendly Communities rating consistent with the goal in the Sustainability Master Plan.

OBJECTIVE 1-14: Monitor sidewalk **conditions** and repair as needed and ensure major obstructions are addressed. Continue to engage with the community to prevent obstruct sidewalks and pedestrian facilities with parking, trash bins, signs etc.

OBJECTIVE 1-15: Prioritize and implement bicycle and pedestrian safety actions in the special projects section of the ATP.

Goal 2: Create a connected bicycle network that accommodates people of all ages and abilities to get to destinations such activity centers, parks, and transit.

OBJECTIVE 2-1: Complete a connected spine network of safe high comfort cycling facilities such as protected facilities, separated trails or pathways, neighborhood greenways supplemented by a denser network of additional bike lanes or other on-road bike facilities.

Strategy 2-1-1: Seek opportunities to separate existing and future bike facilities on arterials from motor vehicle traffic with buffers or greater protection such as a curb, delineators or other more durable barriers. Use best practices when designing bicycle facilities.

Strategy 2-1-2: Maintain all bike lane symbols, striping, green paint and buffer paint and ensure all bike lanes have standard bike symbols.

Strategy 2-1-3: Continue to identify opportunities to modify channelization markings to provide more street space for people bicycling.

Strategy 2-1-4: Continue to build a network of greenways.

Strategy 2-1-5: Coordinate with Parks and Community Services, Planning and Building and Public Works to ensure all new outdoor staircases that increase non-motorized connections include runnels (a track for bike wheels). Evaluate opportunities to retrofit existing staircases.

OBJECTIVE 2-2: Improve bicycle safety at controlled and uncontrolled intersections.

Strategy 2-2-1: Connect all bike lanes to and through signalized intersections.

Strategy 2-2-2: Apply green conflict zone markings through controlled and uncontrolled intersections for all bike lanes on arterials.

Strategy 2-2-3: Prioritize protected intersections with major capital improvements.

Strategy 2-2-4: Apply green conflict zone markings where bike lanes cross dedicated right turn lanes.

Figure 1.12: Loop bicycle detection system in Portland, OR (NACTO).

Strategy 2-2-5: Consider two-stage turn bike boxes where high rates of left turn bike movements are expected.

Strategy 2-2-6: Coordinate with Parks and Community Services to ensure complete connections to city parks.

OBJECTIVE 2-3: Seek opportunities through tactical urbanism that explore low-cost, creative solutions for providing additional bicycle safety.

Figure 1.13: A runnel being used by a bicyclist onto the CKC (City of Kirkland).

OBJECTIVE 2-4: Prevent the obstruction of bike facilities and accommodate bike routes through construction zones.

Strategy 2-4-1: Accommodate bicyclists through construction zones by providing appropriate warning, detour signage and notification; temporary facilities where needed. Work with developers to ensure the same accommodations are made through privately managed construction projects.

Strategy 2-4-2: Coordinate with enforcement and communications teams on community outreach to educate the public and bring awareness to bike facilities to prevent the obstruction of bike facilities by parked vehicles, trash bins, signs or other obstructions that would hinder their use or negatively affect cyclist safety.

OBJECTIVE 2-5: Make bicycling in Kirkland intuitive through maps and wayfinding.

Strategy 2-5-1: Consider additional bicycle oriented wayfinding to help cyclists navigate to nearby neighborhood greenways or other low volume bicycle routes. This would supplement other wayfinding on Greenways and other pedestrian wayfinding to access the CKC and other destinations.

Strategy 2-5-2: Regularly update the bike map and provide the map in a variety of accessible formats.

OBJECTIVE 2-6: Explore opportunities to utilize technology to improve bike safety and accommodation.

Strategy 2-6-1: Upgrade bicycle detection system or other detection options at signalized intersections.

Strategy 2-6-2: Explore signal timing improvements for bicyclists such as leading intervals and bike only phases.

OBJECTIVE 2-7: Ensure bicycle infrastructure improvements is maintained over time such as green striping, maintaining protected facilities and removing debris.

OBJECTIVE 2-8: Explore opportunities to implement a bike share program and consider adding electric foot scooter share or other micro-mobility technologies.

Figure 1.14: Lake Washington Loop wayfinding signage (City of Kirkland).

OBJECTIVE 2-9: Achieve a Platinum Bicycle Friendly Communities rating consistent with the goal in the Sustainability Master Plan.

OBJECTIVE 2-10: Update bicycle parking policy and programs to ensure parking is available at both ends of bike trips.

Strategy 2-9-1: Work with the Planning and Building Department to update bike parking policy for both short term and long term secure parking at transit facilities, multifamily or mixed-use buildings, offices and other appropriate land uses.

Strategy 2-9-2: Assess short-term parking needs within the right-of-way and develop a program to provide short-term bike parking near amenities and at key destinations.

Strategy 2-9-3: Explore opportunities for temporary bike parking at special events.

Strategy 2-9-4: Work with transit agencies to add secure bike parking at transit centers.

Figure 1.15: 2017 Bike Everywhere Day Celebration Station at Marina Park (City of Kirkland).

Goal 3: Encourage and incentivize more people to walk and bike, encourage safe behavior for all users of the transportation system.

OBJECTIVE 3-1: Encourage and incentivize more people to walk and bike through education and encouragement activities such as special events, Bike Everywhere Month, and social media campaigns.

Strategy 3-1-1: Conduct outreach with community groups, colleges in the City to develop and implement encouragement and incentive programs.

Strategy 3-1-2: Continue to promote and grow the Kirkland Green Trip program.

Figure 1.16: LWSD Walk to School Day (City of Kirkland).

OBJECTIVE 3-2: Coordinate with the Lake Washington School District (LWSD) and with the objectives in the Safer Routes to School Action Plans on communication, education, encouragement and activities focused on children taking active transportation to school and for other trips.

Strategy 3-2-1: Participate in walk and bike to school month/days.

Strategy 3-2-2: Coordinate with school resource officers by supporting pedestrian and bike safety curriculum that they can bring into the classrooms.

Strategy 3-2-3: Utilize the bike trailer received by Lake Washington School District (in coordination with the City of Kirkland) for special events and bike training education for kids.

OBJECTIVE 3-3: Provide travel information about how people can get to downtown, special events and other activities through alternatives to driving.

OBJECTIVE 3-4: Coordinate with the Parks and Community Services Department on opportunities for increased bike and pedestrian education such as a bicycle traffic garden for youth education.

OBJECTIVE 3-5: Coordinate with the communications team on public messaging related to pedestrian and bicycle safety education, sharing the road, and safe travel behavior as well as encouragement and travel information.

OBJECTIVE 3-6: Coordinate with the Parks and Community Services Department, Planning and Building Department and neighborhoods to ensure active transportation supports local neighborhood destinations.

SUPPORTIVE GOALS

In addition to the three primary goals of the ATP, there are several supporting goals that supplement the primary goal objectives through specific initiatives as follows:

Supportive Goal S1: Achieve the Master Plan Vision of the Cross Kirkland Corridor.

The Cross Kirkland Corridor Master Plan, adopted by the City Council in June 2014, outlines the community's vision for the corridor and will be used to guide development of the trail as well as transit and utility alignment. The plan includes the location of access points, types and locations of amenities, and how road crossings and mixing zones are handled. While the Active Transportation Plan identifies some strategies for assessing the current status of the CKC Master plan and next steps to push implementation forward, the CKC Master Plan retains its own body of work and recommendations. The City will continue to monitor development along the corridor to leverage opportunities to further develop the trail when new development occurs, and will begin to identify the next stages for capital project development.

OBJECTIVE S1-1: Create a Cross Kirkland Corridor Implementation/Action Plan that addresses the remaining unfinished investments noted in the CKC Master Plan.

Strategy S1-1-1: Identify unfinished connections and prioritize for future investments.

Strategy S1-1-2: Upgrade maps and other signs on the trail to encourage safe behavior and facilitate wayfinding to make access to destinations intuitive.

Strategy S1-1-3: In coordination with Parks and Community Services, identify additional opportunities to develop linear parks along the CKC that enhances the trail and bicycle network.

Supportive Goal S2: Implement the recommendations in the Vision Zero Action Plan.

In 2015, Council adopted a Vision Zero policy to reduce serious injuries and fatalities in Kirkland by 2035. The Vision Zero Action Plan is being developed to identify strategies for how the City can reduce crashes in the city. There are some overlapping recommendations with the ATP but other actions noted only in the Vision Zero Action Plan that will have benefit people walking and bicycling by making our streets and communities safer. Specific strategies related to the Vision Zero objectives are found in other goals in the ATP framework. The following objectives mirror the Vision Zero Action Plan framework:

OBJECTIVE S2-1: Prioritize Safe Street Design and Investments.

OBJECTIVE S2-2: Operate Safe Streets.

OBJECTIVE S2-3: Promote and Institutionalize a Culture of Safety.

OBJECTIVE S2-4: Build a Robust and Transparent Data Framework.

Supportive Goal S3: Utilize technology to support safety measures and supplement safe networks.

Technology can play a significant role in making transportation efficient and effective. For example, technology can help reduce the number of interactions people walking and bicycling have with drivers at signalized intersections. In addition, better understanding the number of people walking and bicycling in the city as well as where crashes occur can better facilitate decisions for where the needs are greatest.

This information also helps the City make the case for new infrastructure through current programs or when seeking outside grant funds.

OBJECTIVE S3-1: Utilize opportunities with Intelligent Transportation Systems (ITS) infrastructure to facilitate safety improvements at signalized intersections.

Strategy S3-1-1: Explore opportunities to improve pedestrian and bicycle safety with leading pedestrian/bike intervals, or pedestrian/bike only signal phases.

Strategy S3-1-2: Explore technology that can better detect people bicycling on the roadway or pedestrians at crosswalks.

Strategy S3-1-3: Consider advances in technology that better accommodate people with disabilities.

OBJECTIVE S3-2: Develop a program to gather bicycle volume at key points in the City in a manner that is meaningful for measuring safety and ridership trends.

Strategy S3-2-1: Invest in permanent counters at various locations along the Cross Kirkland Corridor.

Strategy S3-2-2: Upgrade signalized intersection counts to improve data analytics of pedestrian and bicycle volumes.

Strategy S3-2-3: Expand current count program to better measure other areas of the city not currently covered by existing count programs, and to facilitate before/after counts of projects.

OBJECTIVE S3-3: Build a Robust and Transparent Data Framework.

Strategy S3-3-1: Develop a dashboard on the City website to better communicate pedestrian and bicycle volumes, trends, and crash data.

Figure 1.17: Bicycle counter on Seattle's Fremont Bridge (Puget Sound Business Journal).

Supportive Goal S4: Implement the recommendations in the Safer Routes to School Action Plans.

The City worked in partnership with the Lake Washington School District, law enforcement, design professionals, students, parents, and neighborhoods to identify key steps to make walking, rolling, and riding the bus to school safer and more convenient. The outcome of this process was the development of the Safer Routes to School Action Plans (SRTS) for each neighborhood in Kirkland. These plans address education and encouragement, enforcement, evaluation and also identify projects based on equity and engagement that better connect kids to schools.

The development of the Active Transportation Plan was coordinated with the SRTS Action Plan development in terms of outreach and project development. While there is significant overlap, the ATP does not focus on school access because of this specific body of work. However, the ATP does prioritize projects that overlap SRTS projects in order understand multiple benefits.

Figure 1.18: Sixth Street improvements, which included water, sewer, storm, sidewalk, overlay and reconstruction and traffic signals (City of Kirkland).

2.

COMMUNITY VOICES- PUBLIC ENGAGEMENT SUMMARY

2 COMMUNITY VOICES - PUBLIC ENGAGEMENT SUMMARY

Community engagement was a key component in this ATP update to understand baseline interest in walking and bicycling, as well as barriers that currently keep people from walking and bicycling more.

The update to the Active Transportation Plan began in 2019 with some initial engagement activities such as community meetings and an on-line survey. Due to COVID-19 pandemic related delays, the timeline for the plan update was extended. Staff restarted an extensive public outreach schedule in 2021 that included over 20 meetings with various groups throughout the year. In total, these engagement efforts included:

- Neighborhood association meetings
- Interest group meetings
- Community meeting at City Hall (pre-pandemic)
- City Hall for All event (2021)
- Virtual community meetings
- Online public comment form
- Story Map and interactive Web Map

The virtual community meetings, survey, and opportunities to comment on the webpage were advertised using social media, email lists and through This Week in Kirkland publication. The Transportation Commission was also briefed six times throughout the process prior to the release of the draft plan and staff engaged with the City Council at their April 20, 2021 and March 15, 2022 study sessions.

Figure 1.19: ATP community meeting leveraged on Kirkland's twitter page (City of Kirkland).

SAFE AND ACTIVE TRANSPORTATION SURVEY

Between November 2019 and January 2020, the City conducted a Safe and Active Transportation survey to inform both the Active Transportation Plan and the Safer Routes to School Action Plans. This survey received 1,278 responses.

Figure 1.20: Community engagement in 2019 - early 2020 for safe and active transportation (City of Kirkland).

KEY TAKEAWAYS

Most comments from the public engagement process were safety related concerns. The substance of the comments varied, but many recurring topics included:

- Need to lower vehicle speeds
- Desire for greater pedestrian connectivity and noted lack of or disconnected sidewalks in some areas
- Need for greater separation of modes such as protected bike lanes
- Need for improved roadway crossings
- Problematic human behavior such as cars failing to yield to pedestrians

The City also received many location specific comments, and several general questions. Some general questions/ comments included:

- Appropriate use of electric bikes and scooters in bike lanes and on sidewalks
- Trade-offs between parking and other uses of right-of-way (people suggested to remove parking in lieu of bike lanes , others expressed concern about parking availability)
- Need to ensure bike lanes and sidewalks are not blocked by cars, trash bins or debris

The results of this engagement process, combined with needs and network analysis, were used to inform the program and policy recommendations as well as the bicycle and pedestrian network and facility recommendations within this plan.

The chart on the following page shows what the City heard from people who are interested in walking or bicycling more. See **Appendix A** for more information about the public engagement process, detailed survey results and specific comments received.

Figure 1.21: Walk to School Day Community Engagement (City of Kirkland).

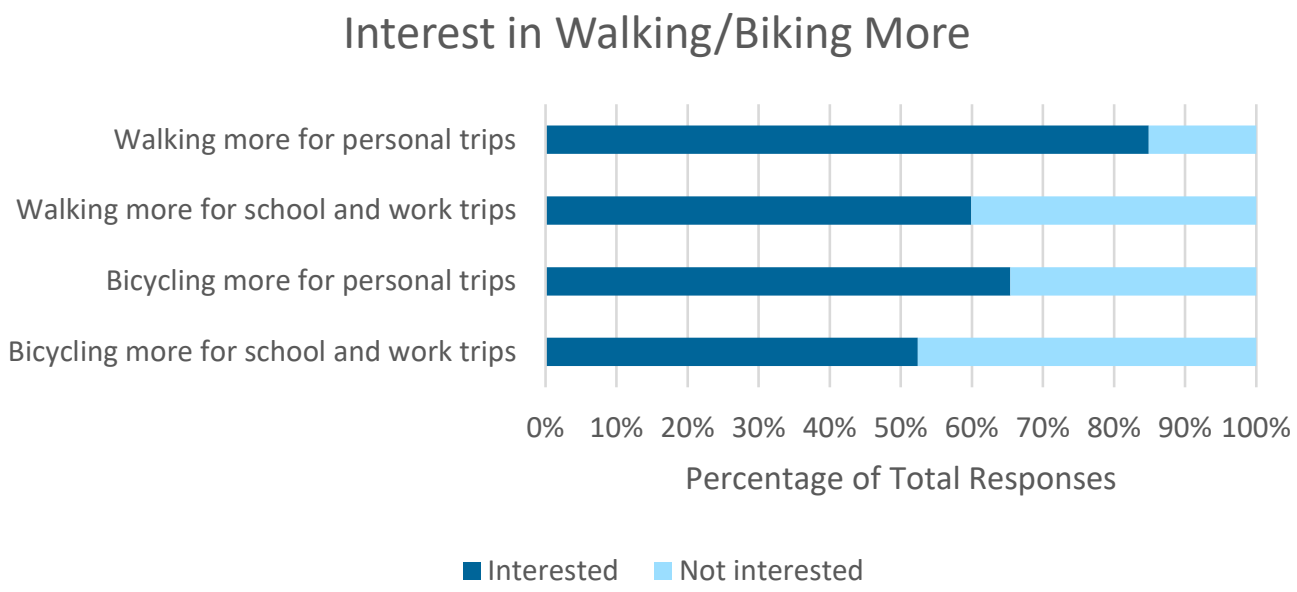


Figure 1.22: Interest in walking and biking more based on 2019-20 Safe and Active Transportation Survey (City of Kirkland).

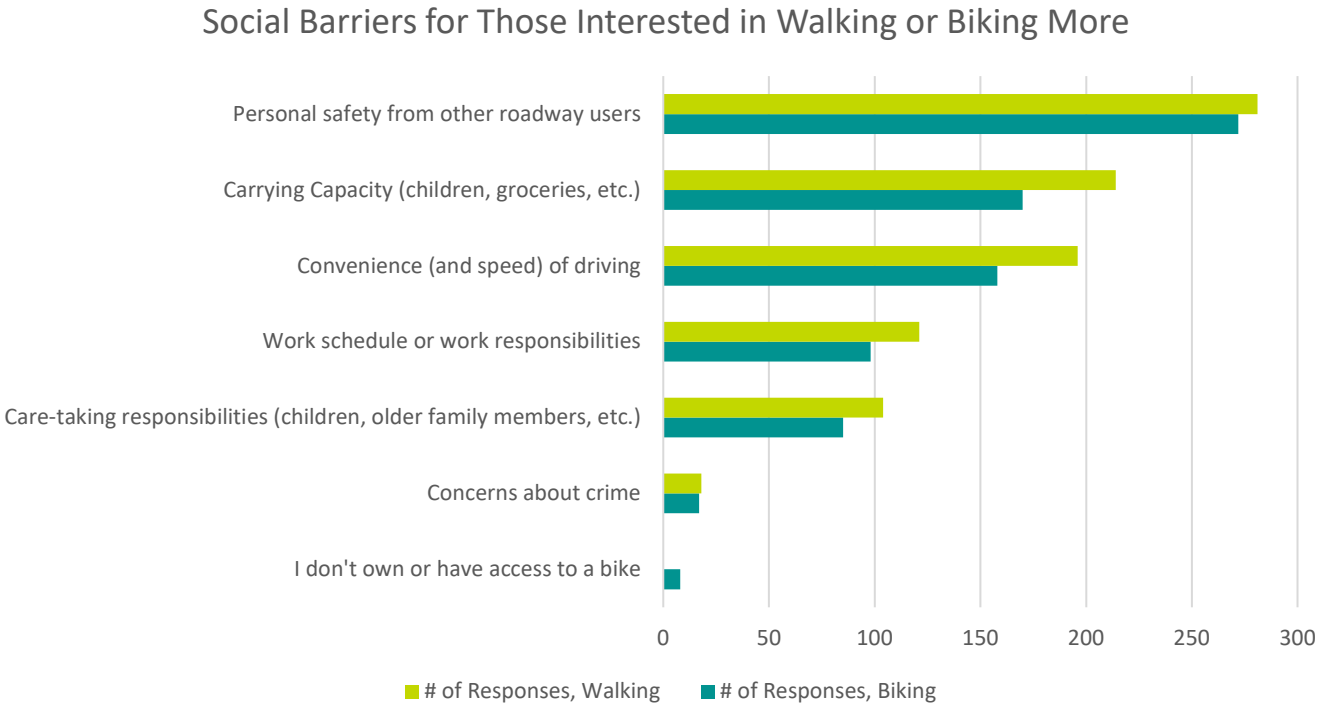


Figure 1.23: Social barriers for those interested walking and biking more based on 2019-20 Safe and Active Transportation Survey (City of Kirkland).

3.

WALKING AND BICYCLING IN KIRKLAND TODAY

3 WALKING AND BICYCLING IN KIRKLAND TODAY

As Kirkland continues to grow, it will be increasingly important to provide a range of safe and convenient transportation options, including safe and comfortable walking and biking networks to get to destinations.

There simply is not enough space within the public right-of-way to accommodate a growing number of automobile trips without resulting in severe congestion. Since the Active Transportation Plan was adopted in 2009, the City annexed three previously unincorporated districts north of the city: Finn Hill, North Juanita, and Kingsgate. The annexation added 33,000 residents and nearly 7 square miles to Kirkland in 2011. The City has also seen unprecedented growth and development, particularly in Totem Lake, Juanita, and Downtown. Future development is currently being planned by upzoning the station area adjacent to the I-405/ NE 85th St interchange in anticipation of future Sound Transit Stride Bus Rapid Transit service along I-405, which is anticipated to bring over 6,000 new households and nearly 18,000 new jobs above existing levels by 2044.

WHAT IS IT LIKE TO WALK IN KIRKLAND TODAY?

Currently, almost 86% of Kirkland's arterials and 81% of collectors have sidewalks on at least one side of the street. In some instances, extruded curbs have been used to define walkways on the roadway as an interim treatment where no sidewalk currently exists. Many of these temporary walkways are located on school walk routes.

Figure 1.24: Extruded curb utilized by pedestrians (City of Kirkland).

When the 2009 ATP was adopted, a stated plan goal was to complete sidewalks on one side of all arterials. At that time, the City had not yet annexed Finn Hill, North Juanita, and Kingsgate. As the City evaluates how well this objective has been met, these annexed areas are included in this evaluation. Of the remaining sidewalk gaps on one side of arterials, 42% of those gaps are located in the annexed areas. See Figure 1.25.

The City has also installed 63 Rectangular Rapid Flashing Beacons (RRFBs), three overhead crosswalk flashers (two of which are funded to be upgraded) and two in-pavement crosswalk flashers. The overhead and in-pavement flashers are identified to be upgraded.

In addition to sidewalk network and crossing treatments, the City has a number of paved and unpaved pathways that connect through neighborhoods and break-up long blocks. Many of these pathways include public access points to the Lake Washington waterfront. As future development occurs, Kirkland's Citywide Connections Map identifies additional neighborhood connections that will be added to this system.

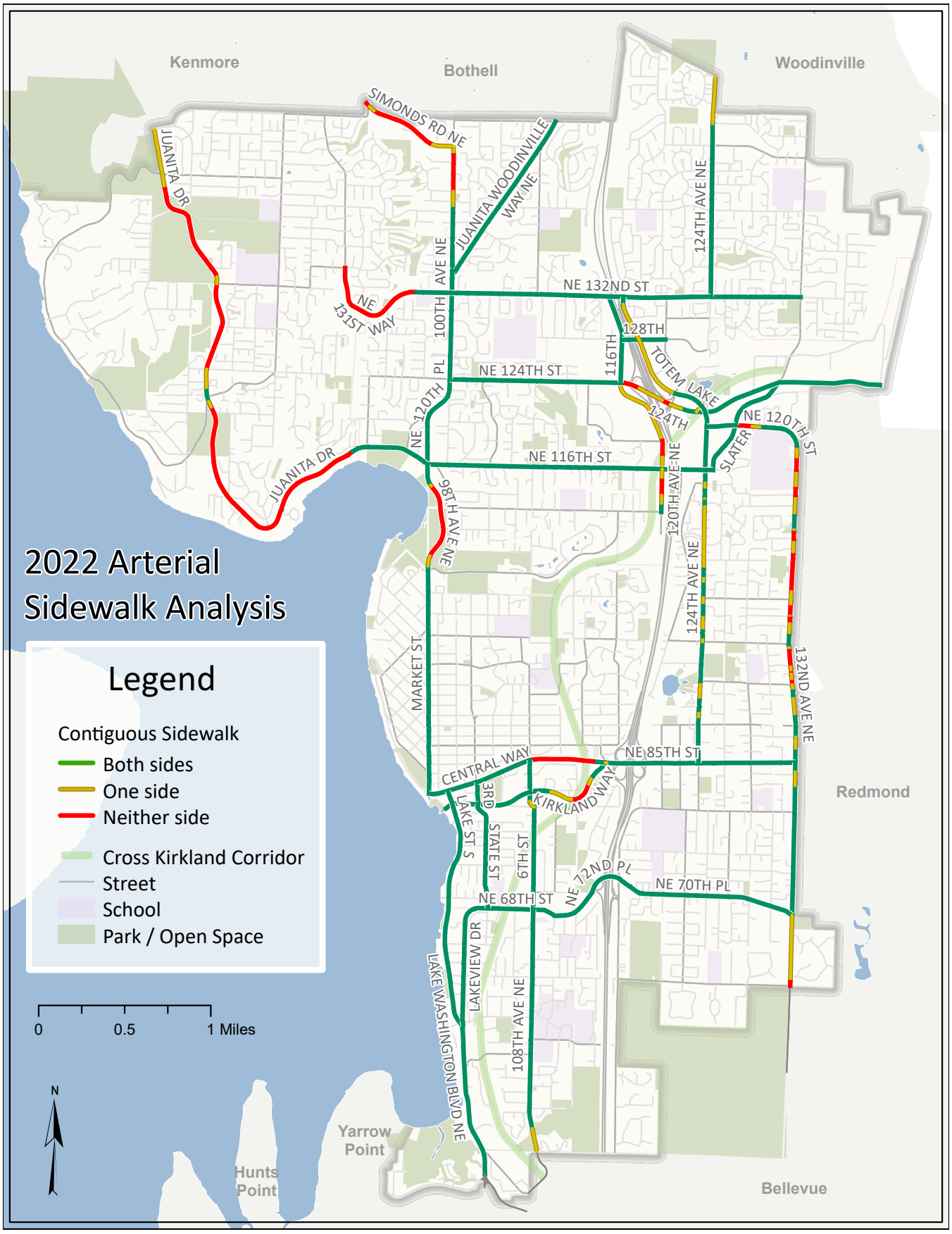


Figure 1.25: Remaining Arterial Sidewalk Gaps.

PEDESTRIAN NETWORK ANALYSIS

The pedestrian network in Kirkland is comprised of sidewalks, trails, short neighborhood connections, curb ramps and other roadway crossing infrastructure, as well as the numerous destinations that people access by foot. A key focus of this plan is to identify both sidewalk and crossing improvements to increase safe and convenient pedestrian access to destinations including transit, activity centers, parks, and the Cross Kirkland Corridor.

SIDEWALK GAPS

Kirkland has made significant progress in meeting its policy goals focused on building out the sidewalk network along arterial streets, but there are still some important gaps to be filled, see Figure 1.25.

In addition to sidewalk gaps on arterial streets, this plan identified all remaining sidewalk gaps, which are shown in Figure 1.28. Many remaining sidewalk gaps are on neighborhood streets that don't provide through block connections or access to community destinations. Still others are along major streets with transit, within activity centers, or along other streets that provide direct access to these destinations, as well as parks.

Figure 1.26: RRFBs on 6th St in Kirkland (City of Kirkland).

STREET CROSSINGS

Being able to cross major streets without having to go too far out of direction and with confidence that drivers will stop are two important factors that support walking. Kirkland has been a model for making street crossings safer and more convenient for people walking with its pedestrian flag program and widespread deployment of safety treatments such as median refuge islands and rectangular rapid flashing beacons (RRFBs) but there is still work to be done. This plan identifies where additional street crossing enhancements are needed to improve access to high frequency transit, activity centers, and parks. Similar to sidewalk gaps, there are street crossing enhancements identified in the Safer Routes to School Action Plans which also provide broader pedestrian network benefits and improve community access and safety.

Figure 1.27: RRFB crossing with median refuge island at NE 116th St near Alexander Graham Bell Elementary School (City of Kirkland).

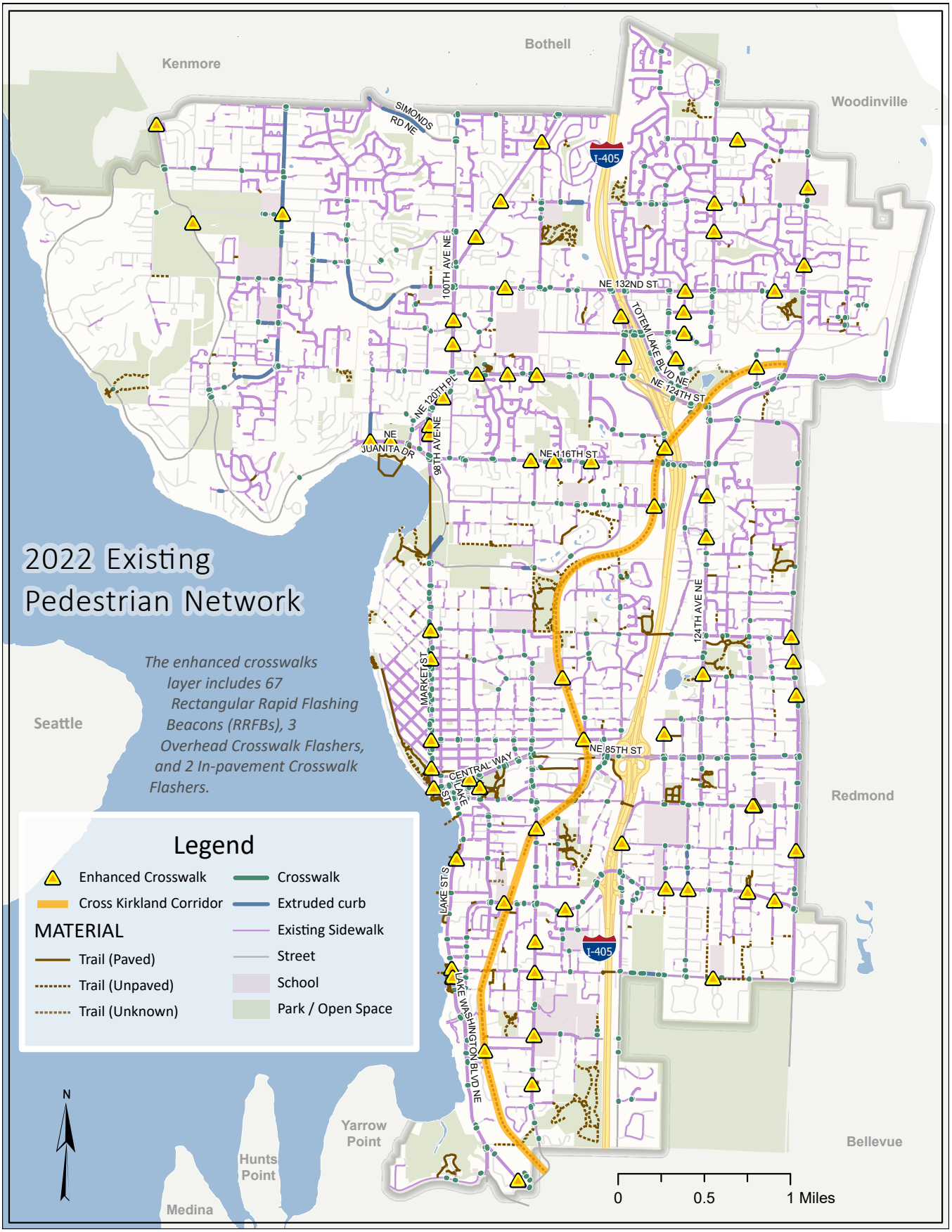


Figure 1.28: 2022 Existing Pedestrian Network.

WHAT IS IT LIKE TO BICYCLE IN KIRKLAND TODAY?

Kirkland has a growing bikeway network consisting primarily of bike lanes. Over time, the City has worked to add buffers to many bike lanes and green conflict zone markings at intersections.

The City has recently implemented its first two neighborhood greenways – NE 75th St and 128th Ave NE. Taken together, these two greenways greatly improve all ages and abilities accessibility in the Rose Hill neighborhood. Neighborhood greenways prioritize a select network of residential streets for people of all ages and abilities to feel safe to walk and ride bicycles. These are often streets with low speeds and volumes that can provide a comfortable environment for walking and bicycling as opposed to bike lanes on busy arterials.

The Cross Kirkland Corridor (CKC) is a wildly popular soft surface multimodal trail that attracts mainly recreational walking and biking. As the CKC becomes more integrated with the on-street bicycle network through neighborhood and street connections and eventually is paved, it will play an increasingly important role in Kirkland's bicycle network.

Figure 1.32 shows Kirkland's existing bicycle network. Table 1.1 summarizes the mileage of the various bikeway types that comprise Kirkland's bicycle network.

Facility Type	Miles
Bike Lane	55.97
Buffered Bike Lane	8.62
Protected Bike Lane	0.19
Shared Lane Markings	2.08
Total	**66.86**

Table 1.1: Mileage of bicycle facilities (City of Kirkland).

Figure 1.29: Buffered bike lane on 84th Ave NE (City of Kirkland).

Figure 1.30: Bike lane on Lake Washington Blvd (City of Kirkland).

Figure 1.31: Community members walking and biking on the Cross Kirkland Corridor (City of Kirkland).

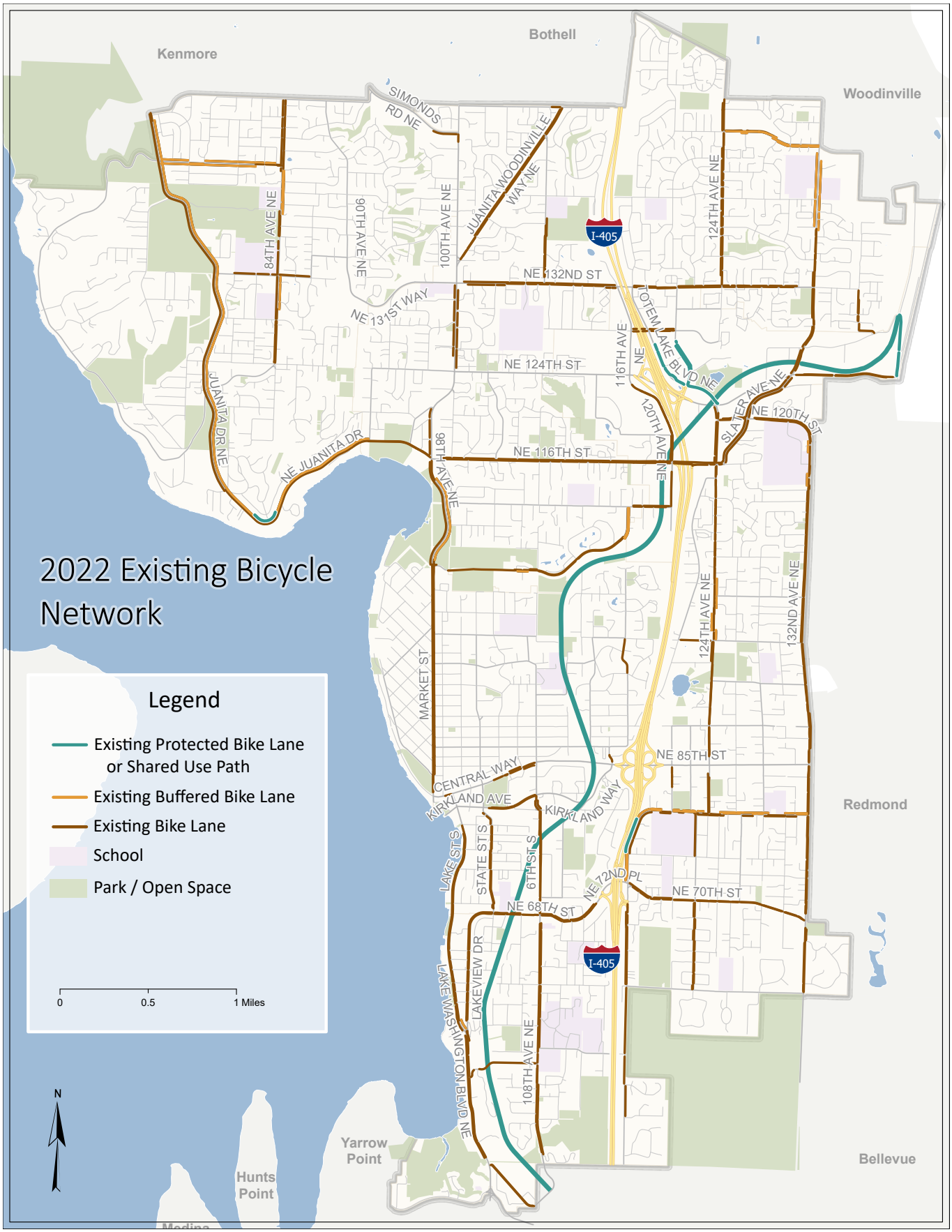


Figure 1.32: 2022 Existing Bicycle Network.

BICYCLE NETWORK ANALYSIS

A network analysis was conducted to determine how well the existing and planned network from the 2015 TMP provide connections to community destinations using "low-stress" bikeways, i.e., bikeways that less confident and more cautious "interested but concerned" bicyclists would feel comfortable using. An example of a lower-stress bikeway would be a buffered bike lane on a street with a 25 MPH speed limit and not large amounts of traffic or a neighborhood greenway.

This analysis begins by assessing the level of traffic stress (LTS) that takes into account the speed and volume of the roadway as well as existing bicycle facilities. Then, connectivity is assessed to see how well the existing bikeway network connects to destinations through unbroken low-stress routes. This is called the Bicycle Network Analysis (BNA). This process identified areas of Kirkland that are not well-served by low-stress bicycle connections. Areas with a low BNA score were assessed to determine what bicycle facility improvements are needed to create a low-stress connection, which informed the network recommendations presented in the next chapter.

Level of Stress in denser areas:

It is important to note that the level of stress is high in some areas that have or are experiencing significant growth such as in the downtown core, Juanita and the 85th Station Area, Totem Lake area is also another area where getting through the urban center is improving but connecting to it can be stressful. These are areas that the City will focus on creating connections to and through that are less stressful for people to walk and bike.

KEY TAKEAWAYS FROM THE BICYCLE NETWORK ANALYSIS

There are several areas where existing and planned bicycle facilities (per the 2015 TMP) still result in a low BNA score i.e., are not well-connected with low-stress bicycle facilities. These include:

- Totem Lake area
- Highlands neighborhood
- Finn Hill
- Portions of the Moss Bay, Everest, Market and South Juanita neighborhoods

This low connectivity is a result of one or more high-stress streets that provide critical connections to and from the neighborhood (e.g., NE 124th St, Market St, 116th Ave NE) or need to be crossed. In some cases, there are alternative connections within a reasonable distance of these high-stress corridors to implement low-stress bikeways, while in other cases there are no good route alternatives. For example, providing a low-stress bicycle connection on NE 124th St would greatly improve connectivity to the Totem Lake area for many people. However, it would be challenging to install a low-stress bikeway on NE 124th St in the near-term given the volumes of traffic on that street and limited space. NE 116th St and NE 128th St offer alternative east-west routes that would greatly improve the Totem Lake area's overall connectivity to the citywide network and are more feasible to implement low-stress bikeways.

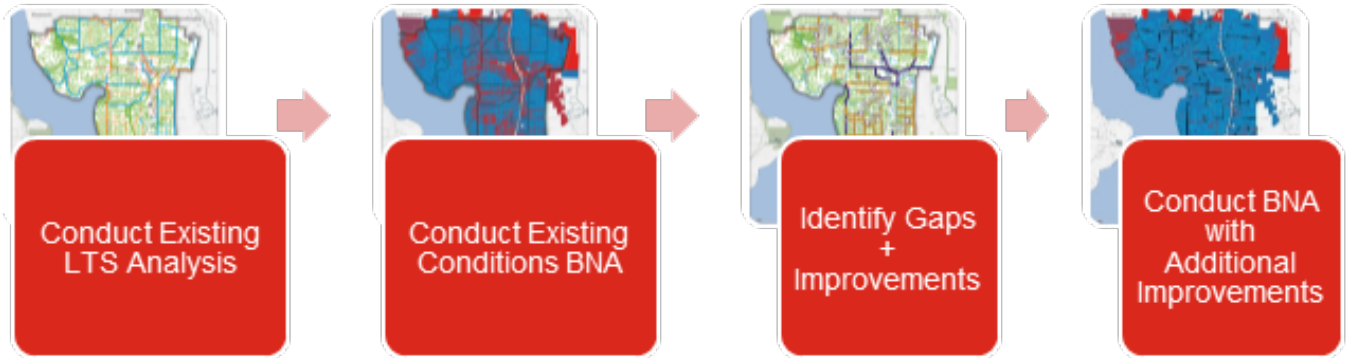
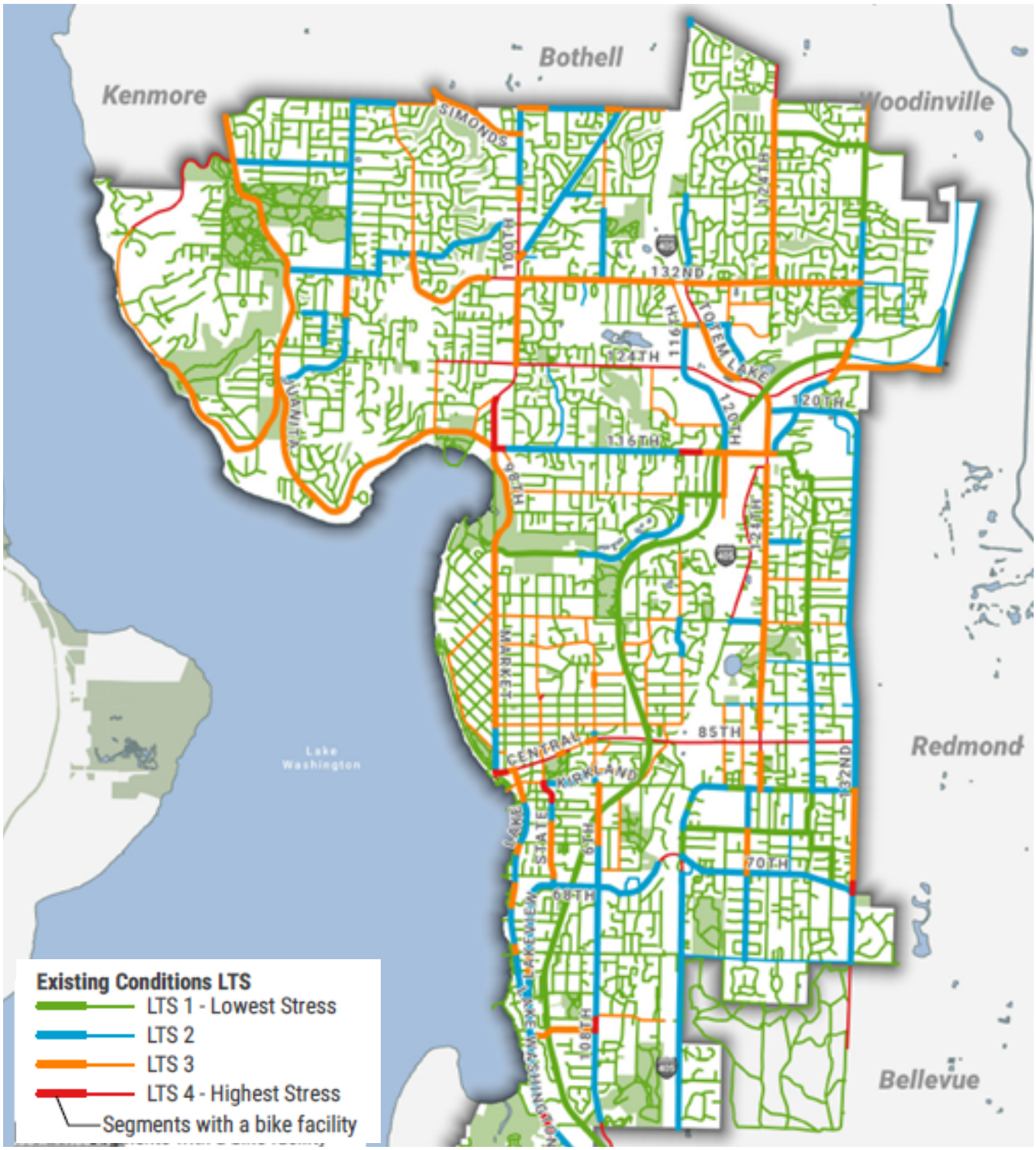


Figure 1.33: Bicycle Network Analysis process.

Level of Traffic Stress on Existing Network



TOOLE DESIGN

Figure 1.34: Level of Traffic Stress on Existing Network.

KIRKLAND'S EXISTING BICYCLE NETWORK IS MOSTLY FOR "ENTHUSED AND CONFIDENT" BICYCLISTS

Currently, the majority of Kirkland's neighborhood street network provides low-stress conditions; meaning they are streets with low vehicle speeds or volumes. However, many of these streets are discontinuous, do not offer direct connections, or have steep grades that present challenges for the casual cyclists or families within the "interested but concerned" demographic. Many of Kirkland's existing bike lanes do not offer a low-stress riding experience primarily because they do not provide sufficient separation to adjacent motor vehicle traffic on roadways with higher vehicle speed and volumes. These "higher stress" bikeways are displayed as orange and red in Figure 1.34. There are existing bike lanes (blue lines) that offer sufficient comfort for many adults, but these mostly occur as isolated segments, which can create stressful conditions for less confident bicyclists. The Cross Kirkland Corridor and new neighborhood greenways offer the lowest stress riding experience and are considered appropriate for people of all ages and abilities.

CRASHES INVOLVING PEOPLE WALKING AND BIKING

Every year dozens of people walking and bicycling in Kirkland are involved in collisions. Fortunately, many of these collisions don't result in injury, but far too many do. Three people who were walking were killed and another 25 were seriously injured in traffic collisions between 2015 and 2019. During the same period, 11 bicyclists were seriously injured in traffic collisions. Figure 1.35 shows the total number of collisions involving people walking and bicycling.

On average there are nearly 60 collisions per year involving people walking or bicycling. Over a five-year period bicycle and pedestrian collisions comprise 18% of all collisions, yet represent a small fraction of all trips taken in Kirkland. Figure 1.36 shows the disproportionate share of serious and fatal injuries among people walking and bicycling.

People of all ages and abilities are making trips on foot or with mobility assistance devices in Kirkland. While the majority of people walking involved in traffic collisions are in the 21 to 60-year-old range, about one-third are children or older adults. Figure 1.37 shows the distribution of pedestrian collisions by age. More information can be found in the Vision Zero Action Plan and transportation safety plans.

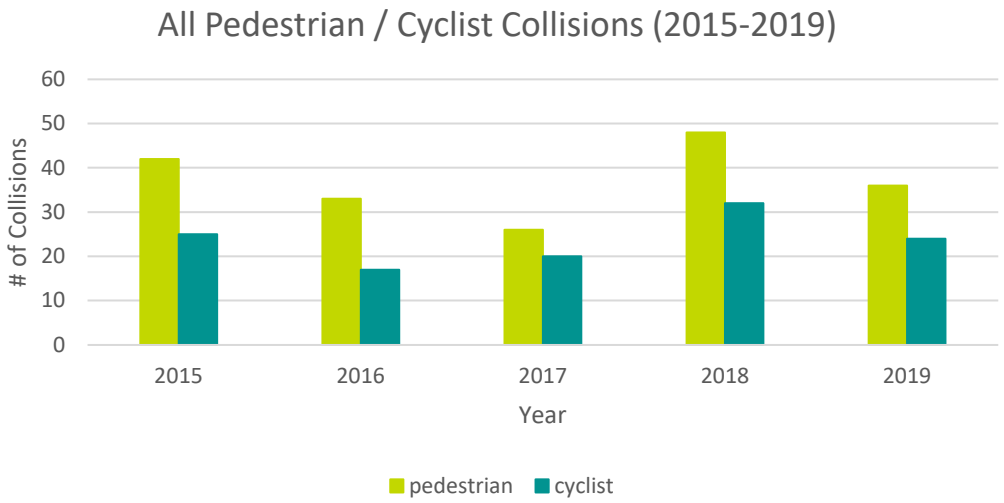


Figure 1.35: Pedestrian and Cyclist Collisions by Year (2015-2019).

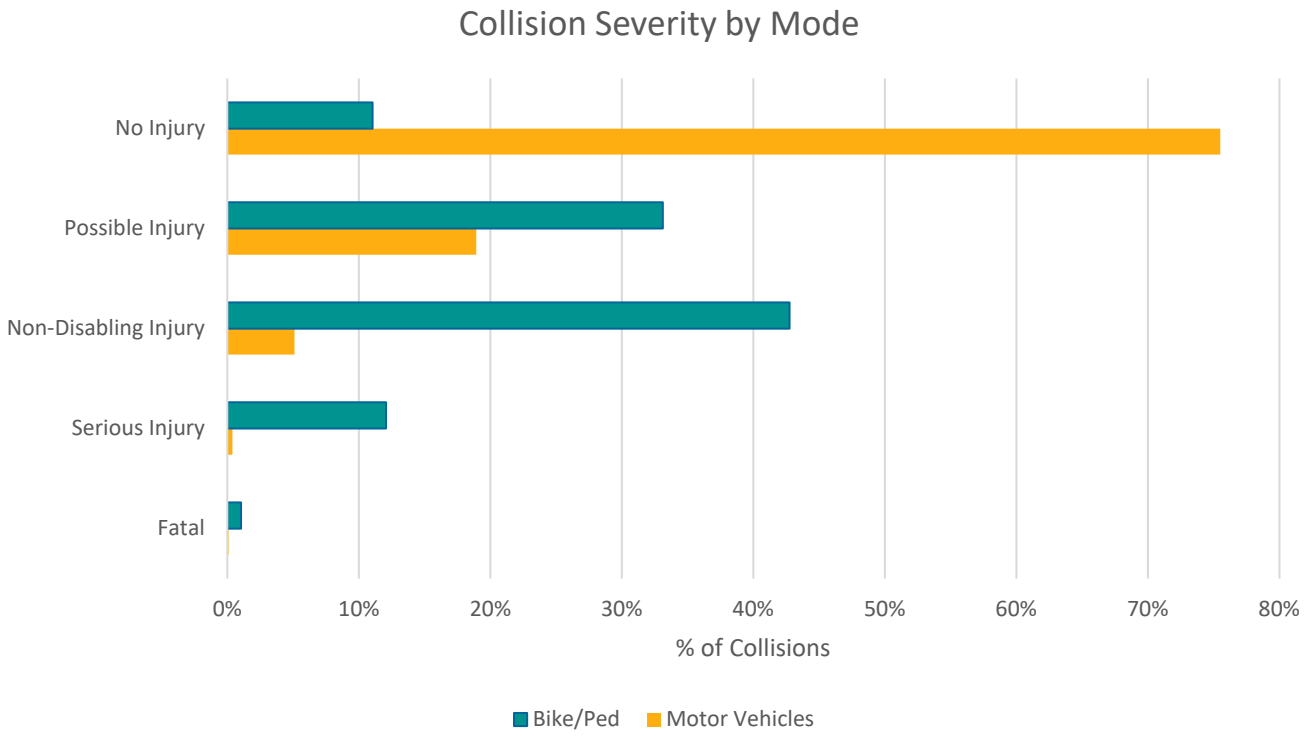


Figure 1.36: Collision Severity by Mode (2015-2019).

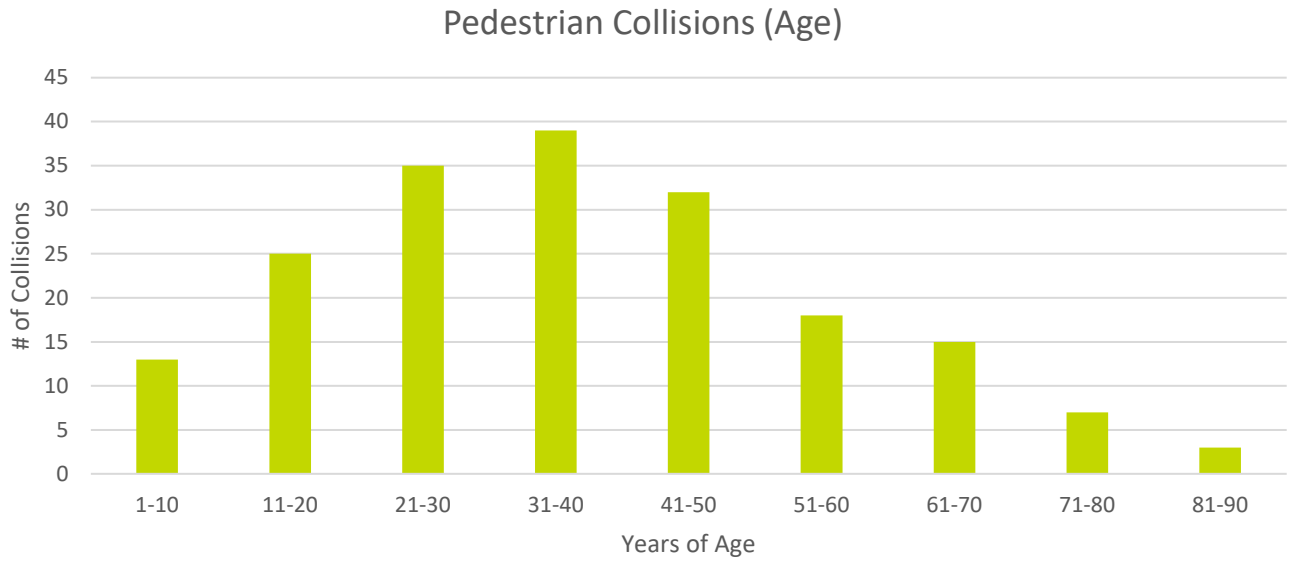


Figure 1.37: Pedestrian Collisions by age (2015-2019).

4.

THE FUTURE OF WALKING AND BICYCLING IN KIRKLAND

4 THE FUTURE OF WALKING AND BICYCLING IN KIRKLAND

This plan envisions safe, complete, connected pedestrian and bicycle networks in Kirkland and identifies and prioritizes infrastructure projects to realize this vision.

The ATP network recommendations are solely within the public right-of-way and focus on access to activity centers, transit, parks, and the Cross Kirkland Corridor. Other City plans including the PROS Plan and SRTS Action Plans focus on walking and bicycling access to and through parks, green spaces, and school properties. The pedestrian network analysis and the bicycle network analysis described in the previous chapter identified where the gaps exist in the walking and bicycling networks. Based on that network analysis, this chapter outlines a vision for a full build out of pedestrian and bicycle networks, and identifies a prioritized list of infrastructure projects for implementing improvements.

Figure 1.38: Community member walking along paved portion of the Cross Kirkland Corridor near Google (City of Kirkland).

PROJECT PRIORITIZATION

Prioritizing projects help guide investments over time. The prioritization process can identify projects and their applicability to various grant and funding opportunities, and strategically allocate City resources towards projects that will provide the greatest benefit to the network and community. Both the pedestrian and bicycle network recommendations were prioritized by access to key destinations, safety, and equity. Bicycle projects were also evaluated for comfort and connectivity through level of traffic stress, described in Chapter 2.

Addressing Equity

Equity is a key component of the prioritization process for the pedestrian and bicycle project recommendations. This evaluated areas with higher concentration of people of color, people with low-incomes, people with disabilities were prioritized. It is important to note that the overall recommendations in this plan support equity in other ways. Some people have no choice but to walk or bike to transit or destinations. This plan prioritizes connections to transit and recommends greater separation from motor vehicle traffic. This benefits people of all-ages and abilities that may be less comfortable in more exposed environments.

Key destinations include activity centers, which are areas zoned for commercial and mixed-use land uses, parks, transit stops, and the Cross Kirkland Corridor. Schools were included as access points for the bike network prioritization, and pedestrian projects received a higher score when overlapping with a Safer Routes to School Action Plan recommended projects.

Access to transit stops with more frequent service were prioritized higher than other transit stops.

Safety was the highest weighted criteria, and evaluated on crashes per mile separately for both the walking and bicycling networks.

More detailed information about the prioritization process can be found in **Appendix B**.

Figure 1.39: Visualization for the Totem Lake Connector Bridge. Construction to be completed by the end of 2022.

Electric Bikes and other ways people 'roll'

Electric bikes are becoming increasingly popular and accessible to more people. These bikes are allowed in bike lanes and on the Cross Kirkland Corridor just as with any other bike, as long as speed limits are observed. Similarly, people who rollerblade or skateboard use sidewalks in a similar fashion. With the capability for increased speeds, public outreach will encourage people to share our trails, bike facilities and sidewalks as well as roadways with all users and to be aware and courteous of others.

PLANNED PEDESTRIAN NETWORK

The planned pedestrian network aims to fill critical sidewalk gaps and strategically enhance street crossings that currently impede access to destinations, or otherwise disrupt safe and comfortable pedestrian travel. There are other infrastructure components that comprise the pedestrian network, including accessibility and trail connections, which are a detailed focus for the City through other initiatives:

Accessibility improvements including curb ramps, accessible pedestrian signals and push buttons as well as other essential infrastructure that improves access for persons with disabilities are acknowledged in the City's Pathway to Transition, a document which summarizes the compliance requirements of Title II of the Americans with Disabilities Act (ADA), outlines actions needed to meet those requirements, and the City's self-assessment results. The Safer Routes to School Action Plans identify safety improvements specifically for improving walking and bicycling access to schools, such as sidewalks, crossing improvements, and lighting improvements. Many of these projects also improve access to other nearby destinations.

Pathway and trail connections are identified in the Parks, Recreation and Open Space Plan, which is a six year guide and strategic plan for managing and enhancing park and recreation services, including a vision for shared-use trail connections and signature trails throughout the city. The City has also developed a Citywide Transportation Connections Map that identifies potential street and pathway connections through public and private property to improve overall network connectivity. The Cross Kirkland Corridor, a regional multimodal trail that contributes significantly to Kirkland's pedestrian network, has its own master plan document with a vision for access points, amenities, cross sections, and character zones. More work is being done by the City and its partners to improve connectivity to the trail such as the Totem Lake Connector and more localized neighborhood improvements such as artwork, stair connections, and wayfinding signage.

PEDESTRIAN PROJECT PRIORITIZATION AND RECOMMENDATIONS

The plan includes two objectives to address sidewalk gaps. Objective 1-1 prioritizes gaps based on access to amenities and Objective 1-2 addresses the need to complete sidewalks on both sides of all remaining arterials as well as both sides of the street on transit routes. Projects identified through these objectives have equal weight in this plan in terms of opportunity for implementation, although projects that have a higher prioritization score for Objective 1-1 will be considered before lower scoring projects.

OBJECTIVE 1-1: Prioritize **sidewalk gaps** that connect people to activity centers, transit, parks and the Cross Kirkland Corridor.

OBJECTIVE 1-2: Complete sidewalk on **both sides** of principal and minor arterials on transit routes. Complete at least one side of all remaining arterials.

To address Objective 1-1, sidewalk gaps were analyzed to determine which gaps, if filled, would provide the greatest benefits in terms of providing access to activity centers, parks, transit stops, and the Cross Kirkland Corridor. These high benefit sidewalks were grouped into logical extents as projects and prioritized based on walk distances to these destinations. More information is available in Appendix B. This prioritization process resulted in both a set of prioritized sidewalk gap segments and a set of roadway crossing locations that need improvements or are new crossing locations necessary to complete the pedestrian network, see Figure 1.42. The top priority sidewalk segments and crossings are listed in Tables 1.2 and 1.3, respectively.

Note the crossings of the Cross Kirkland Corridor (CKC) were not included in this analysis. However, there are two crossings of the CKC that the City will be working on as near term projects: the crossing at 132nd Ave NE/Slater Ave NE, and the crossing at 139th Ave NE/Willows Road. These crossing projects will coincide with the completion of the interim trail between 132nd Ave NE and Willows Road by King County, expected to be complete in 2022.

City of Kirkland Active Transportation Plan

Existing Pedestrian Network and Sidewalk Gaps

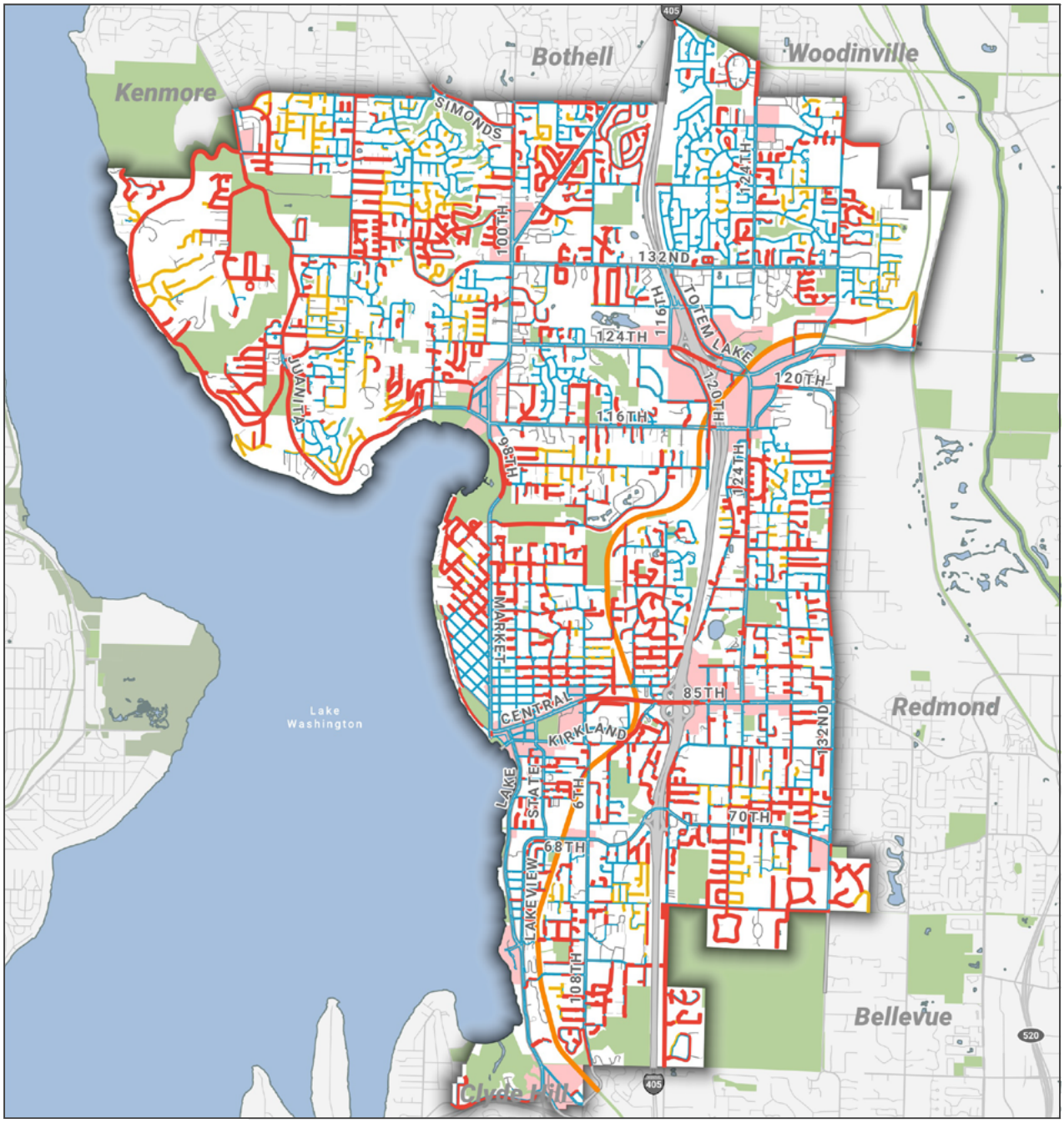


Figure 1.40: Remaining Sidewalk Gaps.

City of Kirkland Active Transportation Plan

Prioritized Pedestrian Network - Final Score

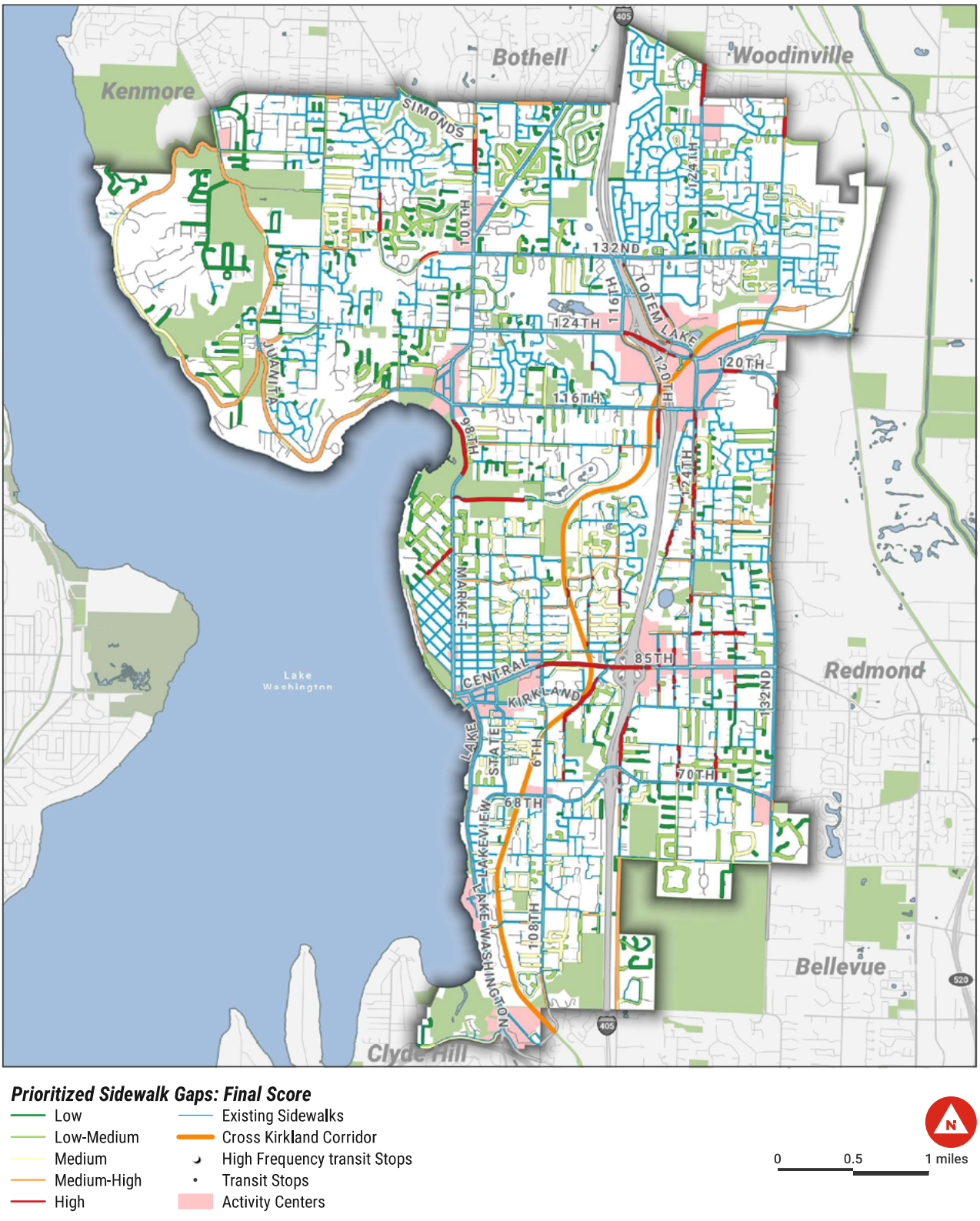


Figure 1.41: Planned Pedestrian Crossing and Sidewalk Network Improvements - Prioritization Scores.

City of Kirkland Active Transportation Plan

Prioritized Pedestrian Network - Final Score and Draft Projects

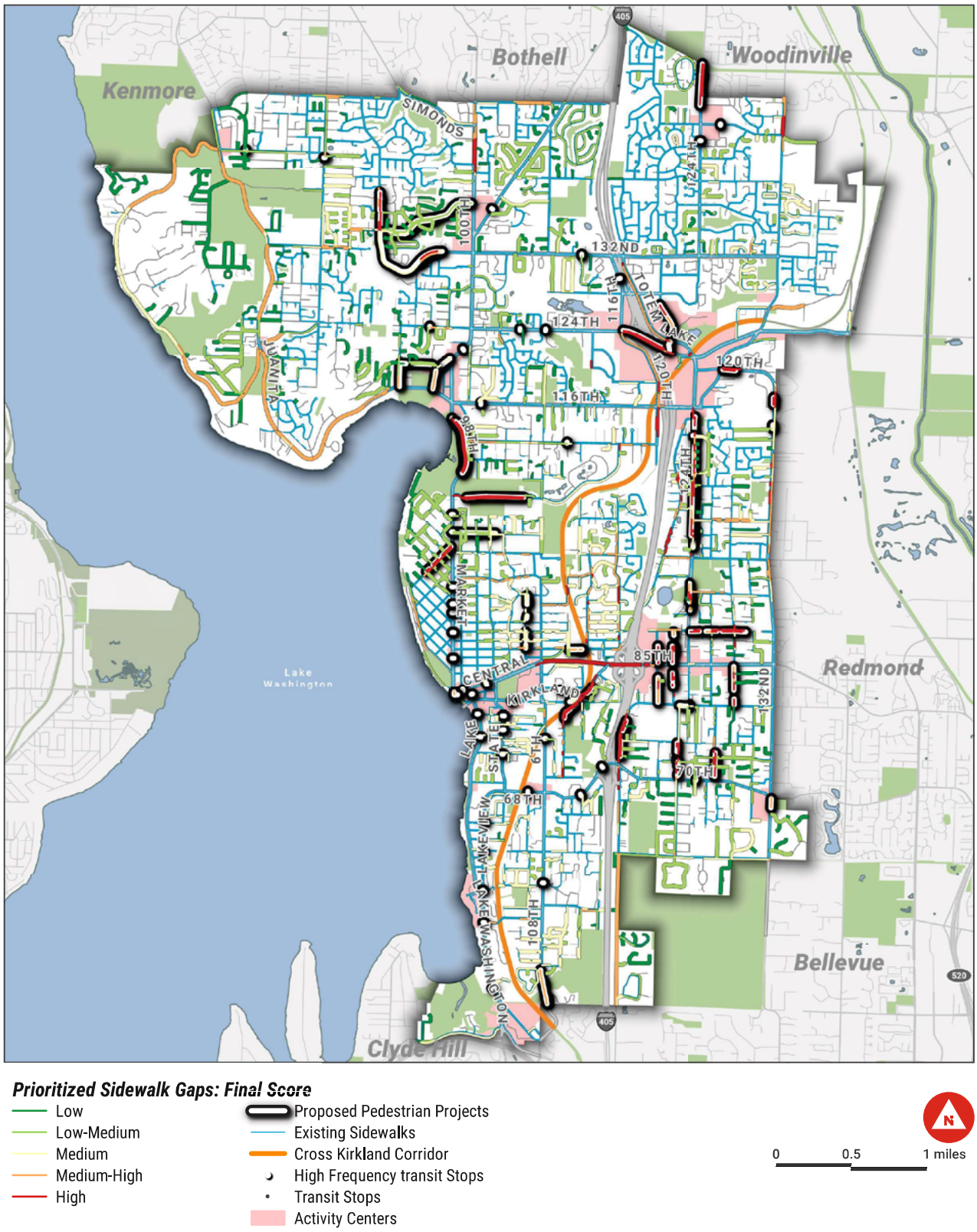


Figure 1.42: Planned Pedestrian Crossing and Sidewalk Network Improvements.

SIDEWALK GAPS ON ARTERIALS AND TRANSIT ROUTES

Objective 1-2 expands on the goal stated in the 2009 Active Transportation Plan for completing sidewalks on one side of all arterials. The City has completed 85.78% (including annexed area) of this goal. To advance further walkability in Kirkland, this plan expands this objective to include sidewalk completion on both sides of all transit routes, and at least one side of all remaining arterials. While many of these gaps overlap sidewalk segments that were prioritized for Objective 1-1, this folds in some key arterials such as Simonds Road and Juanita Drive.

The plan identified 44 high priority **crossings**. The table below highlights the top 14 highest scoring crossings:

Figure 1.43: Bus stop for the 234 and 255 lines (City of Kirkland).

Crossing Name	New or Upgrade	Notes
Lake St - 2nd Ave S	Upgrade	RRFB*, restripe and add stop bars
Lake St - 5th Ave S	Upgrade	Curb extension, RRFB, restripe and add stop bards, improvements from Lake Washington Promenade Study
Central Way - Main St	Upgrade	RRFB, refuge island
Lake Wash Blvd - North of NE 52nd St	Upgrade	RRFB, restripe and add stop bars, improvements from Lake Washington Promenade Study
NE 131st Way - 94th Ave NE	New	Create bike/pedestrian connection to proposed shared use path on north side of street
Kirkland Ave - Kirkland Performance Center	Upgrade	RRFB
2nd Ave S - State St	Upgrade	Add lighting, curb extension

Crossing Name	New or Upgrade	Notes
NE 124th St - 105th Pl NE	Upgrade	Restripe, add raised pavement markers, ADA ramps
NE 124th St - 108th Ct NE	Upgrade	Restripe, add raised pavement markers
Central Way - 1st St	Upgrade	Restriping, median refuge extension and curb extension
State St S - 7th Ave S	New	South side of intersection, add curb extension and crosswalk
NE 68th St - 106th Ave NE	Upgrade	Restripe, add raised pavement markers, RRFB, ADA curb ramps
Lake Washington - NE 43rd St	Upgrade	South of intersection, add RRFB, add stop bars
NE 144th St - 126th Ave NE	Upgrade	Lighting

*RRFB - Rectangular Rapid Flashing Beacon

Table 1.2: Prioritized Crossings.

The plan also identified 46 **sidewalk segments** that were prioritized using the framework described above. The top 20 are listed below:

On	From	To
124th Ave NE	NE 145th St	City Limits
NE 124th St	116th Ave NE	120th Ave NE
90th Ave NE/131St Way/NE 132nd St	9600 Block	NE 134th Street
116th Ave NE	NE 73rd St	NE 75th St
116th Ave NE	NE 75th St	NE 75th Pl
Kirkland Way	East of CKC Bridge	W/O 2nd Ave
NE 90th St	124th Ave NE	128th Way NE
6th St W	13th Ave W	Market St
Railroad St	8th St S	Kirkland Ave
116th Ave NE	South of NE 75th Pl	North of 75th Pl

On	From	To
Forbes Creek Dr	NE 107th Pl	Market St
98th Ave NE	Forbes Creek Dr	Old Market St Trail
120th Ave NE	N 85th St	NE 90th St
96th Ave NE	Old Market Street Trail	Forbes Creek Dr
126th Ave NE	NE 70th St	North of NE 73rd St
124th Ave NE	Slater Ave NE	NE 110th Pl
90th Ave NE	NE 134th St	North of NE 137th Pl
NE 120th St	93rd Pl NE	NE 120th Pl
122nd Ave NE	NE 73rd St	NE 70th St

Table 1.3: Prioritized Sidewalk Segments.

MAINTAINING SIDEWALKS

As the City grows and expands sidewalk infrastructure, it is important to ensure those sidewalks are consistently maintained and repaired. The City conducted a sidewalk condition assessment in 2015 which identified approximately $23 million in needed investments. These needs were prioritized for highly-walkable areas, and thus far the City has progressed about 20% toward addressing these high-priority area repairs and investments. Note additional sidewalk repairs and replacements have also occurred through private development.

The objective in this plan aims to operationalize sidewalk repair and ensure that the City can continue to track this inventory and progress made.

OBJECTIVE 1-3: Develop and operationalize a sidewalk repair program that includes periodic inventories to ensure the City maintains current and future sidewalks.

Figure 1.44: Sidewalk construction project on NE 85th St (City of Kirkland).

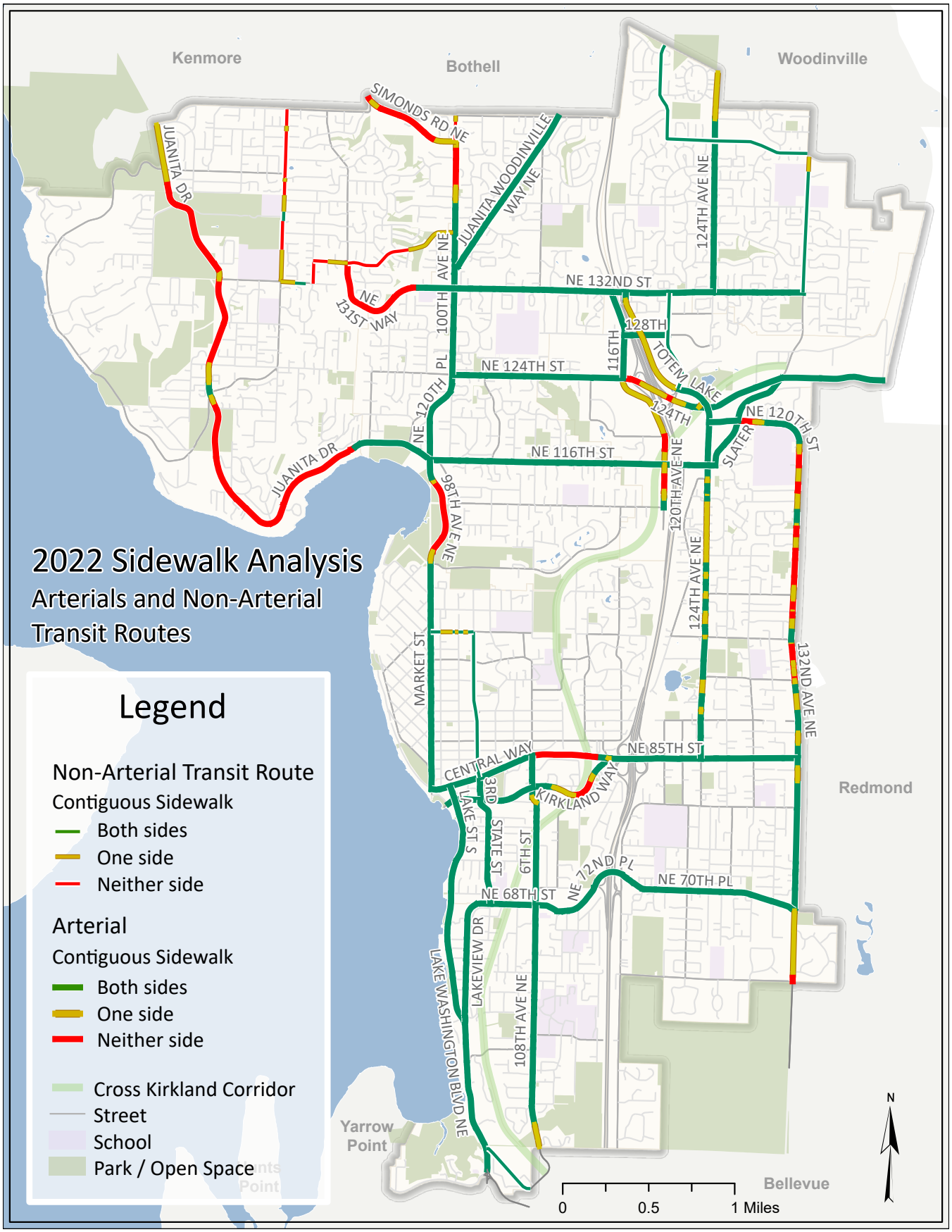


Figure 1.45: Arterials and Non-Arterial Transit Routes 2022 Analysis.

Figure 1.46: Helen Keller Elementary School Walk your Child to School Day 2019 (City of Kirkland).

NEIGHBORHOOD HIGHLIGHT:
FINN HILL AND JUANITA NEIGHBORHOODS

Finn Hill is a unique neighborhood in Kirkland accessed by roadways with sometimes steep grades. The following map shows the planned project investments for the Finn Hill neighborhood to improve walking and bicycling, both on the hill and access to other neighborhoods, including the Juanita neighborhood, and activity centers. This includes projects in the adopted Safer Routes to School Action Plan for the neighborhood. Additional projects (some of which have been implemented already) can be found in the Juanita Drive Corridor Study Master Plan. These projects include intersection improvements, pedestrian and bicyclist safety treatments, Intelligent Transportation Systems (ITS) among others.

The project on NE 131st Way / 90th Avenue NE is a 'Catalyst' project in the ATP meaning that it will be prioritized as one of the next candidates for inclusion in the Capital Improvement Program (CIP).

The recommendations for this project include a protected shared use path that is the result of the NE 131st Way / 90th Ave NE Multimodal Corridor Study. Also, the Holmes Point Street Design Standards and Corridor Study identified specific improvements along various segments of the Holmes Point corridor. In addition, schools zones along 84th Ave NE are next to receive additional safety improvement such as automatic traffic safety cameras.

This highlight of planned active transportation and safety investments for Finn Hill demonstrate a multi-tiered and coordinated approach the City is taking to invest in and implement walk, bike and safety improvements throughout the City.

Finn Hill and Juanita Recommended Bicycle and Pedestrian Improvements

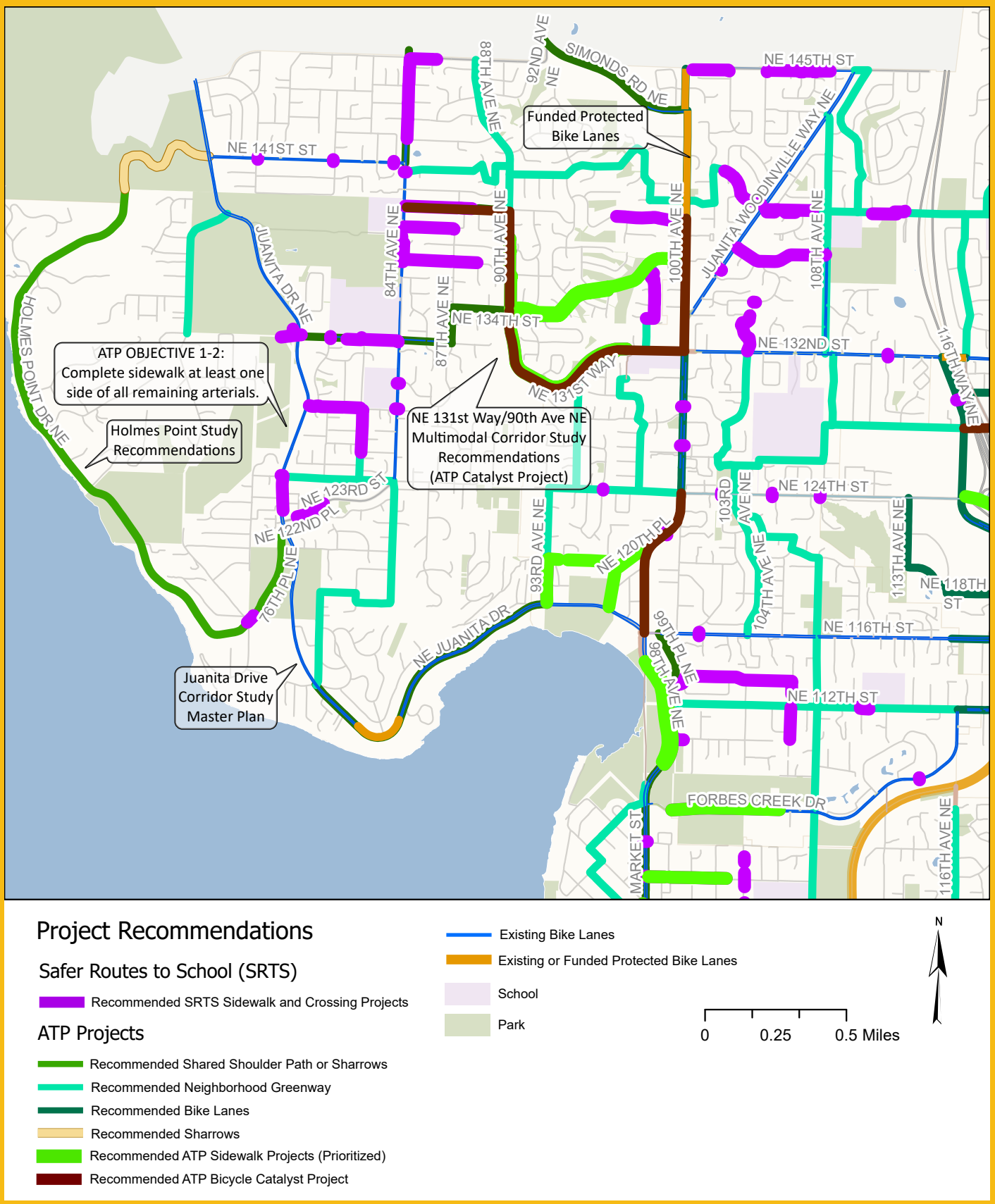


Figure 1.47: Finn Hill Existing Bicycle and Pedestrian Network & Recommended Improvements.

PLANNED BICYCLE NETWORK

There is much support among the Kirkland community for creating a bicycle network that people of all ages and abilities would feel comfortable using. The planned bicycle network includes low-stress facilities such as neighborhood greenways, protected bike lanes, and buffered or conventional bike lanes on lower speed streets. Where there is sufficient right-of-way space, this plan also recommends upgrading an existing bike lane to a buffered or protected bike lane. These facility types are briefly described below.

A neighborhood greenway is a low speed, low vehicle volume residential street with traffic calming features, roadway markings, and signage that provides a safe and comfortable environment for people of all ages and abilities to walk or bike. **Neighborhood greenways** will play an important role in Kirkland's low stress bicycle network, as they often provide a parallel, alternative route to a busier street where it would be difficult to implement a low-stress bikeway. Many of the neighborhood greenways in the planned bicycle network will require speed or volume modifications to the streets, including traffic calming, traffic diversion, removal of parking to improve visibility at street corners, or upgraded crossings of major streets where needed for safety and convenience. These design tools are detailed in Kirkland's Greenways Guidelines.

Figure 1.48: Greenway wayfinding signage, raised intersection, and new crosswalk and school crossing signs on the NE 75th St Greenway in South Rose Hill. (City of Kirkland).

Figure 1.49: Protected bike lanes (Kirkland Design Guidelines).

On high speed, high volume streets such as arterials where bikeway connections are critical to link the network or reach key destinations, protected bike lanes provide physical separation and protective barriers from vehicle traffic for all ages and abilities bicycle travel. **Protected bike lanes** may be configured as raised above the roadway at the sidewalk level, or at the roadway level with in-street barriers such as parallel parking, planter boxes, extruded curbs, or striped buffer with delineator posts. It is important to note that with all protected facilities, maintenance will be a key factor in ensuring the facilities remain free of debris and the separation mechanism can be replaced or repaired if needed. This comes with additional, and sometimes unforeseen, costs. Protected bike lanes may also be configured as a one-way facility on either side of the roadway, following the direction of the vehicle travel lanes, or may be configured as a two-way facility on one side of the roadway. Protected bike lanes are distinct from trails or sidewalks as they are exclusively designated for bicycle travel.

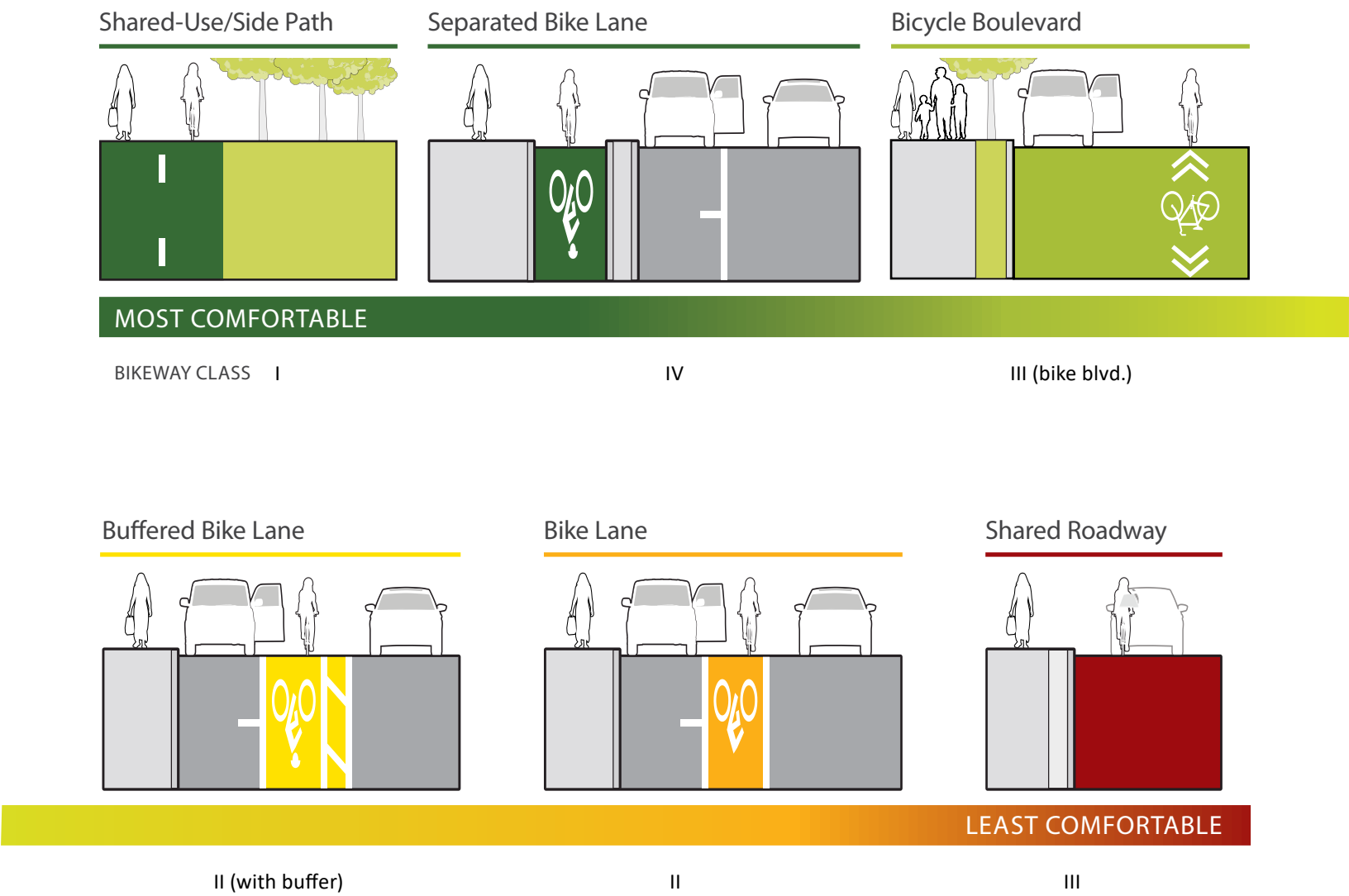


Figure 1.50: Level of Comfort of Bicycle Infrastructure (Toole Design)

A smaller portion of the planned network includes **buffered bike lanes**, and where there are severe space constraints, **conventional bike lanes** and **sharrows** (bike symbol pavement markings). The City will evaluate these corridors over time, taking into account shifts in travel patterns or other opportunities that may make it more feasible to implement a higher comfort bikeway through future rechannelization or right of way acquisition. As an action item from the Vision Zero Action Plan, the City also plans to explore a speed limit policy and introducing traffic calming measures throughout its network, which would make corridors with in-street facilities more comfortable for more people.

PROTECTED INTERSECTIONS

As projects are implemented, connections to and through intersections are critical to ensure a safe and comfortable bicycle trip. These are spaces where there is greater interaction between bicyclists and other modes, where most crashes occur and have the benefit of opportunity for low-cost treatments.

BICYCLE PROJECT PRIORITIZATION

The prioritization process was used as a tool to identify the highest priority investments to inform an implementation strategy. Bicycle projects were prioritized based three categories that are tied to the goals of the Plan:

- Connectivity – Does the bikeway support connectivity to transit and to/from areas where people are most likely to bike?
- Safety and Comfort – Does the bikeway address a location with a past collision(s) or improve comfort for bicyclists?
- Equity – Does the bikeway serve underserved neighborhoods?

Figure 1.54 shows the prioritized bicycle network. The higher a project scores for any given criteria, the greater benefit the project is likely to deliver. Project benefits need to be weighed with project costs and the most likely mechanisms by which a project would be funded and constructed.

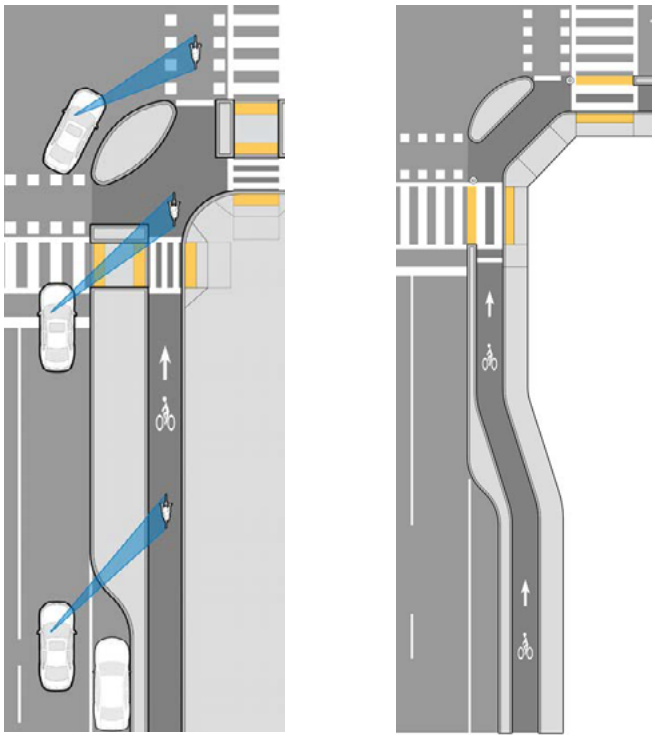


Figure 1.51: Protected intersection designs (Massachusetts Department of Transportation Separated Bike Lane Planning & Design Guide: Intersection Design).

Figure 1.52: Protected intersection in Bellevue (City of Kirkland).

BICYCLE PROJECT RECOMMENDATIONS

Both the existing and planned bicycle network were reviewed to assess the most appropriate implementation strategy. For existing bike facilities, the recommendations identify additional improvements if needed and in places where there are gaps in the planned network, the recommendations propose future improvements.

These improvements are organized in three different categories: Full Build Out, Catalyst projects and Quick Win improvements.

These investments can be viewed in an interactive map.

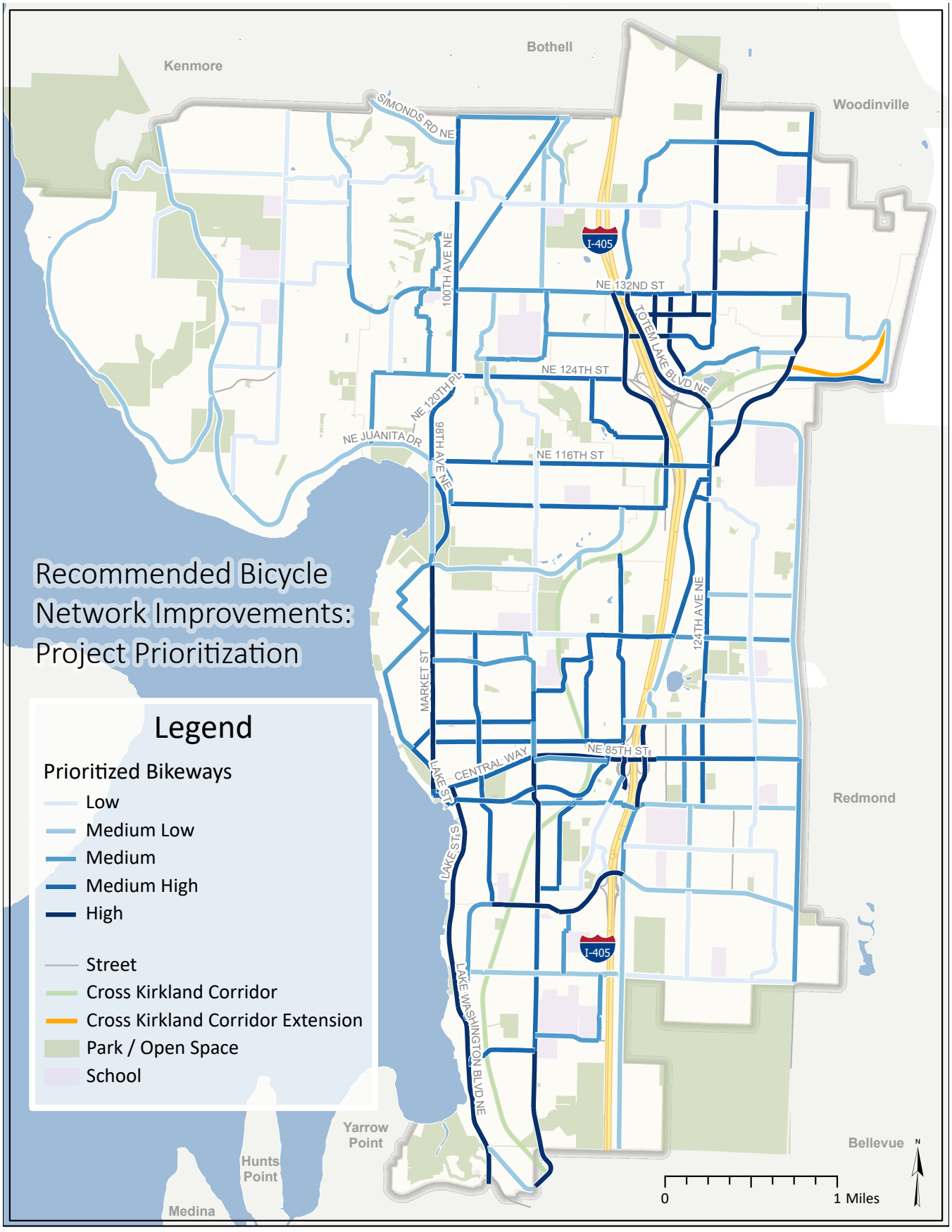


Figure 1.53: Recommended Bicycle Network Improvements: Project Prioritization.

"FULL BUILD OUT" PLANNED INVESTMENTS

The Full Build Out bicycle network improvements map outlines the vision for the future bicycle network as the city grows and changes. Many of these improvements will require additional right-of-way and are not necessarily tied to a specific implementation time frame. However, the City is fortunate to anticipate future development in many neighborhoods.

The benefit of having these strategies specifically outlined in the Active Transportation Plan is right of way needs are identified for future project implementation, so there are no lost opportunities as new developments and roadway improvements occur. For instance, the full build out map can be utilized as a tool by planning and development when communicating street frontage requirements as new development occurs. It can also be used as a coordination tool when streets are repaved or impacted by other public works projects such as stormwater improvements.

Street Name	From	To	Full Build Out
NE 128th St	116th Way NE	120th Ave NE	Add green conflict zone markings. Move EB bike lane to south curb. (116th Ave NE to Totem Lake Blvd) Add raised protected bike lane at curbside level on north side, in-street with delineators on south side (Totem Lake Blvd to 120th Ave NE)
NE 85th St	6th St	I-405/ 85th Station	Shared-Use Path
120th Ave NE	NE 128th St	NE 132nd St	Protected Bike Lanes
85th interchange area connections	All four quadrants		Shared Use Paths connecting to I-405 / 85th Station
Lakeshore Plaza and Kirkland Ave	Market St	Lake St	Shared Use Path or two-way protected bike lanes (with some mixing zones)
7th Ave	Market St	116th Ave NE	Buffered or Protected Bike Lanes, may require neighborhood greenway style implementation at west end of corridor.
Kirkland Ave/ Way	Lake St	NE 85th St	Add buffered or protected bike lanes. Requires right-of-way in some sections and widening of the CKC Bridge.
Railroad Ave, 8th St S, 9th Ave S	Kirkland Way	6th St S	Recommend Bike Lanes in some sections. Neighborhood Greenway passing Everest Park
98th Ave NE	NE 116th St	NE 124th St	Add buffered or protected bike lanes (both sides)
100th Ave NE	NE 132nd St	NE 139th St	Protected Bike Lanes
NE 132nd St, 131st Way, 90th Ave	100th Ave NE	NE 139th St	Shared-Use Path on west side. Downhill bike sharrow. Bike lanes connecting to 100th.
NE 139th St	90th Ave NE	84th Ave NE	Bike Lanes or Neighborhood Greenway

Table 1.4: Recommended Bicycle Catalyst Projects.

CATALYST PROJECTS

Catalyst projects are larger projects that may require additional right-of-way or greater investment as a City sponsored Capital Improvement Project. These are recommended projects that score high or medium in the prioritization process and provide great benefit for the citywide bicycle network meeting the prioritization goals. Most of these recommendations indicate the 'full build out' but are recommended as a capital improvement project in the next six-year CIP. Catalyst projects support connections to the NE 85th Station Area where significant growth is planned, connections into downtown, into the Totem Lake area and connecting from neighborhoods into denser areas.

Table 1.4 (accompanied by Figure 1.56) presents a list of recommended bicycle catalyst projects that show examples of **gaps** in the bike network that are scoring highest in terms of providing the greatest benefit to existing and planned development and connectivity. More detail can be found in **Appendix C** including proposed implementation strategies.

"QUICK WIN" PLANNED IMPROVEMENTS

For the most part, quick win strategies involve filling gaps in the planned bicycle network or improving existing bike facilities. Most of these strategies involve improvements that can be made within existing City right-of-way, either the existing paved roadway or unimproved portions of the right-of-way.

For example, improvements to existing bike facilities could include extending existing bike lanes to intersections, adding green conflict zone markings through intersections or at intersecting streets, buffering or protecting existing bike facilities if space can be made available through restriping or re-channelization, or completing missing gaps in the system. Neighborhood greenways are also considered 'quick win' planned improvements as they do not require acquisition of additional property and primarily involve lower cost infrastructure investments such as signing and striping. High scoring quick win projects are also candidates to be in the next 6-year Capital Improvement Program but can also be addressed through other programs such as the annual striping program or the Neighborhood Safety Program.

These strategies inform the development of the City's Capital Improvement Program over the first six-years of the plan horizon and/or inclusion into implementation programs such as the annual striping program. Many segments in the Recommended Bicycle Network have both an identified 'Quick Win' Improvement and a recommendation for a more robust, 'full build out' design.

Street Name	From	To	Quick Win Strategy
Lake St - Lake WA Blvd	Lakeview Dr	Central Way	Promenade Study
124th Ave NE (North)	NE 132nd St	North City limits	Add pavement markings to existing bike lanes and extend bike lanes where they currently do not exist. Buffer where there is room.
113th Ave to 120th/ 118th St	NE 124th St	120th Ave NE	Restripe to add bike lane or neighborhood greenway. Would need comprehensive review to bike lanes.
6th St S	NE 68th St	Kirkland Way	Add green conflict zone markings, protected bike lanes around curve.
NE 68th St	State St	108th Ave NE	Rechannel to extend existing bike lanes, add green conflict zone markings.

Table 1.5: Recommended Bicycle Quick Win Projects.

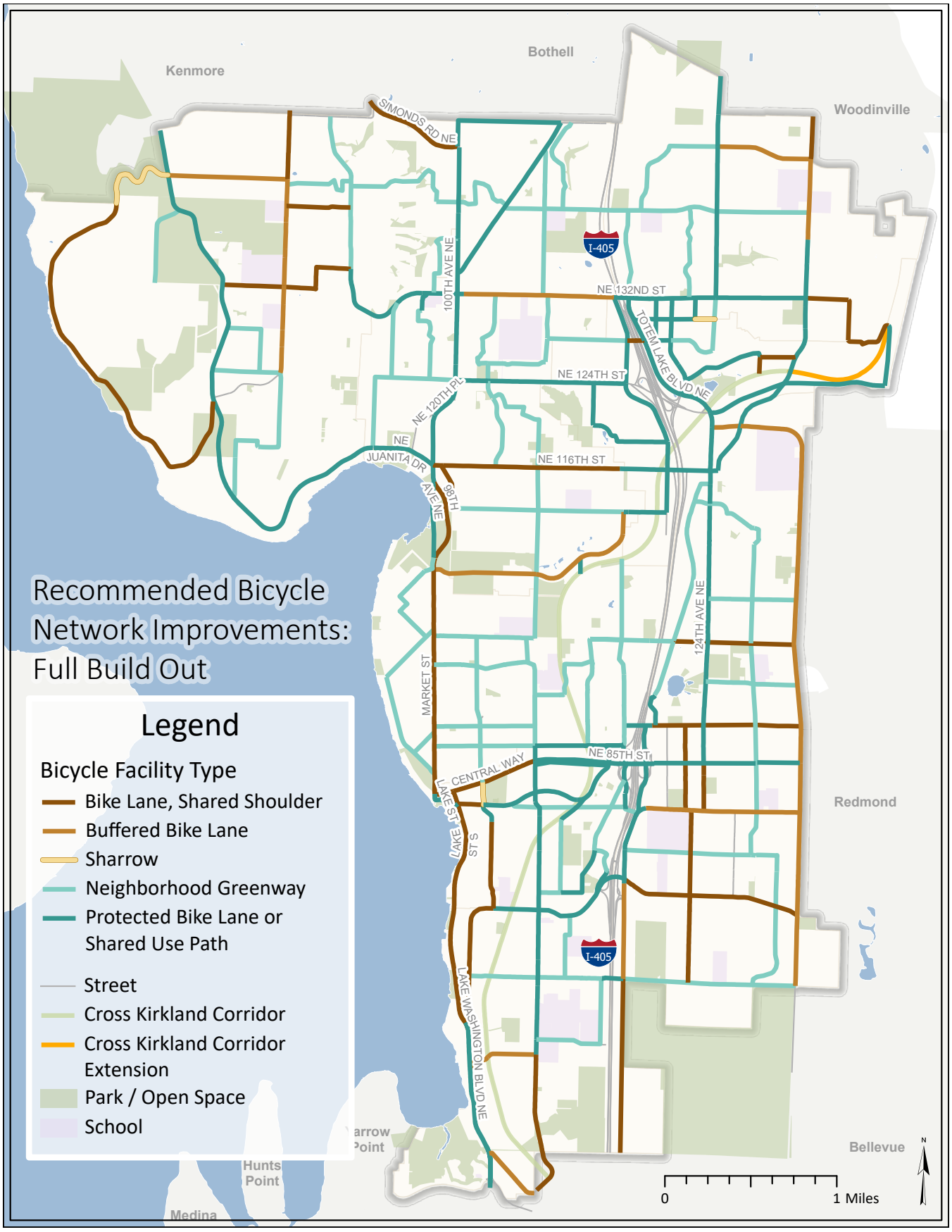


Figure 1.54: Recommended Bicycle Network Improvements: Full Build Out

NOTE: The City has received many comments regarding improvements to Lake Washington Boulevard/Lake Street and Market Street. Both of these corridors have recommendations for further study in the near-term plan to help the City better identify the longer-term strategy.

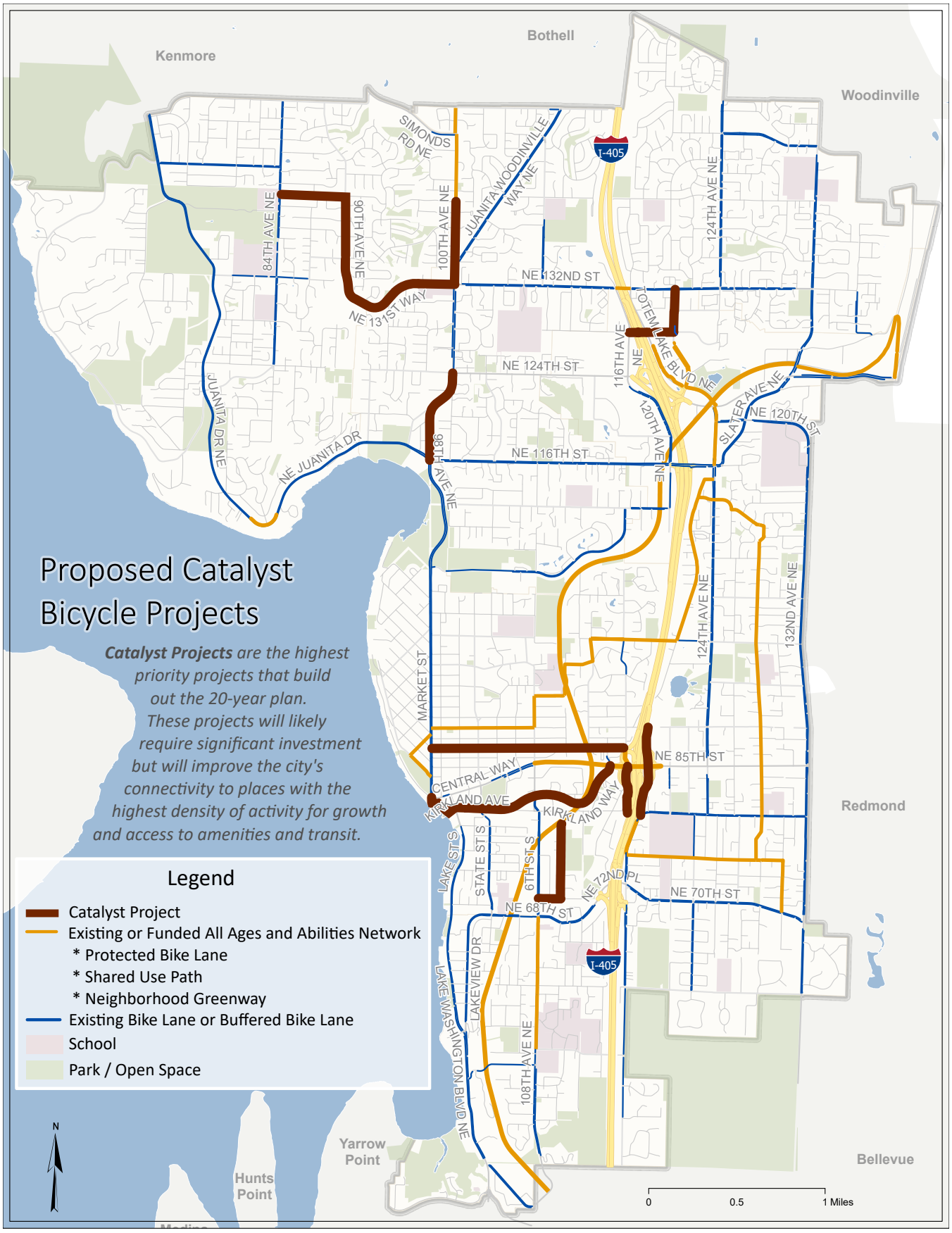


Figure 1.55: Proposed Catalyst Bicycle Projects.

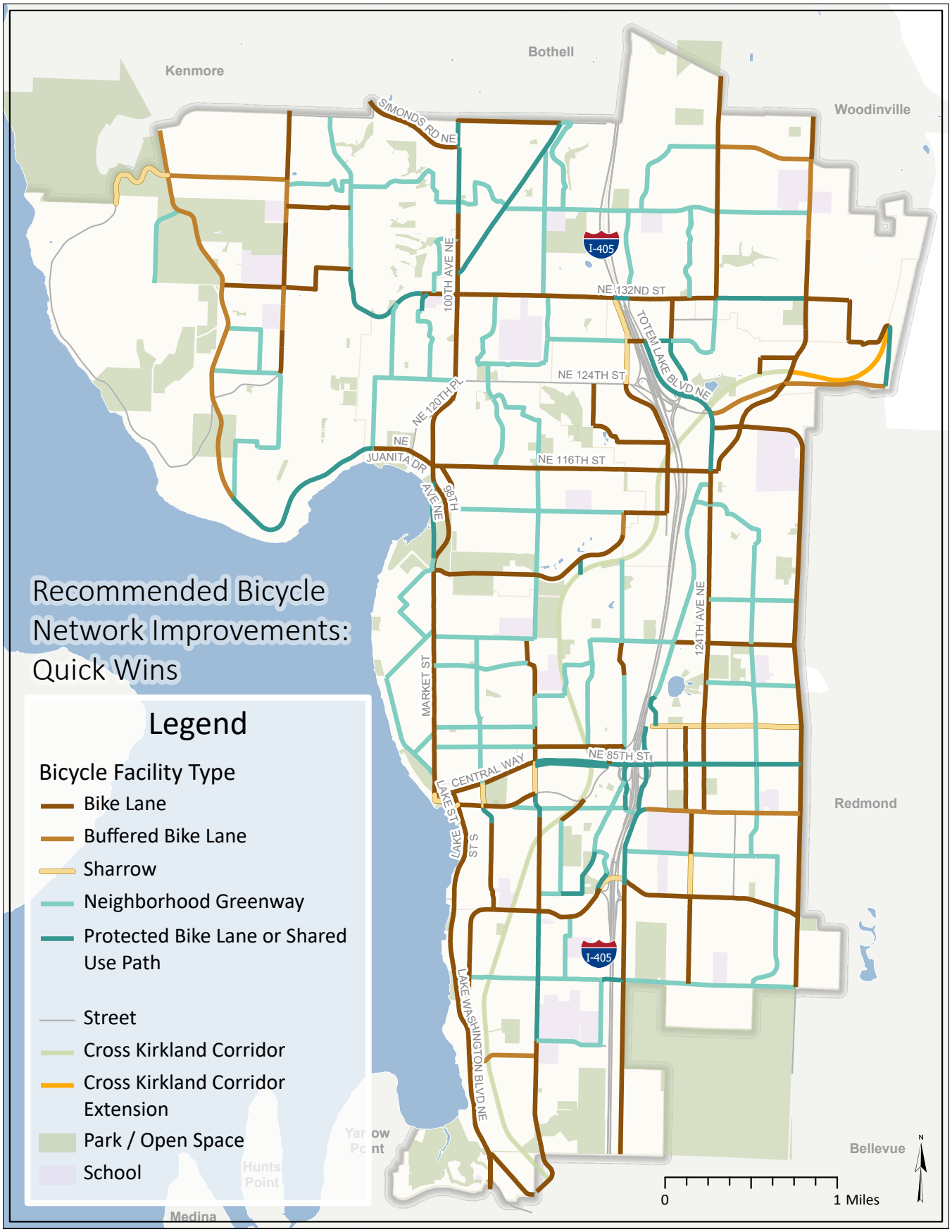


Figure 1.56: Recommended Bicycle Network Improvements: Quick Wins.

SPECIAL PROJECTS

Evenings on Park Lane

Park Lane in Downtown Kirkland was originally designed to be a "flexible street" and has previously been closed to vehicles during special events. In coordination with the downtown community during the summer and fall in 2020 and 2021, the City started "Evenings on Park Lane" where the street was closed to vehicle traffic and opened to people walking and wheeling beginning at 6 PM. Restaurants expanded outdoor seating into parking spaces, and overall the evening closure to vehicles was well received by the community.

City Council will continue to evaluate future closure of Park Lane to vehicles, whether that continue to remain in the evenings and for special events, for longer periods of time or permanently.

Figure 1.57: Park Lane in Downtown Kirkland (City of Kirkland).

85th Station Area Plan

The NE 85th Street Station Area Plan is envisioning bold multimodal transportation network improvements to make it easier to walk and bike to the future Sound Transit Stride bus rapid transit (BRT) station from the City's neighborhoods and destinations. This network vision correlates with the full build out recommendations in the ATP, and includes projects that will require redevelopment or property acquisition, projects fully within the public ROW, and projects that will require coordination with Parks. Many of these projects will require longer timelines for completion, while others are currently underway such as the multimodal paths on both sides of NE 85th Street as part of the WSDOT I-405/NE 85th Street Interchange and ST Inline BRT Station Project.

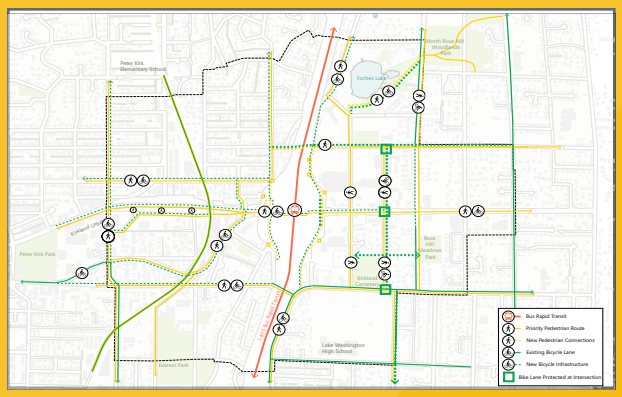


Figure 1.58: 85th Station Area preliminary plans (City of Kirkland).

Lake Washington Boulevard Promenade Study

The City is currently undertaking a technical data collection and design study of Lake Street South/Lake Washington Boulevard to understand how people are currently using the corridor and develop preliminary design concepts to address the mobility issues and needs in the corridor. The results of this study will be shared with Council for further direction by the end of 2022.

Figure 1.59: Lake Washington Boulevard (City of Kirkland).

SHARED SIDEWALKS AND TRAILS

It will take time for the City to implement the strategies identified in this plan and continue to expand and improve Kirkland's bicycle network for people of all ages and abilities to be better protected and more comfortable. In the interim, the existing sidewalk network is often utilized by less confident riders. Although sidewalks are narrower and shared with pedestrians, a sidewalk is perceived as a safer facility than in the roadway with high-speed vehicles. A primary goal of this plan is to encourage more people to walk and bike, and for those less confident riders, sidewalks may bridge some gaps in the network before more protected facilities are feasible to be implemented. The City will continue to evaluate opportunities to widen existing curb ramps or sidewalk facilities where practical for shared use conditions.

Likewise, the City has an abundance of paved and unpaved trails and pathways that connect through neighborhoods. These also add to the bicycling network by creating connections and filling in short gaps. As with sidewalks, riders are encouraged to be courteous of others, be cautious of pedestrians in these shared spaces and ride slowly.

Figure 1.60: Green conflict zone markings extend the bike lane on Market St through the Juanita Bay Park intersection (City of Kirkland).

OBJECTIVE 1-4: Increase safety at **crossings** for pedestrians needed to complete pedestrian networks and access to destinations

OBJECTIVE 1-5: Provide additional pedestrian safety improvements at **intersections**

OBJECTIVE 2-2: Make bicycling safer at controlled and uncontrolled intersections

DOING BETTER AT INTERSECTIONS

Intersections are often the most challenging locations to create bicycling conditions that are comfortable and safe for people of all ages and abilities. Existing bike lanes frequently end before the intersection and are not carried through to the other side, causing confusion and stress for bicyclists as well as drivers.

Figure 1.61: Bicycle queue box near Juanita Village (City of Kirkland).

Spot treatments that enhance safety and comfort at intersections can significantly improve the riding experience throughout the network. Intersection spot treatments could include low-cost changes such as painted pavement markings that continue the bikeway through the intersection or queue boxes which are a visible, designated space for bicyclists to wait at a red light. Other intersection enhancements that can improve the bicycling experience in Kirkland include better signal detection and signal modifications to reduce delay, or geometric changes to create more space for bicyclists or reduce vehicle turning speeds.

In places where spaces are more constrained, intersection treatments go a long way toward improving safety and comfort for people bicycling and reduce interaction between people bicycling and motor vehicle through and turning movements. NACTO has also developed a menu of intersection strategies in its "Don't Give Up at the Intersection" guide.

EDUCATION AND ENCOURAGEMENT

In addition to looking at implementation of networks and physical infrastructure, encouraging more people to walk and bike moves the City toward achieving sustainability and climate change goals but also increases public health and reduces congestion.

Goal 3: Encourage and incentivize more people to walk and bike, encourage safe behavior for all users of the transportation system.

Encouraging more people to walk and bike is a fundamental goal in this plan because of the benefits to public health and meeting climate change goals. Studies have shown that walking and bicycling for everyday purposes is a great way to increase health benefits in communities. In addition, the increase in walk and bike trips reduces motor vehicle trips contributing to less congestion and contributing to Kirkland's climate change goals.

As part of this plan, the City will encourage and incentivize people to walk and bike more through a variety of activities including communication, events and coordination with other agencies. This includes that Transportation Demand Management Programs, working with employers on their Commute Trip Reduction Programs and promoting the Kirkland Green Trip. Providing wayfinding, maps and more information for how people can access destinations without driving can also help encourage more people to walk and bike. Education efforts about behavior and interactions on our roadways can also benefit safety, both for kid and adults.

Supportive Goal S3: Utilize technology to support safety measures and supplement safe networks.

Technology has a significant role in making transportation efficient and effective. For example, technology can help ensure people walking and bicycling have fewer interactions with drivers at signalized intersections by having dedicated phases or extra time for walkers and rollers. In addition, better understanding the number of people walking and bicycling in the city as well as where people are going helps inform decisions for transportation infrastructure. Having a better understanding where and where and why crashes occur can also better facilitate decisions for where the needs are greatest. School speed zone cameras have also proven to increase safety in school zones. Systemic safety analysis using collision and roadway data, and potentially exposure data can help the City better understand and proactively address factors contributing to collisions.

5.

IMPLEMENTATION STRATEGY

5 IMPLEMENTATION STRATEGY

Identifying sustainable funding sources is key to building and maintaining new and improved active transportation infrastructure.

This chapter outlines an implementation strategy for the City to organize, fund, and build the projects and programs presented in the goals and objectives in Chapter 1 and planned networks in Chapter 4. While all the projects and programs recommended in this plan are important to improving Kirkland's pedestrian and bicycle network connectivity, safety, and access; realistically, the City of Kirkland has limits to its financial resources and staff capacity, so it will be necessary to implement projects gradually over time. The implementation strategy for the ATP is as follows:

- Utilize the prioritization process and Catalyst project list to identify CIP projects and candidates for future grant applications
- Leverage funding and construction opportunities through existing City programs to implement quick wins or full build out projects
- Opportunistically implement projects through private development requirements

HOW WILL PROJECTS GET BUILT?

CAPITAL IMPROVEMENT PROGRAM (CIP)

The prioritization process outlines top priority projects for sidewalks, crossings and bike facilities. These top priority projects are the primary candidates for inclusion into the next Capital Improvement Program. Sources of funding in the CIP that are eligible for transportation include 2012 Street levy funds which include pedestrian safety, maintenance and school access projects.

The real estate excise tax is another major funding source for transportation while other portions include funds from the gas tax, impact fees, business license fees, etc.

GRANT PROGRAMS

In addition to locally sourced funds, the City continually seeks additional funds through grants or through the State legislative process. There are a wide variety of grants available through the state, regional and federal programs that the City seeks each year. The prioritization process outlined in this plan can clearly communicate the City's priorities as well as how well projects meet City goals and needs.

OTHER PROGRAMS

There are several other programs that can fund smaller projects that don't require a project to be explicitly listed as part of the capital improvement program.

Annual Striping and Paving Programs

Projects identified to add striping or bike symbol pavement markings can be added to the **annual striping program**. However, more striping, such as green conflict zone markings can add significant maintenance costs to this program. Small incremental improvements could be folded into the existing programs but major additions such as significant increases to green conflict zone markings will require this program to be supplemented with additional funds for added striping and on-going maintenance.

Other programs such as the **annual paving program** are opportunities to achieve some of the recommendations outlined in this plan. Segment by segment recommendations in this plan, specifically for the bike network, provide a tool for the City to use as new streets are paved and subsequently restriped. This is where segment by segment recommendations become useful.

Figure 1.62: Newly striped bicycle lanes on 84th Ave NE (City of Kirkland).

Neighborhood Safety Program (NSP)

The recommendations in this plan can provide neighborhoods a tool for evaluating local improvements through the NSP where communities are encouraged to collaborate and decide on projects that benefit their neighborhoods. The analysis provided in this plan can assist that process for proposals through this program.

School Zone safety cameras

School zone safety cameras provide additional funds for the City to implement safety projects in school zones. While most of these funds will support projects identified in the Safer Routes to School Action Plans, there are many overlaps with the recommendations in this plan for projects to be funded near schools.

Partner Agencies

The City works closely with King County Metro and Sound Transit on future projects coming to Kirkland, specifically Sound Transit's I-405 Bus Rapid Transit routes (STRIDE) and the future King County Metro K-line Rapid Ride Transit line. These projects in addition to other coordination efforts with Metro look at access as well as speed and reliability for transit. These access funds provide an additional opportunity for coordination with transit agencies to fund capital projects in Kirkland that provide access to transit.

Private Development

Kirkland is very fortunate to anticipate future development in many neighborhoods which is critical to providing much of the infrastructure and investment needed to support population growth. As development occurs, sidewalks and other street frontage improvements such as bike facilities are a permitting requirement. The benefit of having these strategies specifically outlined in the Active Transportation Plan is so the City can be clear about future project needs so there are no lost opportunities as future development and improvements occur.

For instance, this list is intended to be utilized as a tool by the Planning and Development Department when communicating street frontage zones as new development occurs. This also helps to ensure the City can preserve and/or acquire the right-of-way needed to achieve the long-term vision for a more protected and comfortable bicycle network outlined in this plan.

Creative Innovations for implementation

In addition to what has already been mentioned, there are other funding mechanisms that are explored as the City likes to ensure there is 'no stone left unturned' when seeking opportunities. Public/private partnerships is an example for funding projects. An example of this is the Feriton Spur Park along the Cross Kirkland Corridor which was built as part of the extension(s) of the Google campus. The park and paving of the Cross Kirkland Corridor segment were funded by Google but this remains a City-owned park. Google was then able to expand their campus to straddle the City-owned corridor.

Transportation Benefit Districts are another unique method of funding which create independent taxing districts that can raise revenue for specific transportation projects within that district. There are a variety of other creative solutions and sources of funding. The approach to implementation is multi-tiered in order to maximize all available opportunities.

Estimated costs are high level as of 2022 and would need to be adjusted for inflation in the CIP as they are programmed. Costs associated with project investments include costs for design/permitting and construction (paint, installation, materials, etc.). Additional costs such as stormwater impacts identified in permitting and coordination with other (utility projects) may need to be added to the estimates on a case-by-case basis:

Program or Project Category	Estimated Costs
High Priority Sidewalks	$45.7 M
High Priority Crossings	$4.0 M
Catalyst Bicycle Projects	$52.0 M
High Priority 'Quick Win' bicycle projects	TBD
Next High Priority Neighborhood Greenways	$9.5 M
Sidewalk Repair Program	$3.2 M
Other Maintenance Costs (wheelchair ramps)	$45.5 M

Table 1.6: Estimated program and project costs (City of Kirkland).

CONNECTING REGIONAL NETWORKS

Bicycle and Pedestrian trips often do not start or end at Kirkland's borders. These may begin from a transit trip coming from another city, a bicycle trip from a longer distance or even walking trips. The City works closely with regional partners such as participating in the Puget Sound Regional Council (PSRC) Bicycle and Pedestrian Advisory Committee and with the Eastrail Regional Advisory Council (RAC). The City also participates in the many conversations and groups around transit connectivity such as with the King County Regional Transit Committee. Connections with Kirkland's neighbors, particularly with Redmond, Bellevue and Bothell are also part of this effort so coordination with neighboring jurisdictions is frequent. Creating connections across jurisdictional borders is critical and these efforts include coordination, support and seeking opportunities for partnerships.