City of Lakewood

2023 NON-MOTORIZED TRANSPORTATION PLAN UPDATE

March 2023

Prepared for:
City of Lakewood

March 2023

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Executive Summary

Introduction

In 2009 the City of Lakewood finalized its first Non-Motorized Transportation Plan (NMTP). In 2022, the city embarked upon updating the plan to reflect all the progress made in the intervening 13 years and to update the City's plan to further buildout it's non-motorized infrastructure. The primary focus of the 2023 NMTP is to summarize the state of Lakewood's non-motorized infrastructure, uncover remaining gaps in the City's pedestrian and bicycle transportation systems and identify possible projects to help fill those gaps.

The 2023 Lakewood NMTP Update was completed in several steps. First, an online survey was created to obtain information from those who live, work, shop or go to school within Lakewood about their level of non-motorized travel as well as their priorities for active transportation improvements.

Second, the existing pedestrian and bicycle system were updated to reflect the numerous non-motorized infrastructure improvements built in Lakewood since the completion of the 2009 NMTP. The bicycle system and pedestrian system plans (Chapter 5) were adjusted based on updated City staff input.

Finally, the project list and inventory of the existing pedestrian and bicycle system within the City of Lakewood was completed and integrated into the City's Geographic Information System (GIS). The GIS data were used to conduct spatial analyses and identify priority pedestrian and bicycle improvements. Planning-level cost estimates were integrated into the spatial analyses and used to help draft priority improvement projects while considering accessibility to public transit, schools, parks, civic centers and other critical factors.

Missing Sidewalks on Steilacoom Boulevard SW

The 2009 Lakewood NMTP included a pedestrian planning process to address the guidelines and regulatory requirements of the Americans with Disabilities Act (ADA). These ADA inventory and self-evaluation portions of the plan were not included within the 2023 update of the NMTP. The City of Lakewood will be developing a separate ADA transition plan to address the ADA needs of Lakewood's existing pedestrian infrastructure anticipated in 2023.

The outline of the 2023 NMTP plan update is summarized on the following pages.

Chapter 1: Outreach Summary

This chapter summarizes the outreach conducted during the 2023 NMTP Update. This outreach included the development of an online survey that was sent out to both the general public and special interest groups within Lakewood. The survey results were used to ensure that Lakewood's non-motorized priorities were reflective of those who live, work and play within Lakewood.

Chapter 2: Existing Pedestrian System

This chapter summarizes the current state of the pedestrian system within Lakewood. This chapter also discusses the progress made between the adoption of the 2009 NMTP and the 2023 NMTP update.

Chapter 3: Method for Prioritizing Pedestrian Projects

This chapter summarizes the process used to prioritize future pedestrian projects using a geographic proximity score, the Pedestrian Priority Index (PPI). This score was developed to ensure that pedestrian projects are prioritized where there is the greatest need.

Chapter 4: Existing Bicycle System

This chapter includes an overview of the current bicycle planning nomenclature and defines typical bicycle users within Lakewood. The chapter also summarizes the current state of Lakewood's bicycle system.

Chapter 5: Pedestrian and Bicycle System Plans

This chapter illustrates what a full buildout of the City's non-motorized infrastructure would look like. A prioritized list of pedestrian projects (based on the methodology in Chapter 3) and a complete list of bicycle projects that would be needed are also presented. Finally, planning level cost estimates are included for full buildout of the City's non-motorized systems.

Chapter 6: Recommended Measures to Implement the NMTP

The final chapter summarizes potential strategies for the City of Lakewood to successfully buildout its envisioned non-motorized system. This includes identifying potential grand funding opportunities and how Lakewood might partner with WSDOT and other agencies.

Chapter 1: Outreach Summary

A key component of the 2023 Non-Motorized Plan Update was to conduct an online public survey to ensure that the projects and priorities identified within the plan reflect the desires of those who live, work, or visit Lakewood. The survey was available on the city website, and advertised through email, newsletters and social media postings. The survey notice was also sent directly to interested parties (such as bicycle groups who were known to be interested in the plan update).

The online survey had 10 questions designed to gauge the public's level of walking and biking activity within the City, and any concerns about non-motorized travel they had, and to better understand what type of improvements were desired.

In total, the City received 205 survey responses, all of which are summarized in the Appendix. 43 percent of survey respondents indicated that they lived within the City, 38 percent shopped within Lakewood, and 16 percent worked within Lakewood. The remaining 3 percent went to school within Lakewood.

Generally, the survey indicated that most respondents walked far more regularly than they biked, as indicated by Figure 1.1 and Figure 1.2.

While the majority of survey respondents indicated that they walked within Lakewood at least two days a week, approximately 70 percent, only 25 percent indicated that they bike at least two times a week. In addition to biking and walking, the survey asked about the use of e-bikes and e-scooters. 83 percent of survey respondents noted that they never ride and e-bike and 90 percent of survey respondents never use an e-scooter in Lakewood.

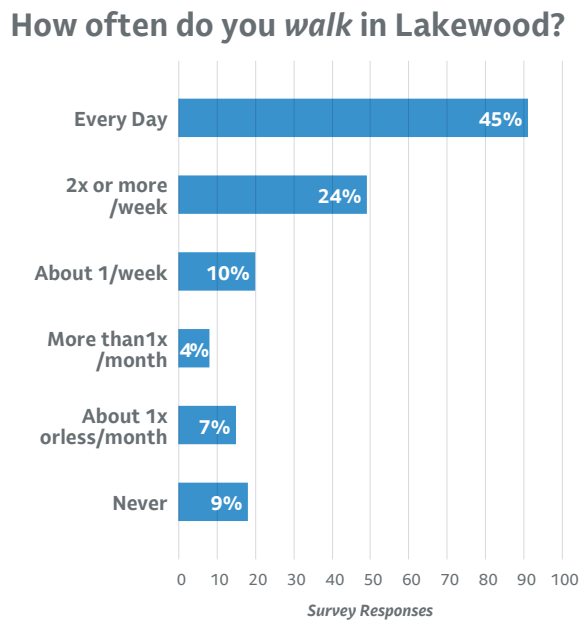


Figure 1.1 Walking Frequency for Survey Respondents

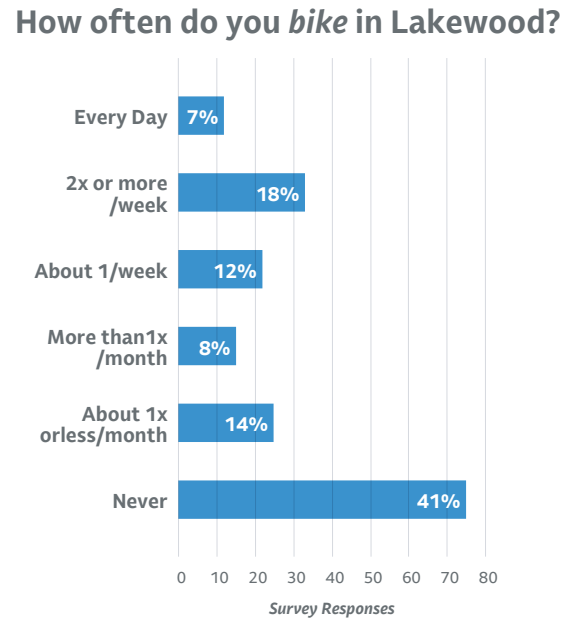


Figure 1.2 Biking Frequency for Survey Respondents

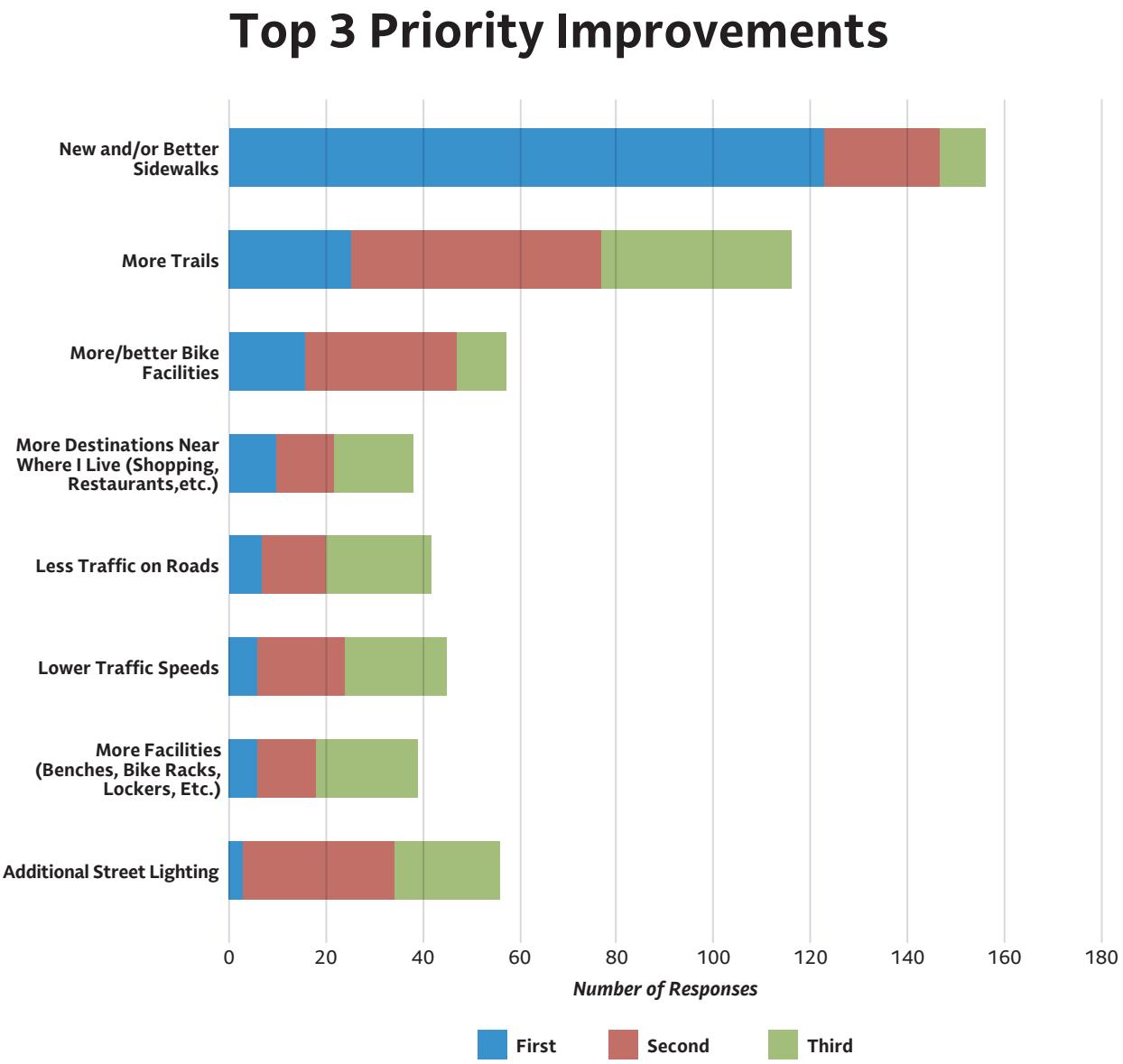


Figure 1.3 Priority Non-Motorized Improvements

Since the 2009 NMTP the City of Lakewood has prioritized the buildout of it's sidewalk network, and the results of the public outreach survey confirms that the public uses sidewalks more than bicycle infrastructure. A survey question was posed asking respondents to note which multimodal improvements they thought were most important. The most common answer shown in Figure 1.3 was 'new and/or better sidewalks' further suggesting that the public places the most importance on the continued expansion of Lakewood's sidewalk network.

The second highest scoring priority was 'More Trails' followed by 'more/better bike facilities." Another question asked respondents to say how important it was to achieve non-motorized goals. The results are shown in Figure 1.4.

Again, over 70 percent of survey respondents indicated that it was 'Essential' to make it safer and easier to walk in Lakewood, with another 17 percent saying that it was 'very important.' Improve bicycle safety also scored highly, with approximately 50 percent of respondents calling it 'Essential.' Connecting to transit and expanding

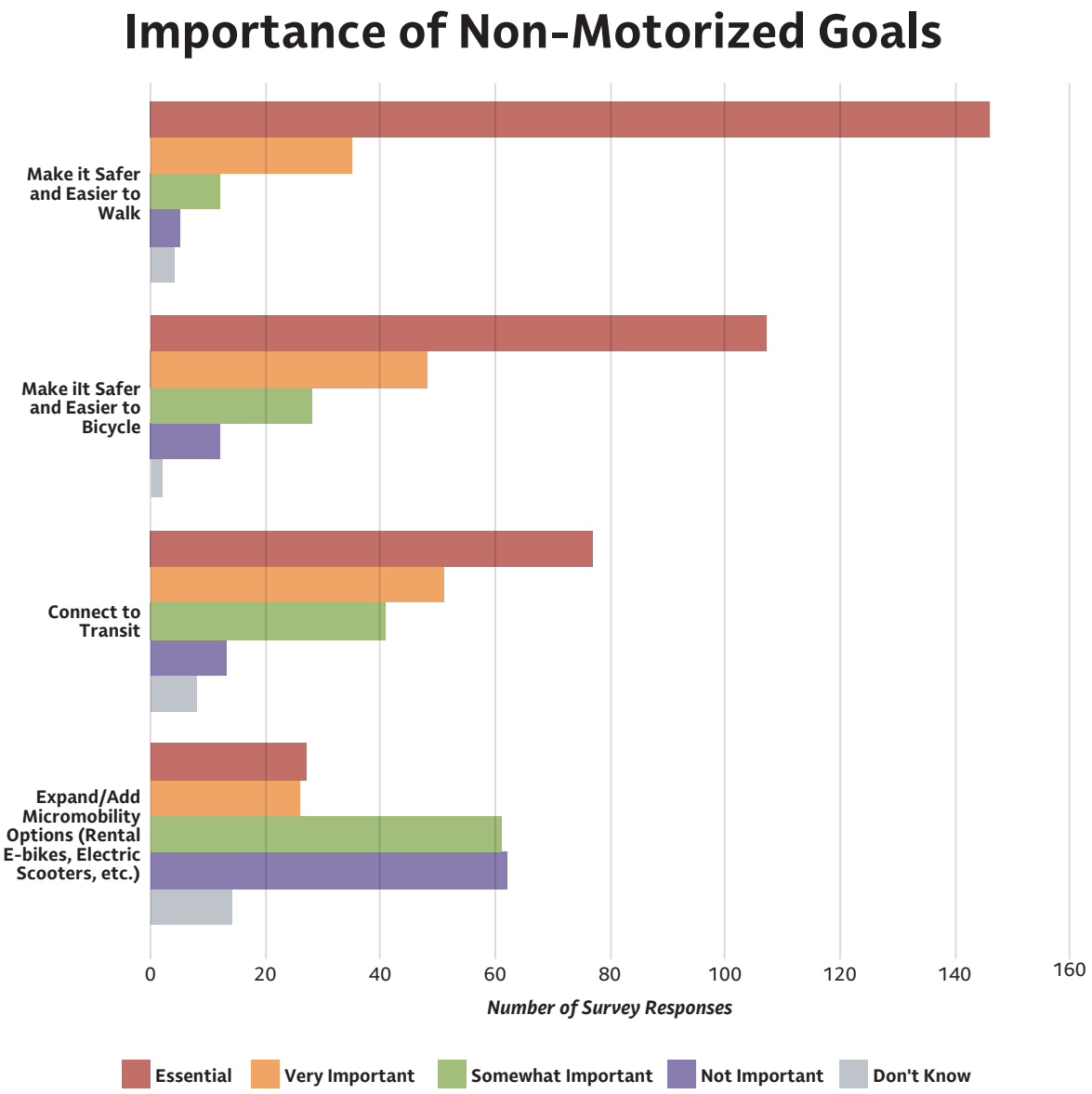


Figure 1.4 Importance of Non-Motorized Goals

micromobility options did not score as highly as walking and biking safety and ease of use.

Generally, the results of the survey confirmed the City of Lakewood's recent non-motorized construction projects as well as their goals and plans moving forward. The City intends to continue building out their sidewalk network and adding bicycle facilities in key locations (as shown in Chapter 5).

Chapter 2: Existing Pedestrian System

2023 Update

During the 2023 update process, no self-evaluation of the pedestrian system was undertaken. The primary purpose of this chapter in the non-motorized transportation plan is to document the extent of the existing pedestrian system. The self-evaluation of the pedestrian system (removed from the previous 2009 NMTP) is planned to be updated as part of a forthcoming stand-alone ADA transition plan in 2023.

Existing Pedestrian Network

As of 2023, the pedestrian infrastructure in Lakewood is varied, with some areas having well-maintained sidewalks and crosswalks, while others may lack pedestrian infrastructure, resulting in travelers choosing not to walk or to walk on the roadway. Since the 2009 NMTP, the City has made significant investment in the pedestrian network. The City has installed over 22 miles of sidewalk, representing a 41 percent increase in pedestrian infrastructure over 13 years. The existing pedestrian network is shown in Figure 2.1.

As seen in Figure 2.1, sidewalks now exist along many of the primary arterials and collectors within Lakewood. Sidewalk coverage in the downtown subarea is robust, with most streets having sidewalks present on both sides of the street. Recent projects have also installed wide sidewalks (9+ feet) along the west side of Gravelly Lake, along Lakewood Dr SW (north of Steilacoom Boulevard) and Onyx Drive. While these wide sidewalks are not a full 14 foot multi-use path, they generally function as such, although in some cases experienced cyclists may choose to ride in the roadway. The Gravelly Lake Drive wide sidewalk has created a key east-west connection for both pedestrians and cyclists within Lakewood. One of the biggest challenges within Lakewood is the relatively few east-west roadways available due to the geographical constraints from both Steilacoom and Gravelly Lake. Gravelly Lake Drive provides the most complete east-west connection for pedestrians in Lakewood. Continued buildout of the sidewalk along Steilacoom Boulevard Southwest will provide an additional east-west connection for pedestrians within Lakewood.

Lakewood also has a number of parks and trails that are popular among pedestrians and cyclists, including Fort Steilacoom Park, American Lake Park, Chambers Creek Park, and others. These parks and trails have a range of existing infrastructure, with some having multiuse paths, while others have simple trail systems which are not accessible to bicycles.

While much progress has been made, some areas of the City have been identified as lacking pedestrian infrastructure, through the public outreach summarized in Chapter 1. The city is working to address these concerns by installing additional sidewalk and shared use paths. For example, the City is currently building a shared use path along 87th Avenue Southwest, paralleling Fort Steilacoom Park.

The following chapter summarizes the methodology for prioritizing expansion of the City's pedestrian system.

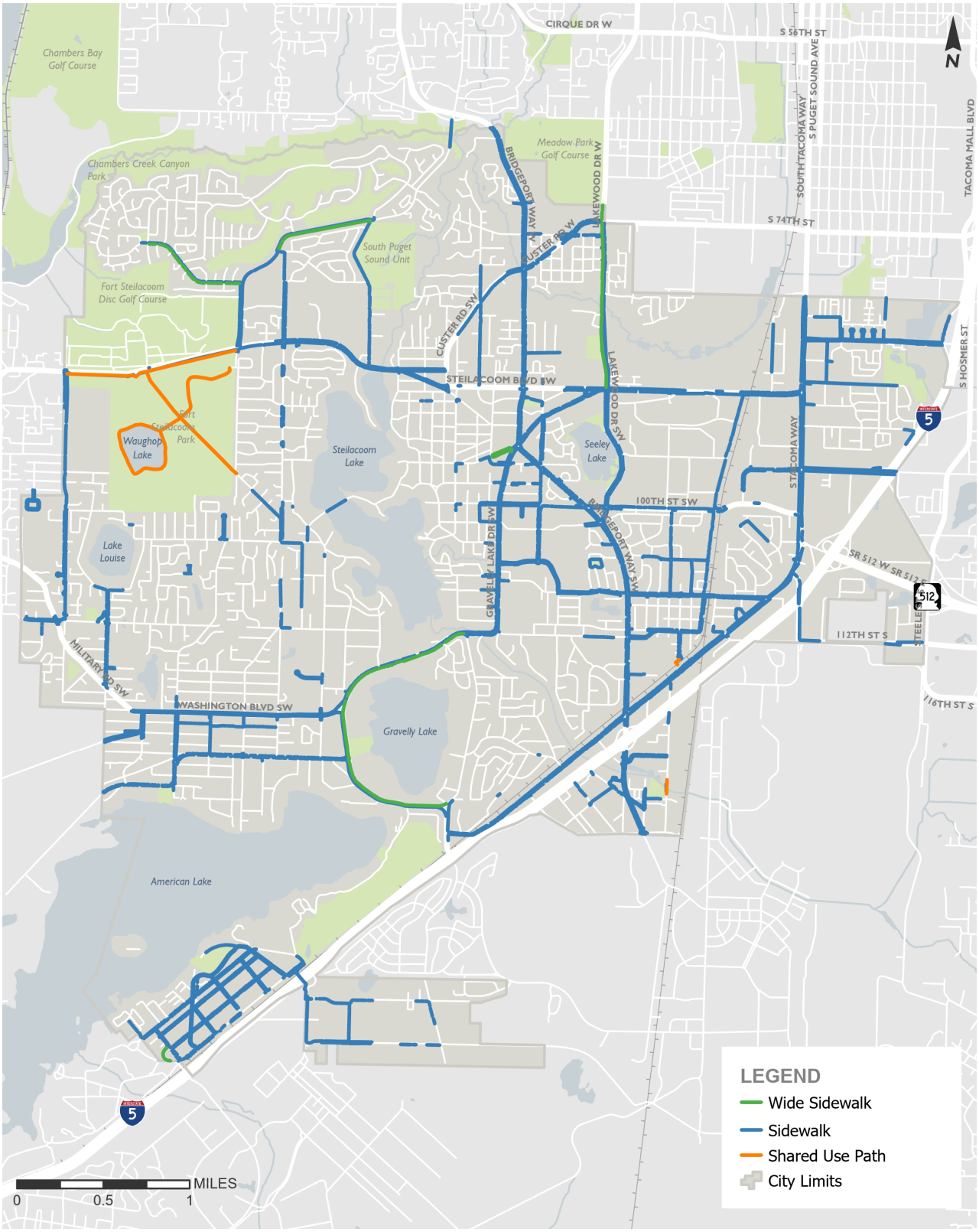


Figure 2.1 Existing Pedestrian System

Chapter 3: Methodology for Prioritizing Pedestrian Needs

2023 Update

During the 2023 update of the NMTP, the City decided to keep the same general prioritization process that was used in the 2009 NMTP. However, the scoring criteria developed in the 2009 plan included 35 total points based on the results of the self-evaluation scoring (as described in Chapter 2). Since this process was not completed in 2023, these 35 possible points were excluded from the evaluation criteria. The remaining 66 points (as described below) were updated based on the most currently available data since the 2009 NMTP. Additionally, the original 2009 NMTP included project prioritization for curb ramp improvements, sidewalk repairs and other ADA upgrades, all of which are not included within the 2023 NMTP but will be in the 2023 ADA Transition Plan.

Pedestrian Priority Index

Future pedestrian improvements in the city should be prioritized so the City of Lakewood can effectively implement the NMTP recommendations. The prioritization method must consider the relative cost of needed pedestrian improvements to maximize the public's investment within Lakewood areas that require higher levels of pedestrian accessibility. The City of Lakewood's Pedestrian Priority Index (PPI) was based on the accessibility of pedestrian facilities.

Accessibility

The closer that needed pedestrian improvements are located to various important trip generators and transportation facilities, the higher their priority. A series of critical accessibility indices are grouped into a composite Accessibility Index to help prioritize improvements.

Point scoring was established for each index. Table 3.1 summarizes the component index ratings, point values and scoring values of the PPI. A total of 66 points is possible within the Accessibility Index.

Defining the Accessibility Indices

A range of spatial index measures were developed to identify and quantify critical pedestrian access issues in Lakewood. Access at the pedestrian trip ends (origins and destinations) and pedestrian access to critical transportation system features (bus transit and arterial streets) were developed based on currently available technology (the City of Lakewood GIS data) and relevant data and information (2020 US Census).

Table 3.1 Pedestrian Priority Index Ratings, Point Values and Numeric Scores

Index Criteria	Location Rating	Point Value
Central Business District	Within ¼-mile radius of civic/commercial center	5
Local Business/Civic Center	Within ¼-mile radius of neighborhood centers	5
Parks	Within 1/8-mile radius of park	5
Traffic Signal/Roundabout	Within 1/8-mile of signal or roundabout	5
Lower Income Residence	Within Census Tract – below poverty line	5
Disabled Residents	Top Third (US Census Density)	5
Population/Employment Density	Per Matrix	6
Senior Housing	Within 1/6-mile radius of Senior Housing site	5
Walk-To-Work	Within Census Tract/Block Group	5
Schools		***10 points possible***
Proximity to Schools	Within 1/8-mile radius of school	5
Walk-To-School Route	Within 50 feet on either side of route	5
Transit		***5 points possible***
Transit Route	Within 50 feet on either side of route	1
Transit Bus Stops	Within 1/8-mile of transit stop	4
Street Functional Class		***5 points possible***
Principal	Within 50 feet on either side of street	5
Minor Arterial	Within 50 feet on either side of street	4
Collector	Within 50 feet on either side of street	3
Local	(all other)	1
Total		**66**

School Sites

Many students walk or ride bicycles on the sidewalks to school. Students, particularly younger children, are among the most vulnerable pedestrians. Areas around schools, where student pedestrians congregate, require special attention in the form of pedestrian facilities and safety measures. The highest value of 5 was assigned to areas within an eighth of a mile from a school (see Appendix A, Figure A.1).

Walk to School Routes

Along the same lines as schools, walk to school routes also service student pedestrians and require special attention due to safety issues. Areas within fifty feet on either side of a designated walk to school route were assigned an accessibility index value of 5 (see Appendix A, Figure A.1). When combined, the two accessibility measures related to school sites and routes can total 10 possible points.

Local Business and Civic Centers

Libraries, court houses and other public buildings provide a wide-range of services to children, senior adults, and mobility-impaired residents. Areas within a quarter mile of these facilities have been an accessibility index value of 5 (see Appendix A, Figure A.2).

Station Area and Downtown Service Districts

Similar to access to local business and civic centers, access to Lakewood's Downtown Service District and Station Districts are a significant community need. The community demands access to the goods and services offered in the downtown area by national and regional chains, as well as access to any of the public facilities located in this area. Access to the Station Area is also critical for those traveling outside of Lakewood on the Sounder commuter rail. Areas within a quarter mile of these districts have been assigned an accessibility index value of 5.

Parks

Parks attract recreational users of all ages. Pedestrian access and safety facilities are essential to park accessibility. Some linear parks also include multi-use trails that provide critical transportation connections for pedestrians and cyclists. Accordingly, areas within distances from Lakewood's many parks were assigned variable accessibility index values, decreasing in value with distance. The values assigned were 5 for areas within one-eighth of a mile, 4 between one-eight and one-quarter mile, 3 between one-quarter and one-half mile, and 1 within one mile from a local park (see Appendix A, Figure A.3).

Public Transit

Pierce County Transit provides public bus service to the City of Lakewood. Some of the transit riders begin and end their trips as pedestrians and almost all will access the bus at stops requiring pedestrian facilities. Similarly, areas along bus routes will most likely be used by bus riders to get to the bus stops. Safe and continuous pedestrian facilities that link the bus stops to the surrounding area are an integral component of the public transit system. Areas within 1/8-mile of the bus stops in Lakewood have been assigned an accessibility index value of 4 and areas within 50 feet on either side of a bus route have been assigned a value of 1, making a total value of 5 for areas associated with public transit (see Appendix A, Figure A.4).

Traffic Signals/Roundabouts

Crosswalks at traffic signals and roundabouts provide a means for pedestrians to safely cross busier arterial and collector streets. Areas to the sides of the intersections serve as a gathering point for pedestrians to congregate while waiting to cross the street. Due to the importance of facilities where pedestrians gather, areas within one-eighth of a mile of a traffic signal or roundabout have been given an accessibility index value of 5 (see Appendix A, Figure A.5).

Street Functional Classification

Streets function as ways to move in and around the City of Lakewood. Different classifications of roadways demonstrate the purpose of each type. Principal arterial streets are usually used to move traffic through local jurisdictions and are often state highways. High vehicle volumes at higher speeds intensify the need for separate pedestrian access and safety facilities. Without them, principal arterials become significant barriers to pedestrians of all kinds, but especially to the mobility-impaired. Areas within fifty feet on either side of a principal arterial were given an accessibility index value of 5. As the speeds and volumes decrease on other classified streets (minor arterials, collectors, and local streets), the barrier the street presents to pedestrians starts to diminish. For this reason, the accessibility index value also decreases. Minor arterials were assigned a value of 4, and collectors were assigned a value of 3.

Lower Income Residents

Residents with lower income are more likely to travel by walking, biking, or riding public transit than residents with higher incomes. In all cases, pedestrian facilities would be used to some degree, making pedestrian connections and safety a concern. For this reason, areas (U.S. Census Bureau Block Groups data) in Lakewood with 25 percent or more of their population having income below the poverty line (according to 2020 US Census Data) were given an accessibility index score of 5 (see Appendix A, Figure A.6).

Mobility-Impaired Residents

Mobility-impaired residents are those with a sensory and/or a physical disability. For this analysis, pedestrian access and safety facilities were determined more essential to those who are mobility-impaired than those with other impairments. These residents depend on pedestrian facilities operating at a satisfactory level in order to get about. As such, areas in Lakewood with a notable percentage of mobility-impaired residents were given a value of 5 (see Appendix A, Figure A.7).

Population & Employment Density (Year 2030)

Future (year 2030) residential population and employment in Lakewood was used as a measurable surrogate for land use intensity, in turn an indicator of pedestrian travel demand. Transportation analysis zones (TAZs) with high residential population and high employment utilize pedestrian facilities more than other areas because of the higher land use density. These land use attributes were measured by (a) dwelling unit per acre (for population) and (b) jobs per acre (for employment); and broken into approximate quarters at natural breaking points among the data. The resulting accessibility index values were highest for TAZs with very high densities both in population and employment, which were given a value of 3. Values decrease down to zero for those TAZs in the two bottom quarters with little to no residential population and employment (see Appendix A, Figure A.8).

Walk to Work Residents

People who walk to work in Lakewood use pedestrian facilities and often cross higher speed streets. For those areas of Lakewood where there are a relative higher percentage of residents walking to work there is a higher need for attention to pedestrian facilities and pedestrian safety. These areas with a higher proportion of residents who walk to work were assigned an accessibility index value of 5 (see Appendix A, Figure A.9).

Senior Adult Housing

Senior adults are typically thought to utilize alternate means of transportation (walking and public transit) more than younger adults. There are only limited senior and adult housing facilities in Lakewood. Nearby pedestrian facilities and their condition may be a safety concern. Due to this, an area within one-sixteenth of a mile from an adult home was given a value of 5 (see Appendix A, Figure A.10).

Composite Map

The Composite accessibility index map is illustrated in Figure 3-1. As shown, areas in darker shading reflect higher pedestrian accessibility index values. Also illustrated in Figure 3.1 are streets with missing sidewalks or sidewalks in poor condition. As example, those poor or missing sidewalks within the darkest shaded areas are ranked the highest in priority for future improvements. These values and scoring, form the basic input into the prioritization of pedestrian system improvements.

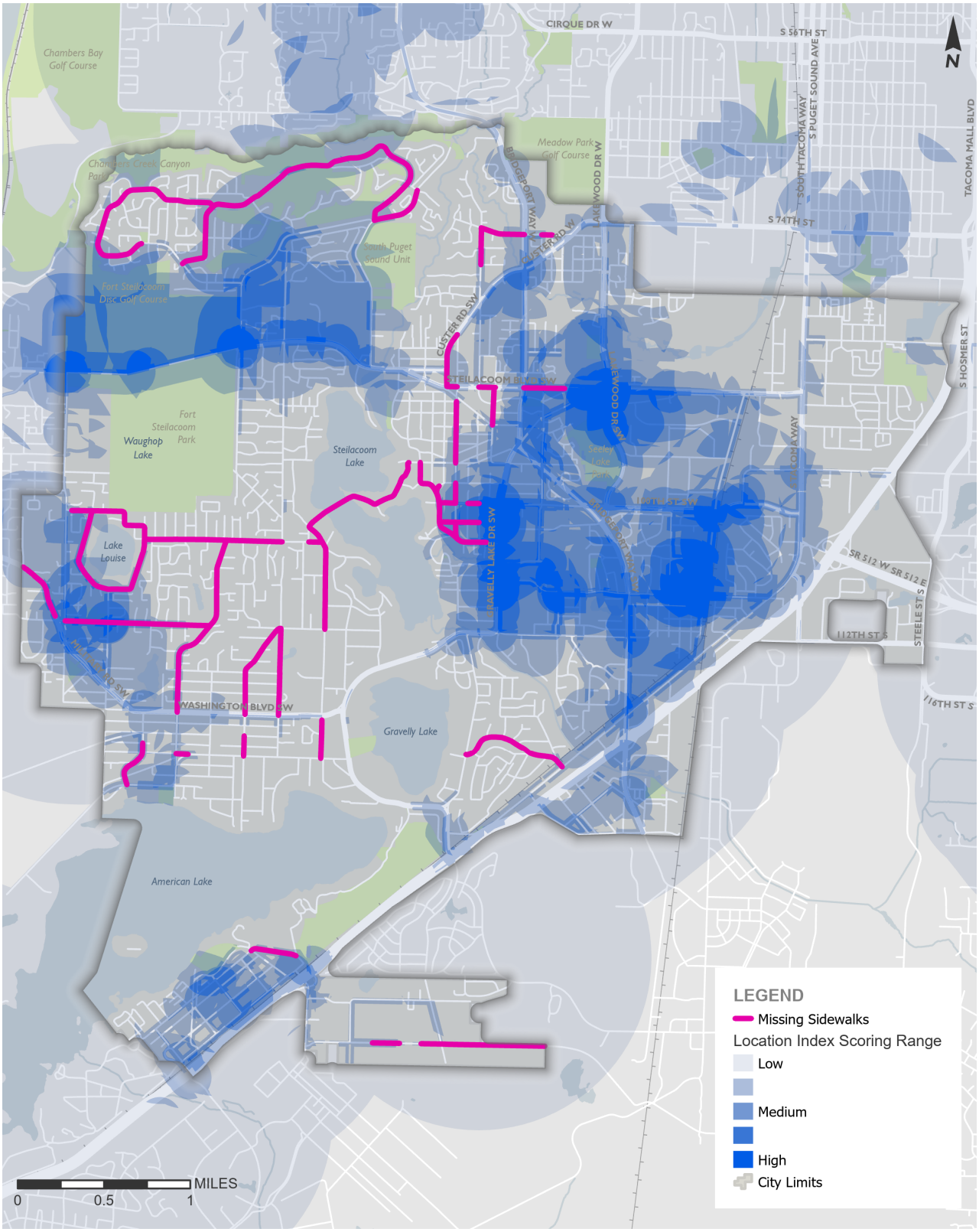


Figure 3.1 Composite Pedestrian Accessibility Index

Planning-Level Costs Estimates

A set of planning-level unit cost measures were prepared within the City of Lakewood GIS database to help estimate the cost of future pedestrian improvements. These costs are not necessarily reflective of actual costs but provide a comparative basis for establishing priorities and evaluating future programs. Sidewalk system improvements were assigned a planning-level cost estimate. The unit costs were based on recent roadway and sidewalk improvement projects completed within the City of Lakewood, and were provided by City of Lakewood staff. Planning level cost assumptions for installation of new sidewalk, curb and gutter was assumed to be $450 per linear foot. The 2009 NMTP included cost estimates for sidewalk repair, curb ramp improvements and other ADA upgrades. Because an ADA assessment was not included in the 2023 update, these costs have been removed from the plan entirely but still will be in the 2023 ADA Transition Plan.

Identifying Pedestrian Improvement Needs and Their Priorities

Those potential sidewalk projects with the highest PPI score should have the highest priority for future project completion. The Composite PPI was applied to all missing sidewalk segments shown in Figure 3.2. The missing sidewalk segments were identified as arterial or collector streets without sidewalks (as identified in the 2009 NMTP).

Pedestrian Improvement Needs

The cost to build new sidewalks along all of Lakewood's collector and arterial streets is estimated to be $79 million (see Chapter 5). The individual sidewalk segments "needs" were identified using the PPI method to provide a more efficient means of defining NMTP projects for implementation over the next five to twenty years. These needs are based on critical accessibility measures and a weighting of Lakewood's priorities. Chapter 5 includes the Pedestrian System Plan, where these "needs" are translated and grouped into specific projects. The projects are then prioritized based on the average PPI score per length across the proposed project. As such, projects that appear higher on the list should be constructed first, if possible.

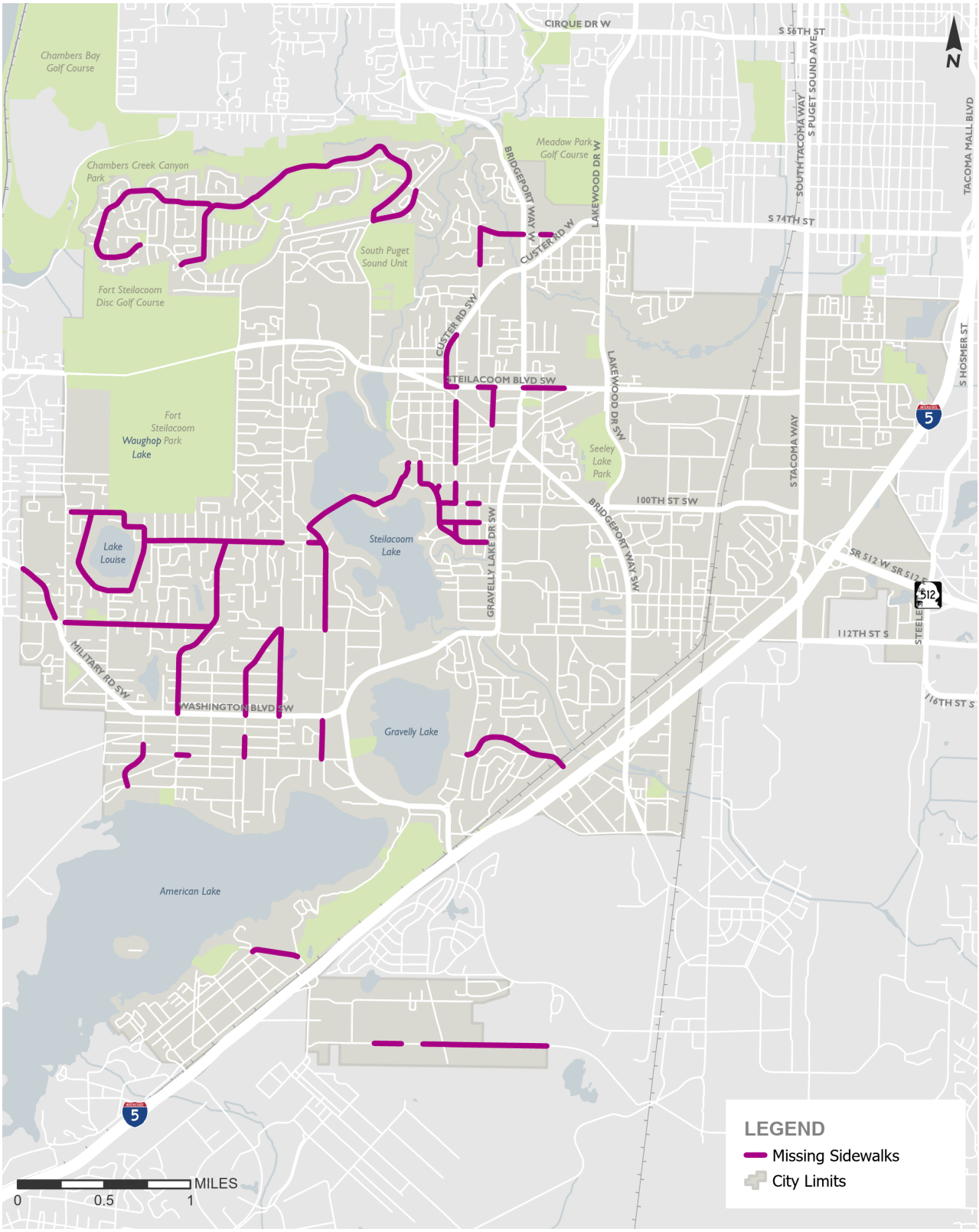


Figure 3.2 Missing Unfunded Sidewalk

Using the Pedestrian Priority Index (PPI)

The PPI provides the City of Lakewood with an objective methodology for prioritizing pedestrian system improvements. This methodology provides an initial basis for project identification as input into the City of Lakewood's 6-year Transportation Improvement Program (TIP). However, professional judgment will always be required to select appropriate projects. Other factors will likely need to be evaluated by the City of Lakewood, including relationship to:

- Other TIP projects
- Special grant application projects
- Pending development projects, and
- Prevailing site conditions.

See Chapter 6 - Recommended Measures to Implement the NMTP for further recommendations regarding pedestrian project funding and the TIP.

Chapter 4: Existing Bicycle System

2023 Update

The 2009 City of Lakewood Non-Motorized Transportation Plan clarified definitions of terms that are commonly used in bicycle planning language. The 2023 NMTP update refines these definitions, and brings them up to industry best practice. Additionally, bicycle planning has changed since the original NMTP, with many jurisdictions placing increased emphasis on improving non-motorized infrastructure, especially as a result of the COVID-19 pandemic. Another driver of increased bicycle use, while not prevalent in Lakewood yet, is the introduction of e-bikes, or electric bicycles. E-bikes have changed bicycle system design in several ways:

1. They have increased the range and utility of bicycles, allowing people to travel longer distances, tackle hills and headwinds, and carry heavier loads more easily.
2. They have expanded the demographic of people who may choose to ride a bicycle, including older adults and people with mobility issues.
3. They have increased the need for effective ways to separate e-bikes from other types of vehicles, such as through dedicated bike lanes or shared-use paths.

E-bike use is expected to continue growing and will continue to impact bicycle planning and design.

Bicycle planning has also gained additional importance as agencies strive to reduce their greenhouse gas emissions. Bicycle system connectivity is critical to driving mode shift (i.e. people will not choose to bike unless they can get to and from their destination on safe and connected bike routes). If Lakewood hopes to encourage more bicycling to reduce vehicle miles travelled, then increasing the connectivity of the City's bicycle network is critical.

Two fundamental building blocks are needed in understanding the study of Lakewood's bicycle system: (1) a baseline definition of the various terms and language used in describing bicycle facilities, and (2) acknowledging the physical constraints which have limited Lakewood's bicycle system development. Each of the building blocks is described here.

Bicycle Planning Language

In the 2009 NMTP, the City created a definitive set of bicycle planning language. National best practices with regard to bicycle planning have changed since the 2009 NMTP, and thus the planning language has changed as well. The following definitions have capture the standard industry definitions, as defined by AASHTO, the Manual of Uniform Traffic Control Devices (MUTCD)[1] and the National Association of City Transportation Officials (NACTO).

Figure 4.1 illustrates the basic forms of bicycle facilities as defined by AASHTO[2]. Pavement markings and signing guidance is provided by the MUTCD.

Consistent with the MUTCD, the City of Lakewood should continue to adhere to the following definition of terms concerning bicycle facilities:

1 Manual of Uniform Traffic Control Devices, U.S. Department of Transportation - Federal Highways Administration, 2009.
2 Association of American State Highway Transportation Officials. Guide for the Development of Bicycle Facilities, Washington, D.C. 2012.

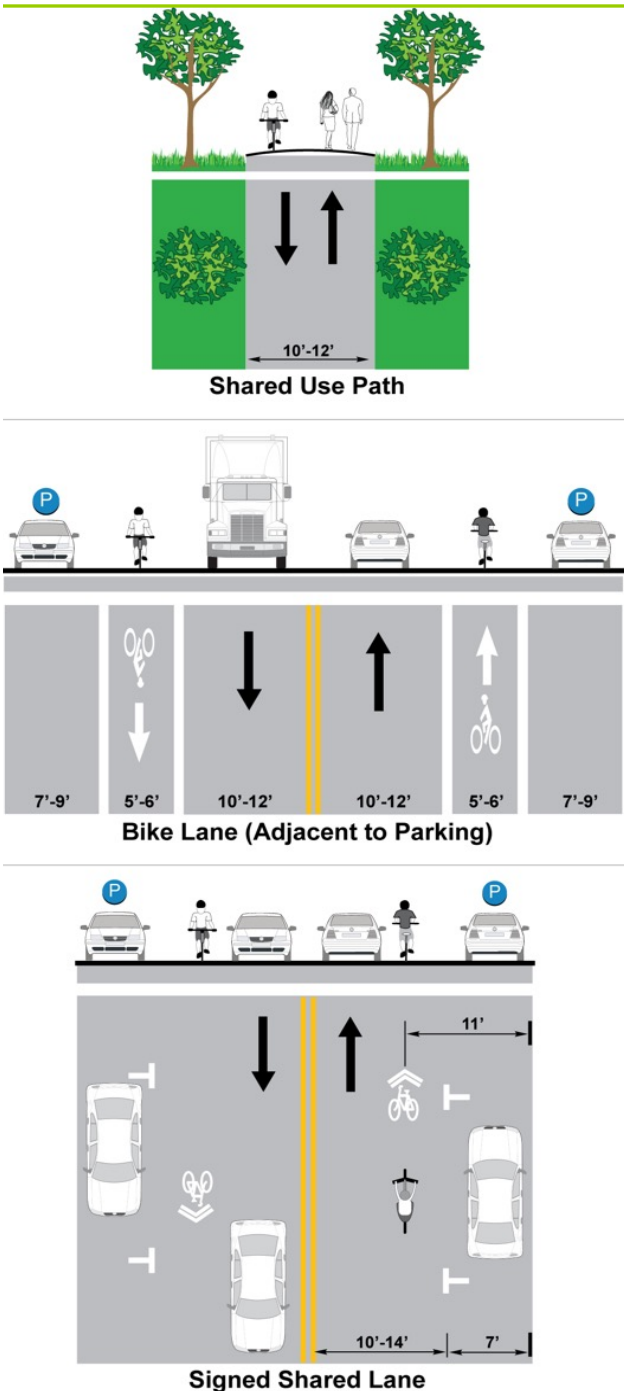


Figure 4.1 Bikeway Facility Definitions

Bicycle Facilities

This is a general term denoting improvements and provisions that accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically defined for bicycle use.

Bikeway is a generic term for any road, street, path that in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for exclusive bicycle use or are to be shared with other travel modes. Shoulders are to be paved at least four feet in width, and are separated from travel lanes with a lane stripe.

Bicycle Lane

A bicycle lane is a portion of a roadway that has been designated by signs and pavement markings for preferential or exclusive use by bicyclists. Bicycle lanes are one-way facilities that are placed on one or both sides of a street, and they carry bicyclists in the same direction as adjacent vehicle traffic.

Another type of bicycle lane is a barrier-separated lane (also called a protected bike lane). These are lanes that are separated from the adjacent general-purpose lane by a physical barrier such as vertical delineator posts, planters, curbs, or other raised features.

Designated Bicycle Routes

Designated bicycle routes consist of a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational route signs, with or without specific bicycle route numbers. Bicycle routes, which might be a combination of various types of bikeways, should establish a continuous routing. Designated bicycle routes can be divided into shared roadway and shared-use path facilities.

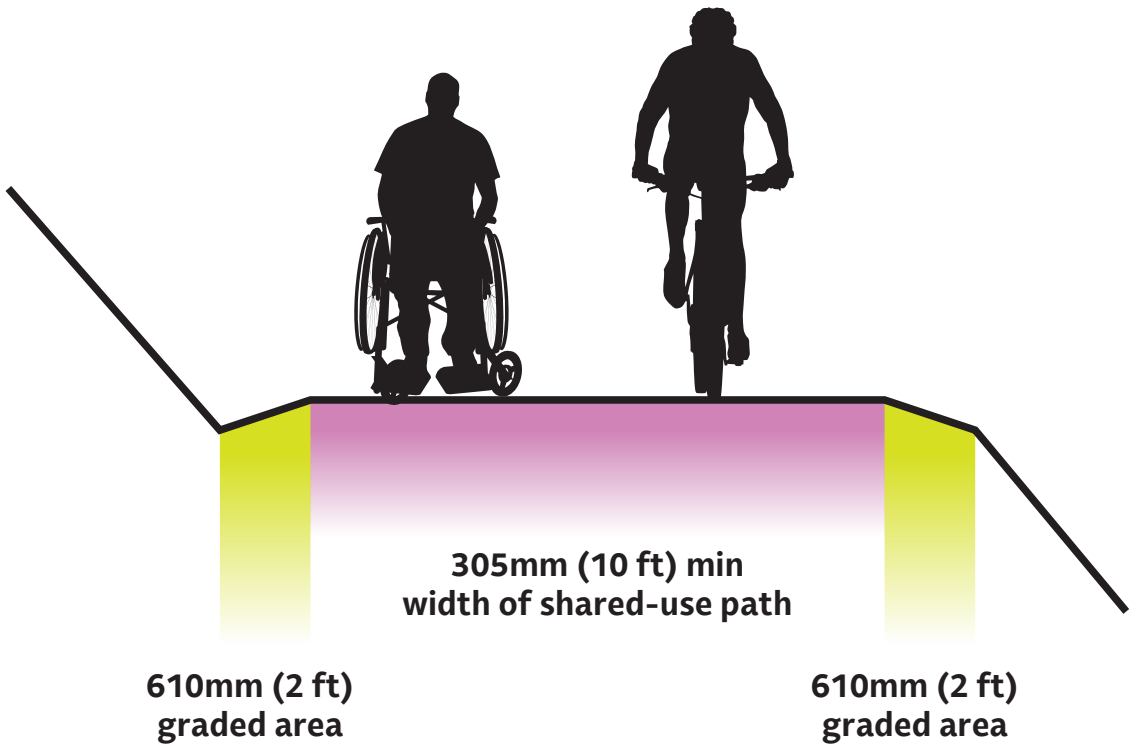


Figure 4.2 Shared use paths should be constructed to minimum widths of 10 feet image

Shared Roadway

On a shared roadway, bicyclists and motorists use the same travel lane. Shared roadways are roadways that are officially designated and marked as a bicycle route. Shared roadways can be placed on streets with wide outside travel lanes, along streets with bicycle route signing, or along local streets where motorists have to weave into the lane in order to safely pass a bicyclist. Shared roadways are often marked by 'sharrows', a white pavement marking showing a bicycle with two arrows above it.

Shared-Use Path

A shared-use path is a bikeway outside the traveled way and physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent alignment. Shared-use paths are also used by pedestrians (including skaters, users of manual and motorized wheelchairs, and joggers) and other authorized motorized and non-motorized users. Shared-use paths primarily attract recreational users, because they typically wind through and connect destinations; they also are an excellent opportunity to function as non-motorized transportation routes. For any cyclists uncomfortable with using roads with vehicles, shared-use paths may be the preferred facility.

Implementation of these specific terms during the last NMTP helped advance consistent dialogue between the City of Lakewood and the community regarding bicycle facility planning and design, within the context of multi-modal systems development. Continued usage of these terms will help further mutual understanding between the City and the community.

source: www.contextsensitivesolutions.org

source: www.indygreenways.org

Defining Bicycle Users

There are a variety of bicyclists traveling within the study area which can be classified depending on their skills, confidence, preferences, and trip purpose.

For this study the following skill and confidence categories of bicycle user types are applied as the impact of different bicycle facility types are determined:

Advanced or confident riders are generally comfortable riding on most available bicycle facilities, including roadways. This also includes riders who are confident enough to ride on roadways which require navigating through more traffic. These bicyclists may also prefer traveling on residential streets or shared use paths. These bicyclists may include commuters, long-distance cyclists, or those who participate in bicycle clubs and races. Typically, these cyclists prefer more direct routes to their destination

Basic or less confident adult riders encompasses a wide range of people. Those who ride frequently for different purposes, those who ride occasionally in favorable conditions, those who ride for recreation, and those who use a bicycle as a primary mode of transportation. They prefer to utilize shared-use paths or bicycle lanes and may deviate from the most direct route to avoid heavy vehicular traffic

Children, riding on their own or with their parents, may not travel as fast as their adult counterparts but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities. Residential streets with low motor vehicle speeds, linked with shared use paths and busier streets with well-defined pavement markings between bicycles and motor vehicles can accommodate children without encouraging them to ride in the travel lane of major arterials.

Individuals may also choose to ride a bicycle for different trip purposes. AASHTO categorizes trip purposes as either utilitarian or recreational, which are defined as:

U**tilitarian or nondiscretionary** trips are trips that are a necessity for an individual's daily activities. They may include commuting to work or school, shopping and errands, or other necessary activities. Some riders may use bicycles for utilitarian trips if they do not have access to a vehicle or transit or are otherwise dependent on bicycling. These types of trips may require short-term or long-term bicycle parking, and riders often prefer a direct route with flat topography.

Recreational or discretionary trips include trips that are made for exercise and/or leisure. Recreational riders fit into a wide range of age, comfort, and experience. These trips can range from short neighborhood trips to longer rides which may take place over the course of several hours. Recreational riders may ride in a group, may drive to the starting point of their bicycle trip, and may prefer a looping trip rather than backtracking. These unique characteristics show the wide breadth of trip types that recreational trips include.

Local Geography

Natural geographic features, historic rural residential patterns and other transportation constraints have limited bicycle system connectivity in the Lakewood urban area including I-5, Sound Transit, railroad and various lakes and streams. As a result, Lakewood's bicycle system has many excellent features but could still be improved in terms of cohesiveness and connectivity. Figure 4.3 maps the current bicycle system within Lakewood.

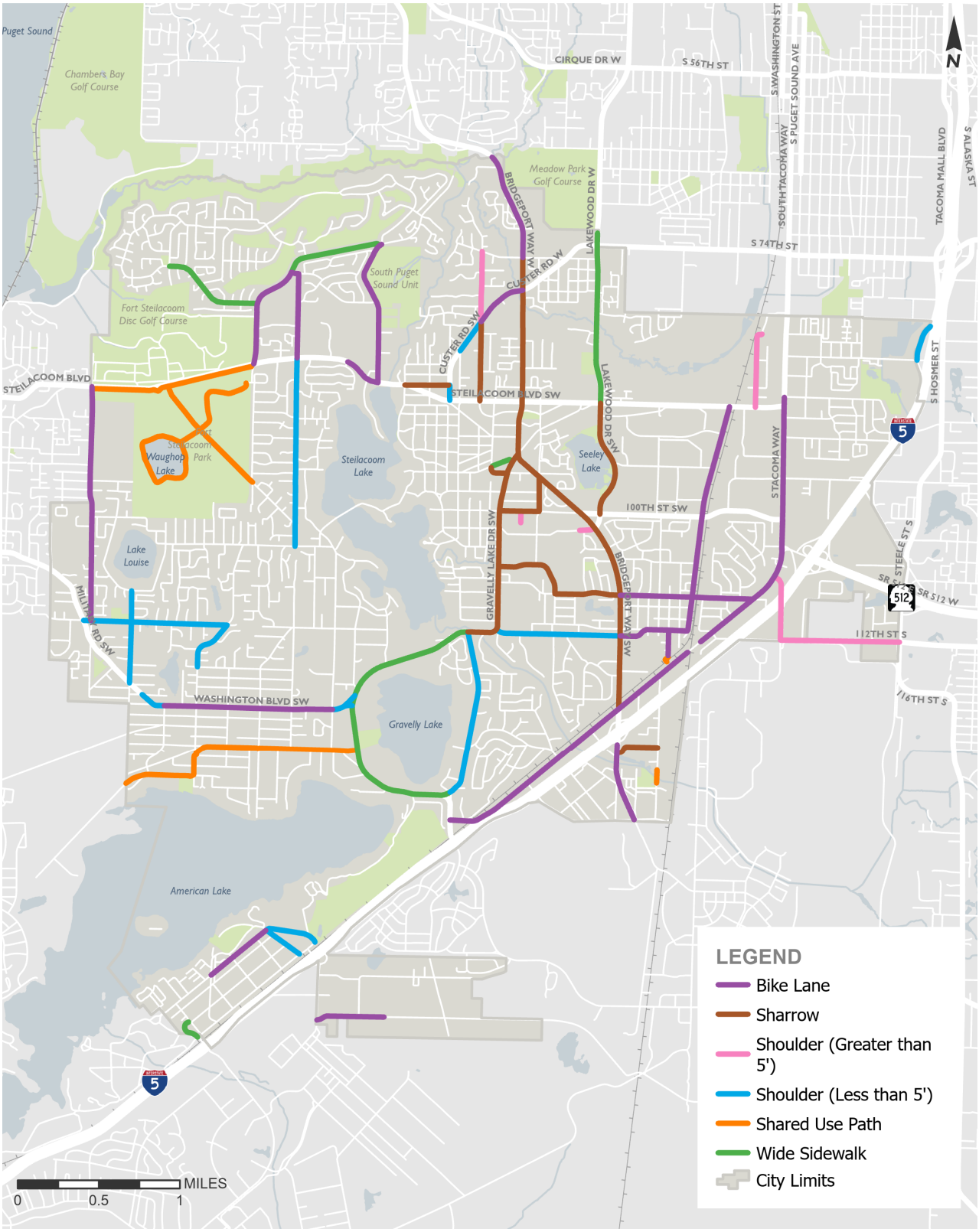


Figure 4.3 Existing (2023) Bicycle Facilities

Chapter 5: Pedestrian and Bicycle System Plans

2023 Update

During the 2023 NMTP update, the pedestrian and bicycle system plans were adjusted, but not completely overhauled. The pedestrian system was updated to reflect the buildout of the sidewalk network since the 2009 NMTP, but the ultimate pedestrian system plan still includes planned sidewalk on both sides of all arterials and collectors within the City of Lakewood. The bicycle system plan was adjusted slightly (in addition to updating the existing infrastructure) to reflect updated City plans to buildout more dedicated bicycle infrastructure. For example, the 2009 NMTP plan did not have any bicycle facilities planned along Hillcrest Drive Southwest, but recent Sound Transit plans for an improved railroad crossing at Clover Creek Drive Southwest resulted in the City desiring a bicycle facility along Hillcrest Drive Southwest. The updated bicycle system plan map (Figure 5.3) reflects these changes.

Pedestrian System Plan

Chapter 3 summarized the process establishing the prioritized sidewalk improvement needs and their costs based on a GIS composite accessibility index scoring system. The second step involved defining logical pedestrian corridor projects that addressed priority needs, but also provided continuous linkages between major non-motorized trip generators or attractions, particularly those connections that link various neighborhoods with each other, downtown Lakewood and the Station District. The resulting Pedestrian System Plan culminating this two-step process is illustrated in Figure 5.1.

New Sidewalks and Shared-Use Paths

As shown in Figure 5.1, the recommended Pedestrian System Plan includes an increase in new sidewalks (approximately 16.6 miles) and shared-use paths (approximately 1.5 miles) for pedestrian travel. The recommended projects include new sidewalks along sections of arterial and collector streets, which in many cases serve as in-fill to match existing sidewalks within these corridors.

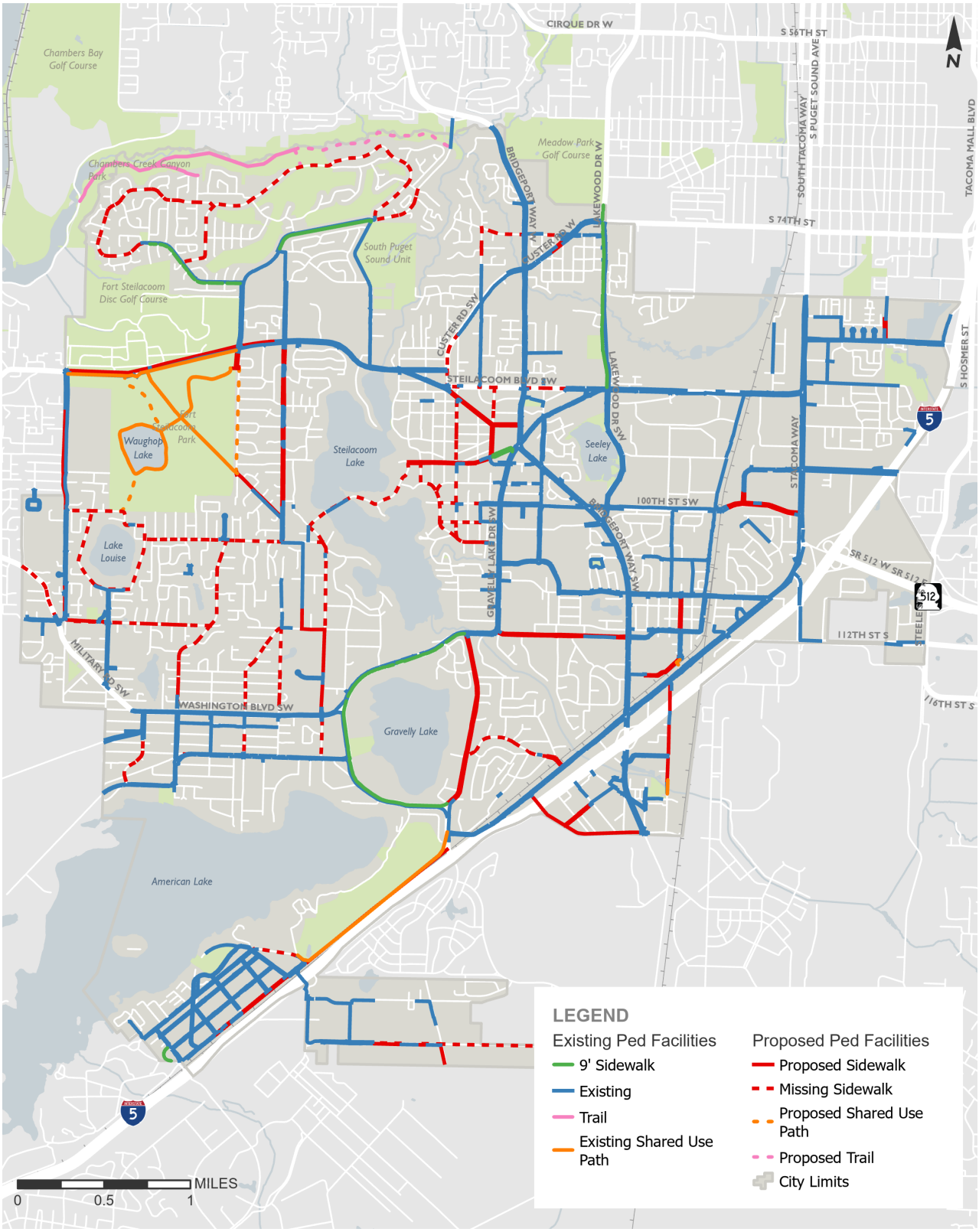


Figure 5.1 Pedestrian System Plan

Table 5.1 Prioritized Pedestrian System Projects

Prioritized Project #	Sidewalk Project	Distance (mi)
1	Custer	0.9
2	Edgewood Ave	0.3
3	Dekoven	0.7
4	Butte	1.1
5	Lake City	0.7
6	75th/Custer	0.5
7	83rd	0.5
8	Onyx Loop 1	1.7
9	104th	0.8
10	112th/Military	1.2
11	Louise	1.5
12	Nyanza Park	0.7
13	Interlaaken N	0.8
14	Interlaaken Bridge	0.8
15	Onyx Loop 2	2
16	150th	0.9
17	Interlaaken S	0.2

Table 5.1 lists the various new sidewalk projects within the City of Lakewood. The highest priority pedestrian system improvements include the completion of critical sidewalk connections along several Principal and Minor Arterial streets, including:

- Custer Road
- Edgewood Avenue
- Dekoven Drive Southwest
- Butte Drive Southwest
- Lake City Boulevard

The new sidewalk projects listed in Table 5.1 are estimated to cost almost $79 million (in 2023 dollars) and total nearly 16.6 miles in new sidewalk.

The new, high priority sidewalk projects included in the NMTP provide important system connections to major pedestrian trip generators and safety enhancements for pedestrians traveling along busy city arterials streets. Pedestrian access to transit is significantly enhanced by these system improvements. The locations of the pedestrian projects are shown in Figure 5.2.

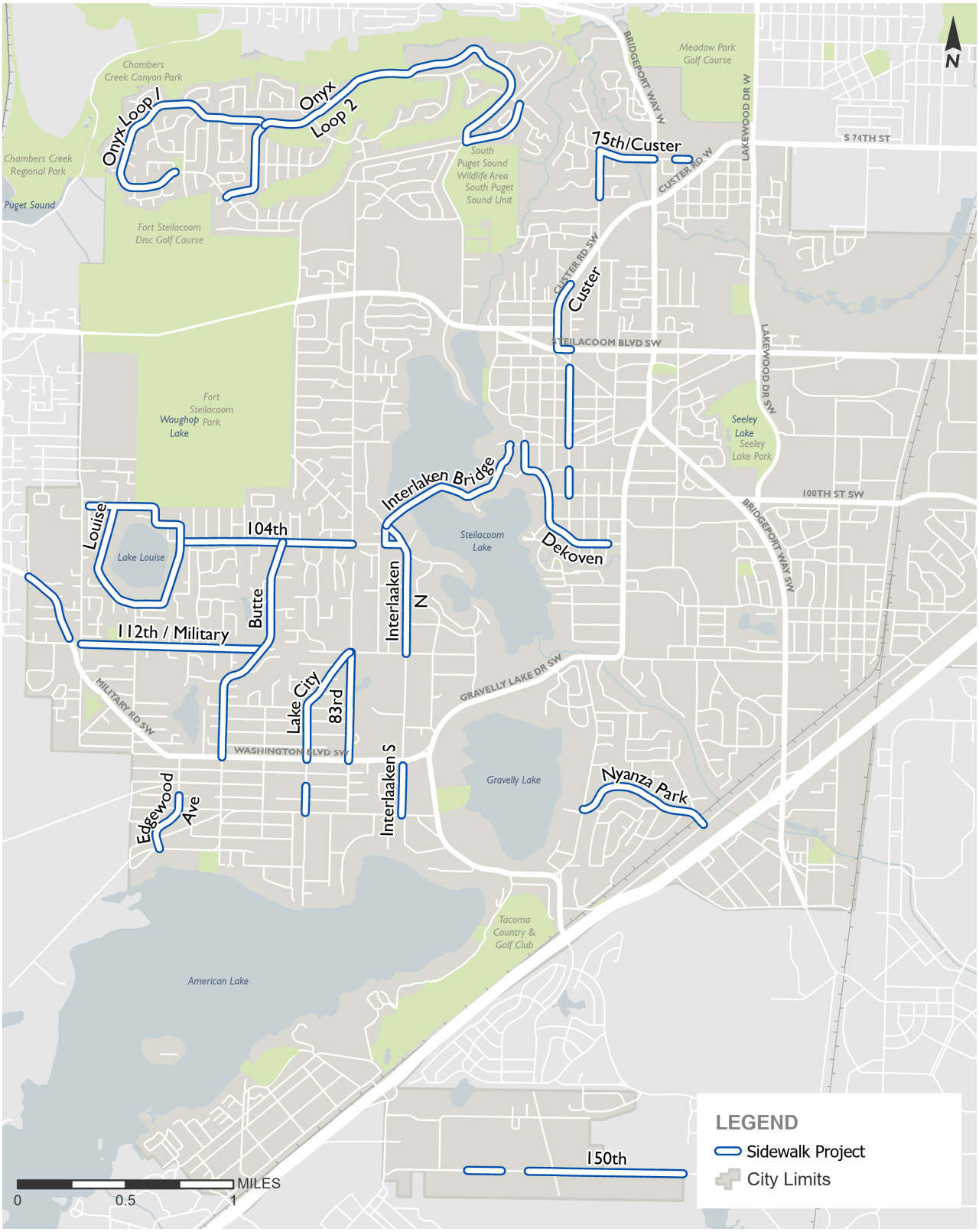
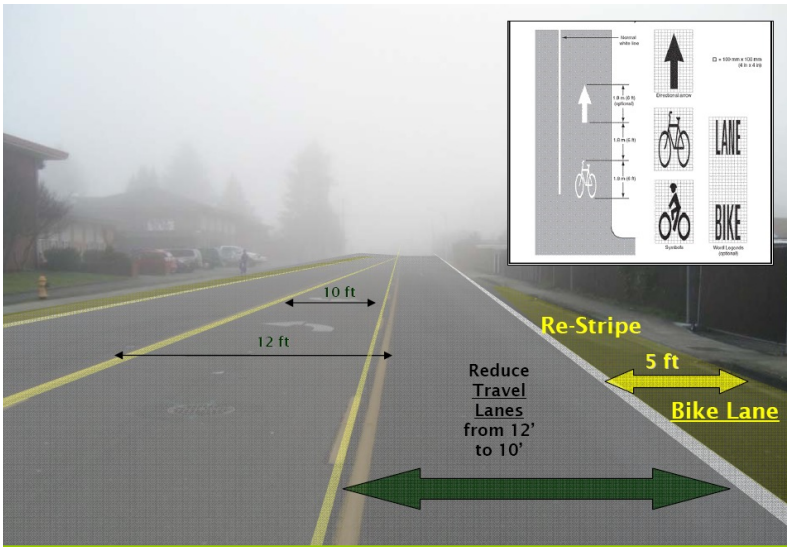


Figure 5.2 Pedestrian Project Locations



WSDOT Coordination

Several critical pedestrian routes cross I-5 to link Lakewood neighborhoods to the city system. There are two local arterial street crossings or interchanges with I-5 that currently are missing or possess inadequate pedestrian facilities. These routes include:

- New York/McChord
- 47th Avenue (important future connection to Sounder Station)

In each case the current structures spanning I-5 were mostly constructed without sidewalks and it is expected that the cost to add sidewalks to these structures would be prohibitively expensive. Eventually, each structure will need to be replaced or modified, at which time new sidewalks should be added. The City will need to coordinate with WSDOT to ensure that new pedestrian facilities are included in any structural upgrades or replacements to the I-5 interchanges or over-crossings.

Bicycle System Plan

Priority was placed in the plan process to identify opportunities to build new (as part of street projects identified in the City TIP) or re-stripe existing arterial streets with bicycle lanes to close critical gaps in the existing system. The city is tasked with trying to effectively connect its various neighborhoods and downtown and other centers by means of overcoming steep terrain, navigating around several lakes and crossing the Sounder Railroad tracks and I-5. There are limited corridors making these connections, and in each corridor the public rights-of-way are constrained.

As an alternative, along existing streets where space is limited (existing travel lanes and curb/sidewalks) or there are underlying design constraints bicycle lane re-striping was found to be impractical. As an alternative to bike lanes, the plan recommends striping and posting many of these routes as shared lanes with "sharrow" designations.

Many cyclists in Lakewood enjoy the existing shared-use path (trail) system, particularly for recreation and some commuter traffic as well. A number of recent multiuse paths and wide sidewalk projects (8-9 foot sidewalks) have been completed around the City. While eight or nine feet is less than the typical 14 foot section identified for a shared use path, these facilities are often used by recreational cyclists and pedestrians alike.

Figure 5.3 maps the existing and planned bicycle system for Lakewood. The bicycle system plan includes re-striping about 3.5 miles of bicycle lanes, 17.8 miles of shared-use lane (sharrow) routes, and approximately 1.5 miles of new shared-use paths to fill critical gaps in Lakewood's bicycle system.

New Bike Lanes

The new proposed bike lanes are mapped in Figure 5.3. Several arterial streets in Lakewood have sufficient paved width for the possibility of re-striping travel lanes to accommodate on-street bike lanes. These routes provide critical linkages to major cycling activity centers, particularly downtown Lakewood and connections to the shared-use path system. These streets include:

- South Tacoma Way
- Military Road Southwest
- Steilacoom Boulevard
- 59th Avenue

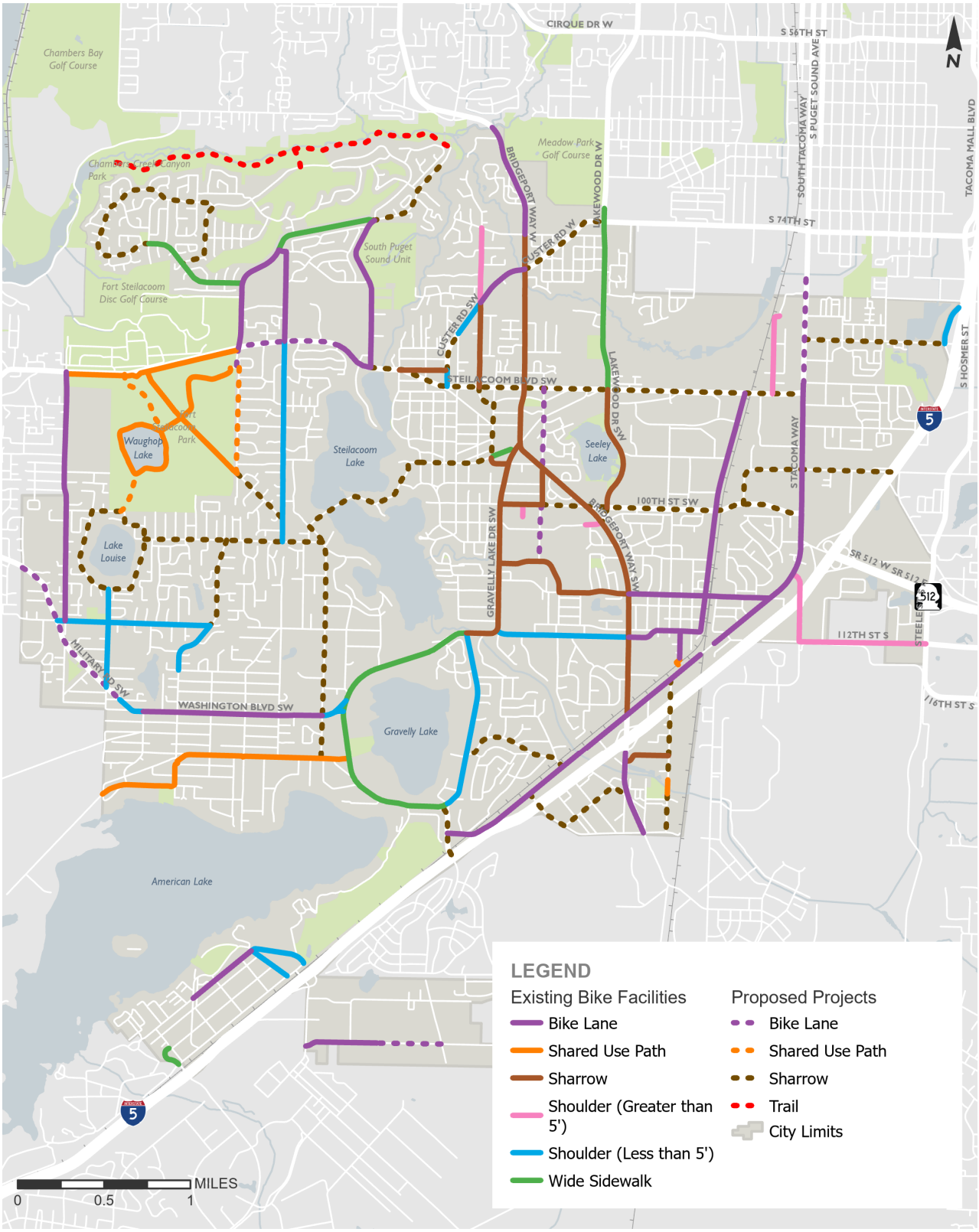


Figure 5.3 Bicycle System Plan

Shared-Lane Routes

The NMTP examined a number of options to help connect the bicycle system within and through the Lakewood urban area. Unfortunately, several major corridors are severely constrained making it difficult to re-stripe existing streets without removing important travel lane vehicular capacity or incurring significant costs to purchase new right-of-way and widen existing streets.

As illustrated in Figure 5.3, the proposed shared-lane routes provide critical linkages for cyclists in a number of corridors, including: Steilacoom Boulevard, 100th Street, Main Street, Interlaaken, Butte Road and 104th Street. Several of these routes are multi-lane arterials. In the implementation of these recommendations, the City of Lakewood should apply signing and striping of sharrow lanes on the two-lane routes first; and then select a demonstration application of sharrows on one of the multi-lane arterials (symbol placement on outer travel lanes) before a system-wide application.

Shared-Use Path Connections

The 2009 NMTP recommended new shared-use path connections around Gravelly Lake next to Gravelly Lake Drive and Nyanza Drive, and along Flett Creek. The Gravelly Lake Drive section has been completed, with the east side of the lake along Nyanza Drive planned for construction shortly. The Flett Creek shared-use path has been eliminated from the 2023 NMTP. The path was proposed to run through Mountain View Cemetery and has been removed due to construction feasibility issues. An additional shared-use paths through Fort Steilacoom Park near Waughop Lake is recommended with a paved surface of 10′ with 2′ of asphalt or gravel on each side for a total width of 14′.

The recently constructed paths and future paths provide important linkages for future trail users, and provide greater local (cross-town) and regional non-motorized access, especially for recreational cyclists and pedestrians.

Shared-use paths usually intersect major city arterials at critical junctions. At the western terminus of the existing shared-use path adjacent to Steilacoom Boulevard at Farwest Drive, westward bound cyclists have difficulty crossing Farwest Drive (as do northbound cyclists on Farwest Drive, in the bike lane) to continue traveling westward along Steilacoom Boulevard. This location is an excellent opportunity for the City to consider placement of a “bike box” on the south leg of the Farwest Drive intersection of Steilacoom Boulevard. The “bike box” would provide added space for cyclists wishing to cross and turn left onto Steilacoom Boulevard. If successful, similar “bike box” striping projects could be place at other major intersections.

Routes for Special Study

The NMTP includes various new bike lane, shared-lane and shared-use path connections within a fairly comprehensive system spanning the Lakewood urban area. However, due to topographical and geographical constraints and obstacles, not all corridors are optimally connected and require further study to identify the appropriate, long-range plan solutions.

Sounder Station Connectivity

Enhanced pedestrian and bicycle access to the Sounder Station will be important to better link Lakewood to Sounder access, especially for those living south of I-5. In future additions to the City’s TIP, sections of Hillcrest Drive Southwest/ Nyanza Park Drive Southwest and McChord Drive Southwest should be considered for full urban street upgrades with sidewalks and on-street bicycle facilities (likely sharrows). Sound Transit and the City of Lakewood are currently working together to improve the railroad crossing at Clover Creek Drive / Hillcrest Drive Southwest. This connection will provide a safe way for non-motorized users to cross the railroad tracks and then travel towards the Sounder Station.

Interlaaken Bridge

The Interlaaken Bridge is an important non-motorized connector between downtown Lakewood and the Lake Louise area. The bridge’s minimum dimension prohibits the re-striping for bike lanes, so use of “sharrow” markings and signs are appropriate. Furthermore, the addition of sidewalks to the bridge may be extremely expensive, and neither connector streets have sufficient space to add sidewalks and curbing treatments without major impacts to private

residential landscaping and infrastructure. The current pedestrian access within the corridor (sharing the travel lane and thin shoulders) will likely be required in the future.

Downtown Lakewood

There are limited streets in Lakewood's downtown area where bicycle facility enhancements can be made without removing either parking (undesirable to local merchants) or travel lanes (undesirable to commuters). Yet downtown Lakewood is an important non-motorized destination and inter-modal hub. The NMTP identified key corridors in which bicycle lanes can be added by changing current traffic control measures. NW 59th Avenue appears to provide the most feasible route in which there is sufficient space to re-stripe a north-south connector with on-street bike lanes, with a direct connection to Lakewood's city center from Steilacoom Boulevard. This re-striping would likely require removing two-way left turn lanes and turn pockets along NW 59th Avenue.

Funding Needs for Bicycle System Pedestrian Improvements

Planning-level costs were estimated for stand-alone bike lane and shared lane re-striping, and the extension of the shared-use path network. The total cost of the bicycle system improvements is summarized in Table 5.2 and is estimated at about $1.4 million over the next 20 years.

Table 5.2 Priority Bicycle System Projects

Bike Lane Signage and Marking				
Project #	**Street**	**From**	**To**	**Distance (mi)**
BL-1	Military Rd	City Limits	Wash Blvd	0.98
BL-2	59th Ave.	Steilacoom Blvd.	Bridgeport Way	0.46
BL-3	59th Ave.	Bridgeport Way	Main St.	0.33
BL-4	87th	Elwood Dr	Steilacoom Blvd	0.13
BL-5	Steilacoom Blvd	87th	Weller Rd	0.58
BL-6	S Tacoma Way	88th St. Ct.	City Limits	0.60
BL-7	150th St SW	73rd Ave SW	Woodbrook Dr SW	0.36
	Total			**3.44**
Shared-Lane Signing & Marking				
Project #	**Street**	**From**	**To**	**Distance (mi)**
SL-1	Onyx Dr. & Zircon Dr. & 91st Ave. & 78th St.	87th Ave.	loop around to Onyx Dr.	1.69
SL-2	Phillips Rd.	Onyx Dr.	68th Ave.	0.58
SL-3	Steilacoom Blvd.	Phillips Rd SW	S. Tacoma Way	2.52
SL-4	Angle Lane	Elwood Dr.	Hipkins Rd.	0.37
SL-5	Lake Louise Dr.	101st St.	around Lake Louise	1.42
SL-6	104th St.	Lake Louise Dr.	Interlaaken Dr.	1.03
SL-7	Butte Dr.	104th St.	112th St SW	0.51
SL-8	Interlaaken Dr.	Mt. Tacoma Dr.	Washington Blvd.	2.22
SL-9	Custer Rd.	Bridgeport Way	Lakewood Dr W	0.56
SL-10	Custer Rd.	88th St SW	Meadow Rd SW	0.23
SL-11	Lakewood Dr.	100th St SW	Bridgeport Way	0.09
SL-12	Mt. Tacoma Dr. & Motor Ave.	Interlaaken Dr.	Whitman Ave SW	0.42
SL-13	New York Ave. & Lincoln Ave. & SF Ave.	Pacific Hwy.	Bridgeport Way	0.75
SL-14	47th Ave.	Pacific Hwy.	McChord Dr SW	0.89
SL-15	100th St.	59th Ave SW	S. Tacoma Way	1.52
SL-16	96th St. & 40th Ave.	100th St.	I-5	1.03
SL-17	Nyanza Park Dr SW	Nyanza	Pacific Hwy SW	0.66
SL-18	Whitman Ave & Fairlawn Dr	Steilacoom Blvd	Motor Ave SW	0.45
SL-19	84th St.	S. Tacoma Way	Tacoma Mall Blvd.	0.81
	Total			**17.75**
Shared-Use Path				
Project #	**Street**	**From**	**To**	**Distance (mi)**
P-1	Elwood Dr SW	87th Ave SW	Angle Ln SW	0.62
P-2	Waughop Lake S	Lake Louise Dr SW	Lake Waughop Loop Rd	0.23
P-3	Waughop Lake N	Steilacoom Blvd	Lake Waughop Loop Rd	0.42
	Total			**1.27**

Non-Motorized Funding Needs

The combined non-motorized system improvement costs are $80.1 million, as summarized in Table 5.3.

Most of these costs are attributable to sidewalk improvements, and it remains uncertain as to whether some of these sidewalk improvements will be included within other arterial street projects in future updates to Lakewood's CIP.

A preliminary funding assessment was conducted on the various pedestrian and bicycle improvement needs as input into the larger transportation funding question that Lakewood will examine as part of its Transportation Element, at which time the NMTP findings can re revised and updated.

Sidewalk Construction Program—totaling approximately $78.8 million. Potential sources include the General Fund, bonding of funds, new development, and state & federal grants. The City will need to consider either dedicating more of their General Fund revenues towards sidewalk improvements in these major corridors or consider an additional revenue program, or both.

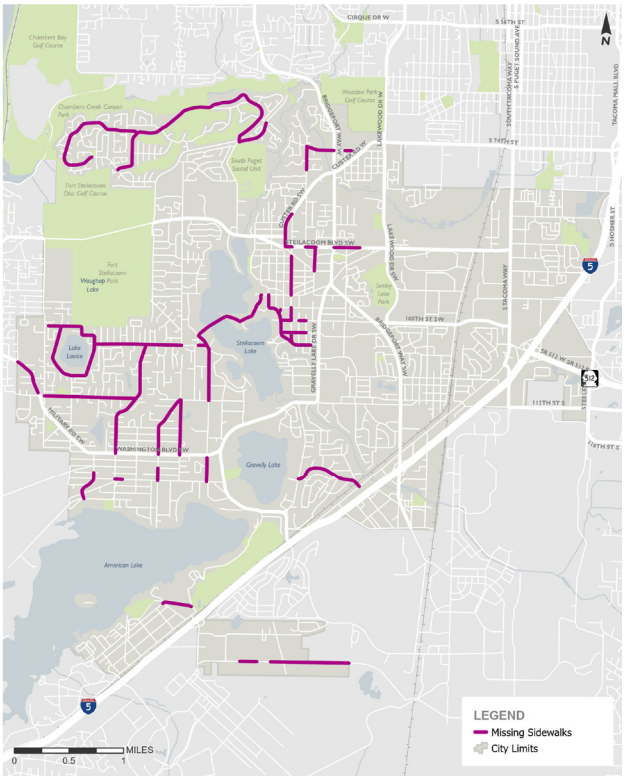
Bicycle System Expansion Program—totaling $1.3 million. City source is General Fund.

Table 5.3: Non-Motorized Plan Costs

Project Type	Miles	Cost
New Sidewalks	16.6	$78,800,000
Bike Lane Signing and Marking	3.5	$201,000
Shared-Lane Signing / Marking	17.8	$725,000
New Shared-Use Paths	1.3	$360,000
Total		**$80,086,000**

Sidewalk, bike lane and shared-lane markings are assumed to be on both sides of the street. The miles shown in this table reflect center-lane miles.

Chapter 6: Recommended Measures to Implement NMTP



GIS Mapping of Existing and Missing Sidewalks and Curb Ramps

Overview

The City has made significant progress on building out it's non-motorized infrastructure since the adoption of the 2009 NMTP. The findings of the updated 2023 NMTP show that Lakewood should generally continue doing what has been done in the intervening 14 years. This will continue to require coordination with neighboring cities, Sound Transit, Pierce Transit, WSDOT and other government entities.

Project Programming, Coordination and Development

The City of Lakewood should continue to engage neighboring cities, regional transportation agencies, school district and neighborhood associations in prioritizing neighborhood sidewalk and curb ramp improvements and bicycle facility enhancements. These efforts will be necessary to develop the annual update of sidewalk and curb ramp improvement projects and bicycle system enhancements as input into the six-year Transportation Improvement Program (TIP). Defining short-term projects will involve more detailed planning than simply selecting the high priority projects to construct as already noted in the NMTP. Other issues that will affect project priority-setting include:

- Defining "packaged" pedestrian improvements that span or mix high and moderate priorities, resulting in comprehensive corridor enhancements for construction programming and cost efficiencies
- Complimenting long-range street projects with intersecting sidewalk, curb ramp and bicycle facility improvements to complete neighborhood accessibility
- Coordinating state highway improvement projects with WSDOT and transit station, stop and route improvements with neighboring city pedestrian and bicycle system enhancements
- Re-striping and signing major corridors with on-street bicycle lanes or "sharrow" (shared travel lanes) to link major sub-areas and activity centers to the City's shared-use path system and major employment, recreation and commercial destinations

NMTP Database Maintenance

The NMTP GIS database should be updated periodically to reflect new or replacement pedestrian and bicycle system improvements within the Lakewood urban area. Updates to the City of Lakewood's GIS database can either be made on a case-by-case basis or in a comprehensive effort at the end of each year (prior to updates of the 6-year TIP).

WSDOT Coordination

WSDOT's highways provide critical regional connections within and through Lakewood. Non-motorized accessibility and mobility issues are important along state highways within the city. The City of Lakewood has no immediate jurisdiction over the design and construction of WSDOT facilities.

The City should encourage WSDOT to complete a thorough examination of each interchange and overcrossing of I-5 within Lakewood with respect to pedestrian and bicycle facilities. The state's evaluation should address all of the ADA Transition Plan requirements, including a Self-Evaluation and plan to remove pedestrian access obstacles. Such findings can then be administered through each of WSDOT's design and construction projects to comply with the ADA.

Neighborhood Traffic Management

Traffic congestion and management issues will more frequently be raised as the Lakewood urban area grows and matures. To best manage local traffic conditions and non-motorized improvement measures, the City of Lakewood should continue to implement its Neighborhood Traffic Management Program in coordination with the findings and recommendations of the NMTP. The city's Neighborhood Traffic Management Program is designed to improve neighborhood safety and respond to citizen's request for neighborhood traffic monitoring and solutions.

Possible solutions or measures are defined through a two-phase process: Phase I measures include various traffic control measures like temporary installation of speed radar devices, pavement markings, target law enforcement, signing and volunteer speed watch efforts; Phase II measures (should Phase I measures not yield sufficient results) include installation of more permanent, physical traffic control devices like speed humps, radar feedback signs, traffic circles and street medians. It is particularly important to coordinate the Phase II physical traffic control devices with the recommendations and projects identified in the NMTP to help ensure that non-motorized safety is considered.

Walk-to-School Route Planning and Bicycle Education

Walk-to-school route planning may best serve as a mechanism to refine the NMTP, with neighborhood-specific priority refinements and comprehensive projects that best match the initial priorities identified in the NMTP. Walk-to-school route planning is also an excellent mechanism to advance pedestrian and bicycle safety education. The City of Lakewood has developed initial walk-to-school route plans in coordination with Clover Park School District. As Lakewood continues to develop into a more urban center, walk-to-school routes will likely become more important. The city should continue to coordinate with the Clover Park School District to refine and update future walk-to-school route plans.

Funding

There are several ways in which pedestrian and bicycle system improvements are funded in Lakewood. This section highlights both current funding mechanisms and the options the City might consider to increase funding of pedestrian and bicycle system improvements. Whenever possible the distinction is made between funding programs and funding sources. Pedestrian and bicycle system improvements are funded both privately and publicly in Lakewood.

Public Pedestrian & Bicycle Systems Development

State Highways

In general, the City of Lakewood and WSDOT have jurisdiction over most public roads in Lakewood. The funding for state highway and freeway improvements is coordinated through PSRC and construction projects are programmed through Washington's Statewide Transportation Improvement Program (STIP). These highway improvements often include pedestrian and bicycle system components. The funding source for these improvements are generally a combination of federal and state gas taxes, fees and sales tax.

In 2022 the Legislature passed a new transportation revenue package, called Move Ahead Washington, to fund a wide range of projects across the state over the next 16 years. The Move Ahead Washington package is funded through one-time transfers from the state's general fund, Public Works Assistance Account, the Infrastructure Investment and Jobs Act (IIJA), and the Climate Commitment Act. The package does not include a gas tax.

Projects funded by the 2022 Legislature in Lakewood include those projects listed in the proposed 2023-2026 STIP as follows:

- **100th Street SW: Lakeview Avenue SW to S Tacoma Way**
  Primary improvements will include curb, gutter and sidewalk improvements, as well as shared bike lanes, street lighting, storm infrastructure, and pavement overlay. These improvements will be constructed along 100th Street SW from Lakeview Avenue SW to S Tacoma Way. In addition to the improvements described above, a new signal will be constructed at its intersection with 40th Avenue.
- **112th Street SW: Clover Park High School Sidewalk**
  Improvements are to include pedestrian lighting at crossings, school speed zone flashing beacons and signage, ADA curb ramp retrofits, sidewalk with curb, pedestrian-scale lighting, and a bike lane on one side of the road.
- **112th Street S: S Tacoma Way to Steele Street S**
  Improvements will include grinding, overlay, and channelization of the roadway surface.
- **Farwest Drive SW: Safe Routes to School**
  Project provides multiple improvements between 112th Street SW and the existing sidewalk north of 92nd Street SW. Improvements include the installation of approximately 3,275 feet of sidewalk with a 6 foot width, with curb and gutter on the west side of the street. Additionally, there will be 1,700 feet of bike lane on the west side of the road, as well as pedestrian scale illumination and ADA curb ramps and retrofits. There will also be approximately 1,700 feet of lane reductions from 5 to 3 travel lanes (one through-lane in each direction and a two-way left-turn lane) between 93rd Street and 101st Street.
- **S Tacoma Way: 96th Street SW to Steilacoom Boulevard**
  Project consists of constructing a reconstruction of the wearing asphalt along S Tacoma Way between 96th Street SW and Steilacoom Boulevard. Improvements will include pavement repair, grinding, a two-inch overlay, channelization, upgrading sidewalk ramps to conform with ADA standards, and signage.
- **Steilacoom Boulevard SW**
  Improvements along Steilacoom Boulevard SW are to be introduced via two separate projects, outlined below:
  - **83rd Avenue SW to Weller Road SW**
    Project consists of constructing improvements to include curb, gutter, sidewalks, bicycle facilities, street lights, pavement overlay, and storm drainage on both sides of Steilacoom Boulevard between 83rd Avenue SW and Weller Road SW. The project will also require retaining walls in some areas.
  - **87th Avenue SW to 83rd Avenue SW**
    Project consists of relocation or increasing the offset of utility poles and removal of roadside objects as well as improving street lighting, resurfacing the pavement, increasing pavement marking reflectivity, changing driveway types, install flashing yellow operation, audible pedestrian push buttons, countdown pedestrian signals, re-channelization of the roadway to include bike lanes and narrower travel lanes, as well as updating traffic signal from span wires to mast arms.

State Pedestrian and Bicycle Safety and Safe Routes to School Programs

Since 2005, the State Pedestrian and Bicycle Safety and Safe Routes to School programs have committed $135 million over 17 years to support pedestrian and bicycle safety projects such as pedestrian and bicycle paths, sidewalks, safe routes to school and transit. Since their inception in 2005, 349 projects have been completed with an additional 107 projects currently underway.

The purpose of the Pedestrian and Bicycle Safety program is to aid public agencies in funding cost-effective projects that improve pedestrian and bicycle safety through engineering, education and enforcement. Eligible projects may include engineering improvements, education programs and enforcement efforts. Project applications are evaluated in the categories of Safety, Equity, Project Quality, Deliverability, and Value.

WSDOT also administers the Safe Routes to School program, which coordinates federal and state funding commitment to support pedestrian and bicycle safety projects such as safe routes to school, transit and pedestrian and bicycle paths. The purpose of the Safe Routes to Schools program is to provide children a safe, healthy alternative to riding the bus or being driven to school. Eligible projects include engineering improvements, education projects, and enforcement efforts within two-miles of primary and middle schools (K-8).

The programs are still funding projects and are currently in the 2023-2025 funding cycle. In the 2023-2025 funding cycle, WSDOT is recommending 38 projects for Safe Routes to School and 28 projects for the Pedestrian/Bicyclist Program, totaling a projected $103.9 million.

WSDOT has initiated grant funding for both programs. For the 2023-2025 funding cycle, approximately $106 million is available for the two programs ($51.94 towards the Pedestrian/ Bicyclist Program and $54.07 million of Safe Routes to School funds). The majority of this funding is allocated by Move Ahead Washington, a combined $68.48 million.

City Transportation Improvement Program (TIP)

Pedestrian and bicycle system improvements are generally programmed in the City of Lakewood's Capital Improvement Plan(CIP). The current 2022-2027 CIP includes approximately $43 million budgeted for transportation improvement projects. Many of these projects include improvements to the non-motorized network including, but not limited to: South Tacoma Way improvements, a new Pedestrian Crossing Signal on 84th Street at Pine Street, and sidewalk construction on Farwest Drive.

Other Funding Options

Local Improvement Districts

In the past the City of Lakewood has administered development of local improvement districts (LID) to fund sidewalk improvements (new and replacement sidewalks) within specified areas. Projected public support for LID funding of significant street and sidewalk systems is uncertain. The City should continue to support the formation of LIDs for critical neighborhood pedestrian system enhancements, alone or as part of street improvements and neighborhood traffic management improvements.

Funding Policies for Lakewood Consideration

The City of Lakewood is currently funding significant pedestrian and bicycle system improvements within the urban area, based on its current major funding sources: federal and state gas taxes, state fees and state grants. As an extension of current practice, Lakewood should continue to actively pursue additional funding support for pedestrian and bicycle funding through application to various federal and state programs, in particular the Federal Safe Streets For All (SS4A) and Safe-Routes-to-School Program. The combination of these policies will help the City of Lakewood supplement its current funding programs for pedestrian and bicycle system improvements. As outcome, priority pedestrian improvements may be accelerated, helping the City meet growing demands.

Summary

The recent public opinion research indicates that Lakewood residents regard safe walking routes a public priority, and value the public's investment in bicycle facilities, especially the shared-use path (trail) system. The City serves a critical role in the planning, development and construction of needed pedestrian and bicycle improvements.

The City should continue it's focus on building out a well-connected, safe non-motorized network throughout the city to ensure it meets the growing demand.


CITY OF LAKEWOOD, WA
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