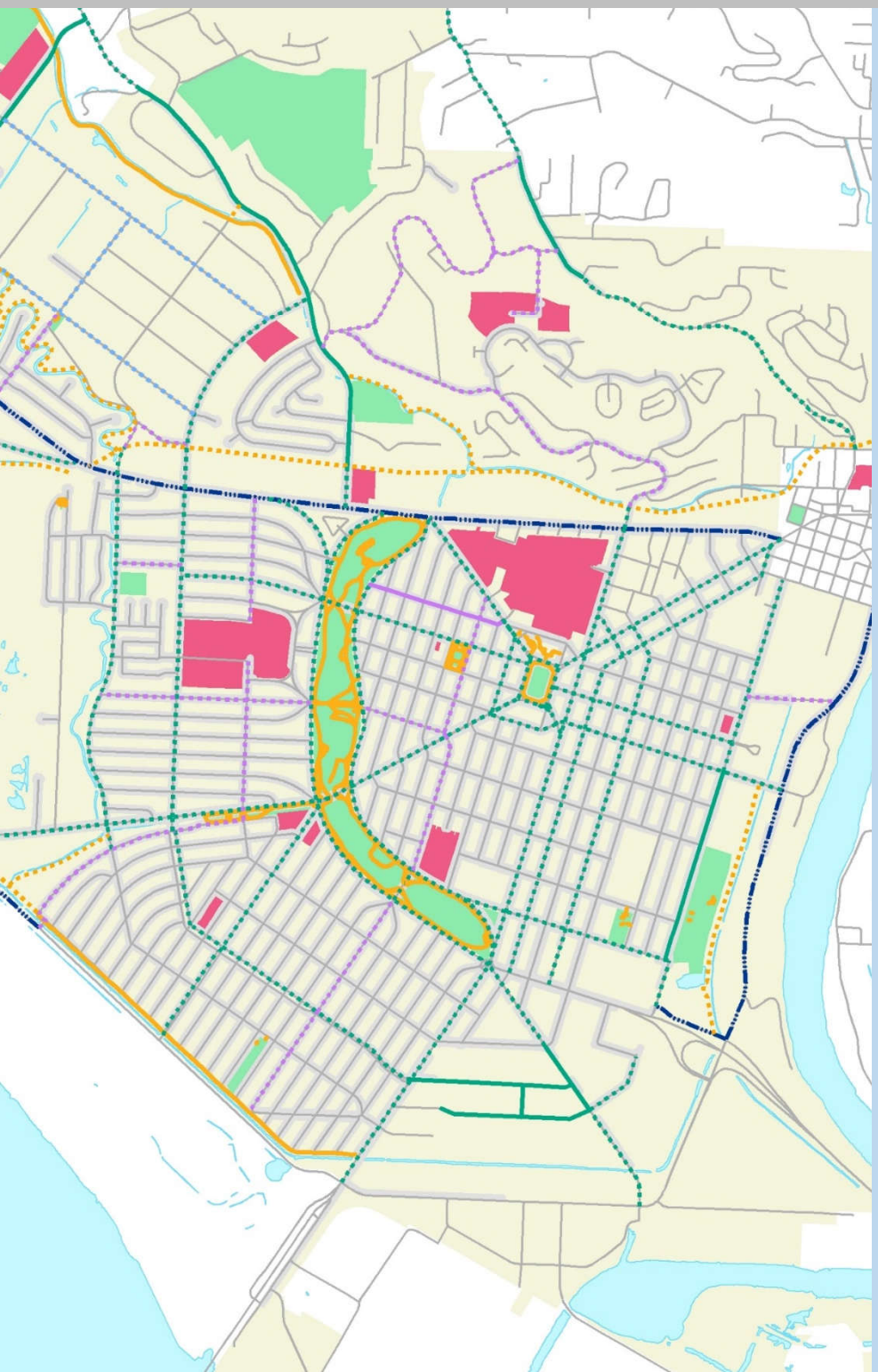
The City of Longview Washington

2022

Bicycle and Pedestrian Master Plan



A community in which residents and visitors of all ages and abilities are able to travel safely and conveniently on the city's transportation network

Council Workshop Draft
6/2/2022

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Acknowledgements

This Master Plan would not have been possible without the teamwork, support and contributions of many people. Thank you to City Council and the Complete Streets Advisory Committee for their leadership in guiding the development of this plan. Many additional community members, volunteers, and bicycle and pedestrian advocates contributed to the development of this plan through their critique of drafts, comments at outreach events, and conversations with other community members.

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Summary

The Longview Bicycle and Pedestrian Master Plan presents a vision of a community in which residents and visitors of all ages and abilities are able to travel safely and conveniently on the city's transportation network. A national surge in alternative modes of transportation has resulted from increasing concerns with health, and road safety for all users, which has provided a great, recent boost to active transportation. This Master Plan lays out strategies and an implementation plan to increase the opportunities for people walking and bicycling while improving safety throughout the city.

Why Bicycling and Walking?

Bicycling and walking are low-cost means and an active choice for transportation that improves an individual's health, disposable income, work & school performance, and community unity. It also reduces pollution and rate of crime.

There are numerous economic, social, health, and environmental benefits of active transportation. Walking and biking are transportation and personal physical enhancement. Many people like to ride a bicycle to work because it relaxes them and provides them with exercise. Employers like the increased employee performance and reduction in health care costs and absentee costs. Walking and bicycling to school can give children the opportunity to gain independence, socialize, engage in healthy activity and improve performance. With active transportation, the lines between utility and enjoyment are blurred—one more benefit of active travel.

Other benefits of walking and biking include:

- Walkable and bikeable neighborhoods are more livable and attractive, increasing home values and resulting in increased wealth for individuals and additional property tax revenue for the community.
- Walking and bicycling increase spending on local goods and services while improving residents' economic situation. Residents shop more locally, improving merchant revenue and city tax revenue while defraying transportation costs that improving resident savings and/or disposable income.
- Walking and bicycling are good for public health. "Muscles vs Motors" for exercise can reduce the cost of spending on health care at the household and community level.
- Road infrastructure improvements such as bump outs for pedestrians and bike lanes add safety for all road users. Infrastructure that provides increased safety will help Longview achieve Target Zero, the WSDOT Strategic Highway Safety Plan.
- Improvements for walking and bicycling create space for people using other forms of micro-mobility for transportation or recreation. These forms typically have small wheels and are either human-powered, electric-assisted, or electric powered. Some types of micro-mobility include scooters, skateboards, wheelchairs, strollers, and inline skates.

Longview City Council approved a Complete Streets Ordinance, No. 3413 in 2019, which set the stage for this Master Plan. The City has some experience developing on and off road infrastructure for cyclists and pedestrians. This experience will allow Longview to develop a successful plan where many elements are tested. People can frequently be seen biking around the city, but the disconnected network hampers the use of bicycles for everyday transportation. Walking is very popular at Lake Sacajawea, where no matter the weather, people are walking the path on nice and rainy days

Challenges

Longview overall is well situated for an active transportation effort but requires a concerted effort to create a cohesive and safe network. Nearly all city services are located on flat land with the furthest destination for nearly all residents being 5 miles. Many roads are wide and could easily accept a bike lane, often without inhibiting parking. Sidewalks are prevalent and can be found in nearly all neighborhoods and shopping areas. There is also a dike trail network that offers opportunity for the introduction of protected bikeways and walkways, which could become part of the city's active transportation network as well as fitness trails. Some have been opened for trial use, the expansion of the trail network is a possibility that needs to be further explored. Finally, there is an out of service railroad right-of-way that offers an east-west trail opportunity on the north side of town, not far from the dense downtown working population and Lake Sacajawea Park.

Connecting the discontinuous existing bikeway and trail networks throughout town will be critical. The downtown shopping district may have parking and bike lane conflicts that may require a negotiation with merchants. There are some residential areas located on hills overlooking the city, which may inhibit increasing the number of residents bicycling for transportation, exercise, or fun. These can be overcome with some short term fitness training and/or power assisted bikes. Many potential participants will need to be convinced that for the most part this is a low hurdle. In general, the community is not well informed concerning the "6 Es" (Engineering, Encouragement, Education, Enforcement, Equity and Evaluation) of bicycling and walking needs. Programs like Safe Routes to School, Bicycle Friendly Community, Bicycle Friendly University, and Bicycle Friendly Business would be helpful for introducing the 6 E principals and building citizen support.

Plan Organization and Use

The Plan is organized as follows:

Chapter 1: Introduction provides an overview of this plan and its purpose.
Chapter 2: Existing Conditions summarizes the current condition of the City's pedestrian, bicycle, and trail network.
Chapter 3: Recommended Policies presents bicycle-and pedestrian-supportive policies and action items.
Chapter 4: Recommended Network depicts the recommended system of bikeways, walkways, and trails.
Chapter 5: Bicycle Parking Standards and Guidelines provides an overview of parking policy and design best practices.
Chapter 6: Design Program outlines local, state and national best practices for pedestrian, bicycle, and trail facility types.
Chapter 7: Education and Outreach Strategies describes programs the City and/or local agency partners could implement to promote walking and bicycling.
Chapter 8: Implementation Plan identifies potential funding strategies and supporting policies.

The Bottom Line: Where to Start

The recommended bikeways, walkways, and trails connect key destinations (public transportation, schools, shops, parks, health care facilities, religious institutions, summer festivals, etc.) in and around Longview. Improvements vary from low-cost measures yielding immediate results, such as re-striping of streets to

accommodate bike lanes, to longer-term strategies for transforming Longview into a remarkable bicycle- and pedestrian-friendly community.

Volunteers and City staff conducted an inventory of existing bikeways and sidewalks for this Master Plan. The inventory identified locations where roadway shoulders are sufficiently wide to provide bike lanes through low-cost re-striping efforts. Other bikeway recommendations will be implemented through a combination of roadway re-striping, roadway reconfiguration (reducing or moving a parking, turn, or travel lane), through shoulder widening, dike trail conversion, and gaining rights to the east/west Patriot rail-to-trail right-of-way. Sidewalk priority projects are also necessary to fill gaps in the existing sidewalk network.

Recommended Programs

Partnerships between Cowlitz County, City of Kelso, CDID, community advocacy/advisory groups, school, religious institutions and businesses could create and enhance programs to enable pedestrians and cyclists to safely and easily travel through the county.

- Utilize the League of American Bicyclists Bicycle Friendly Community, Bicycle Friendly Business and Bicycle Friendly University program along with the Walk Friendly Community program to measure our performance.
- Create a school education/encouragement program. In partnership with the Longview School District, build a successful citywide Safe Routes to School (SRTS) program utilizing SRTS programs for public & private schools as well as colleges.
- Establish at least one community ride program. In partnership with neighborhoods, or festivals, sponsor an event where residents can bike, walk, and run in the streets without auto traffic.

Implementation

Most bicycle facilities and sidewalks in the city are developed through capital road projects or private development. Capital road projects are usually funded by gas tax revenues augmented by multiple state and federal grants. City code also requires that development projects construct or reconstruct street frontage to current City standards.

Implementation of this Plan will occur through the following strategies:

- Continue funding bicycle and pedestrian projects with the capital budget. Dedicating funds to annual expansion of the existing pedestrian and bicycle network.
- Leverage local funds to pursue grant opportunities.
- Establish public/private funding opportunities and other partnership opportunities.
- Work with the Complete Streets Advisory Committee to pursue funding opportunities.
- The Complete Streets Advisory Committee will establish a working group to develop partnerships for identifying funding opportunities for bicycle and pedestrian projects.

This Plan focuses recommendations on walkways, bikeways, and trails that connect key destinations in Longview. Recommendations are designed to prioritize the downtown core and radiate outwards to promote walking and bicycling throughout the city. See Chapter 4 for a list of all recommended pedestrian and bicycle projects and Chapter 8 for the recommended implementation schedule for the bicycle network and priority trails projects.

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Chapter 1: Introduction

The Longview Bicycle and Pedestrian Master Plan provides a vision and implementation strategy for how Longview can improve conditions for bicycling and walking over the next twenty years. The Plan envisions an interconnected bicycle and pedestrian network that provides routes to city center, schools, shops, summer festivals, parks, recreational facilities, businesses and transit. Once achieved, this Plan will improve residents' health, finances, work and school performance, and in general enhance their quality of life, and, it will reduce pressure on the environment and be a source of pride to the community.

Increasing interest in Active Transportation will benefit our community health, living standards, performance at work and school, property values, crime victimization, and general quality of life. Many Longview residents are currently gaining these benefits by building active transportation into their daily activities but many more would participate if the proven engineering improvements were installed on our streets/sidewalks, encouragement programs were developed, safe biking/walking education programs were available for all ages, and enforcement implemented for unsafe driving/bicycling/walking behaviors that discourage people from sharing Longview's roads.

Past Efforts

Discussions about developing an active transportation culture have been active for no less than 40 years. The oldest reference to active transportation in Longview goes back to 1981, when Resolution 1198 established a bicycling policy for the City of Longview. Since then, many other attempts to advance active transportation have taken place. Members of the community have organized Bike To Work Week events as well as awareness building programs during Earth Day. Cowlitz on the Move addresses physical activity related to active transportation. Longview has opportunistically introduced a series of non-connected trails and bikes lanes over this same period to encourage exercise and transportation.

In 2012, a significant investment was made with the development of the Highlands Trail. It is a 1.3 mile off-road bike/pedestrian trail that provides some active transportation advantages. Additionally, in 2015 as part of a County Wide non-motorized plan, the CWCOG developed a city wide active transportation biking plan. About the same time, the Longview Recreation Department developed a mostly off-road recreational bike path plan, using many of the Dike trails. In 2018, Longview enjoyed the opening of the 'golf course' dike path, which at this time do not connect to other bike lanes or paths. CWCOG is working with Patriot Rail Road for the acquisition of the railroad tracks north of Ocean Beach for Rails-to-Trails conversion. The trail would provide an important path helping non-motorized transportation avoid the busy Ocean Beach Hwy traffic and its numerous driveways. It would also provide a protected path supporting active transportation on the north end of town. These negotiations are still ongoing, with further efforts on the Rail-to-Trail plan being developed in 2019. In 2019, City Council approved a Complete Streets Ordinance along with empowering a Complete Streets Advisory Committee.

This Bicycle and Pedestrian Master plan contributes to meeting two goals of the 2045 CWCOG Regional Transportation System Plan.

- Goal 3: Develop an integrated non-motorized transportation system.
- Goal 5: Maintain and enhance a regional transportation system that is safe and accessible for multiple travel modes.

Likewise, this Master Plan will be a step towards the implementation of the CWCOG 2016 Bike/Ped Assessment. Work with stakeholders and Technical Advisory Committees (TACs), representing all five counties of the SWRTPO, to develop action steps to implement the active transportation long-range strategies. Our hope is that this plan starts the process for the implementation of these regional policies.

Consistent improvements for pedestrian facilities have been made over time as the City has developed. We have a strong history of providing walking alternatives for our citizens.

Recent projects include:

- Washington Way Bridge Replacement
- RA Long Park Improvements
- Shay Locomotive Park Improvements
- 2019 Sidewalk Repair Project
- Nichols Blvd Pavement Overlay
- New York Street ADA Ramps
- Washington Way and 15th Avenue Signals
- Ocean Beach Highway Signals
- 28th and 30th Avenue ADA Ramps

While Longview has many documents supportive of bicycling and walking, no single document discusses the overall objectives of promoting active transportation. Bicycling and walking have historically been viewed as a recreational activity and not a transportation alternative. Consequently, most initiatives have been executed from a recreational point of view. This plan re-envisions active transportation in Longview, not only as a recreational activity for people with the time and money to enjoy it, but also a transportation option available to all residents to enjoy and utilize.

The Longview Bicycle and Pedestrian Master Plan will flip the transportation pyramid on its head: we're all pedestrians at some point in our trips and it's the cheapest, easiest form of transportation. In the recent past, City, State, and National transportation policy was centered around the automobile. This Plan provides detailed guidelines about how to develop future action items to address pedestrian and cyclist success. The success of our active transportation plan will be based on the success and growth of people walking and using their bikes to move from place to place since walking and cycling will be the primary forms of active transportation if Longview is to be successful with this effort.

Up to this point, public involvement with active transportation planning has had minimal structure. Involved citizens, mostly cycling friends would organize around events like Bike to Work Week and Earth Day. They would encourage residents and businesses to support these events in order to build awareness and encourage more participation. Many of these same people supported the CWCOG active transportation effort as well as bicycle/pedestrian count for WSDOT. Many were members of Warm Showers where they hosted cycling tourists. They stayed informed with information from the Cascade Bicycle Club as well as the State's lobbying arm, Washington Bikes. A Facebook page "Longview Active Transportation" was created which has grown to over 170 people. Finally, a Safe Routes to School (SRTS) program was initiated, but unfortunately was placed on hold due to the COVID pandemic. The restarting of SRTS, which is a cooperative effort between schools, enforcement, and engineering will be a critical component of a successful active transportation system.

In 2018, a concerted effort was organized to develop a Complete Streets initiative under an active transportation umbrella. Various community groups and individuals volunteered their time and effort to create a vision for Longview. While there was no formal feedback sessions, the energy and volunteer time demonstrated the community's desire for an active transportation program. This ultimately led to the

passing of a Complete Street ordinance as well as formation of a Complete Streets Advisory Committee made up of residents, a Council member and Longview city engineering staff.

The public involvement plan facilitated a shared vision of the non-motorized transportation system for Longview. Community members rallied around the 6 E's (Engineering, Encouragement, Education, Enforcement, Equity & Evaluation) which are the guideposts for the League of American Bicyclists and Safe Routes To School programs covering both cyclists and pedestrians.

Master Plan Development and Public Outreach

This Master Plan was developed through a collaborative, public process. Beginning in 2021, a team consisting of Complete Streets Advisory Committee members, other residents and volunteers, and City staff drafted the Plan from scratch. The drafting team used other cities' master plans for inspiration and guidance on important components of a successful bicycle and pedestrian plan.

Figure 1 – Attendees examine the recommended network map at the in-person open house on March 10, 2022.

The team contributed their experiences walking and biking around Longview. Many contributors also called on memories and knowledge of other cities that have exceptional infrastructure for pedestrians and bicyclists. The Master Plan is a mosaic of the community's values and experiences and this lends to its strength. By developing this Master Plan with volunteer staff and resources, the City saved money and time over hiring an external consultant.

After the draft of the plan was reviewed and refined by the Complete Streets Advisory Committee, City Staff commenced on a public outreach program in 2022 to engage the public and collect comments on the plan. The draft Master Plan was posted to the City's website in January. The City developed and hosted on online, virtual open house from February through March. The City also hosted an in-person open house in March. Staff collected comments from the public at these outreach events and incorporated into the revised Master Plan. Staff also engaged local government partners to hear other public agencies' concerns and recommendations. The comments were reviewed and then incorporated into this draft. The revised draft Master Plan was presented to the City Council at their workshop in April. The Master Plan will be later adopted by City Council.

Vision and Plan Actions

The Longview Bicycle and Pedestrian Master Plan aims to provide a system complementary to the existing/future roadway and trail network for access to major destination points. The system plan promotes alternate mode choice; reduces pedestrian and bicycle travel times; seeks to improve pedestrian, cyclist, and motorist safety via physical infrastructure, improvement and maintenance, enhanced design treatment; and promotes increases in walking and biking through engineering, education, encouragement, enforcement, equity, and evaluation programs. Longview will collaborate with schools, citizen groups,

businesses, social institutions, cities, state agencies and other public groups to identify opportunities to enhance non-motorized transportation opportunities throughout Longview.

Vision

The Longview Bicycle and Pedestrian Plan envision an interconnected transportation system where:

- People can bicycle or walk safely and conveniently to all destinations within reasonable walking or bicycling distance;
- Students at all education levels will have safe routes and receive instruction for the safest approach to walk and cycle to school;
- People can walk or ride to and from their transit stops and have a comfortable and convenient place to wait or transfer;
- Bicyclists and pedestrians can enjoy Longview's natural beauty, waterways, and parks
- Bicyclists will have safe and proper storage/parking for their bicycle at home, work, shopping and transit;
- Businesses, government, schools, parks, other institutions (religious facilities, theaters, etc.) and festivals will develop programs to encourage active transportation to their location;
- Economic and other benefits will be promoted by those who benefit from active transportation.

Plan Actions

In order to achieve this vision, the Longview Bicycle and Pedestrian Master Plan proposes the following action items:

- Develop a prioritized list of bicycle and pedestrian improvements that provides access to bicycle and pedestrian destinations, including schools, parks, employment centers, religious institutions, festivals and transit center.
- Update existing pedestrian and bicycle design standards, and apply the new design standards for pedestrians and bicyclists providing routes usable by pedestrians and cyclists of all ages and abilities.
- Encourage active transportation through high-quality design, supporting programs and events.
- Promote economic development opportunities related to bicycling
- Develop guidelines for secure bicycle storage facilities and racks in activity centers, large employment centers, colleges and universities, and at major transit stops.
- Develop recommendations that provide local businesses, schools, and others the tools and guidance necessary to implement bicycle and pedestrian-specific improvements within their specific areas of influence.

Chapter 2: Existing Conditions

This chapter presents an overview of existing pedestrian and bicycle facilities in Longview, including sidewalks, intersections, shared-use paths, on-street bicycle facilities, and bicycle parking.

Jurisdictional Responsibilities

The City of Longview is responsible for the planning, construction, maintenance, operations, rehabilitation, and improvements to urban roadways and bridges within City limits. Cowlitz County and City of Kelso also maintain some roadways adjacent to and surrounded by the City of Longview. Other jurisdictions that could provide non-motorized facilities include the Consolidated Diking Improvement District #1 (CDID), Port of Longview, Public Utility District No 1 (Cowlitz PUD), Lower Columbia College, and the Army Corps of Engineers. Collaboration and cooperation with these jurisdictions will be critical to the success of implementing the overall master plan.

Walking and Biking in Longview Today

Longview is the perfect setting for active transportation. Much of the City is located on the flat land of the former floodplains of the Cowlitz and Columbia Rivers. The City is zoned to accommodate many different uses of land within close proximity to one another. The main commercial and industrial areas are just a few miles from the residential areas, connecting residents directly to many job opportunities. The urban area is just 24 square miles and no point within its boundary is further than seven miles from your destination. This means that someone with an average skill level could bike from one end of the City to the other in less than 30 minutes. This setting is the perfect opportunity for active transportation and makes Longview a great place to walk and bike.

The City's existing infrastructure provides many opportunities today for residents and visitors to use active transportation. Most of the residential streets are quiet, allowing for shared use of roadways. The historic and older sections of the city were constructed with concrete pavement, curbs, sidewalks, and street trees. Paved and gravel trails connect residents to nature along the City's many dikes and drainage ditches and the jewel of the city, Lake Sacajawea.

However, there is room for improvement. Many of the wider streets lack bike facilities and many of the existing sidewalks are ADA non-compliant due to lack of curb ramps at intersections. Some of Longview's schools are located on arterial streets with wide driving lanes that encourage faster automobile speeds. There are many vehicular crashes that involve pedestrians and bicyclists. The city streets lack traffic calming in areas of high pedestrian and cyclist use. The safety concepts of plans such as Target Zero should be adopted. Finally, wayfinding for pedestrians and bicyclists should be improved to help people connect between destinations.

There have been efforts to document and measure biking and walking activities in and around Longview. Strava is a GPS-based app used by people to record their activities. They compile data recorded by their users into a "Global heat map" to give decision makers data on where people are traveling in their communities. The following maps show the heat map data collected in Longview. This provides a general overview of where people are using the existing roadways for active transportation. It should be noted that most people who use these apps are doing so for recreational or commuting purposes.

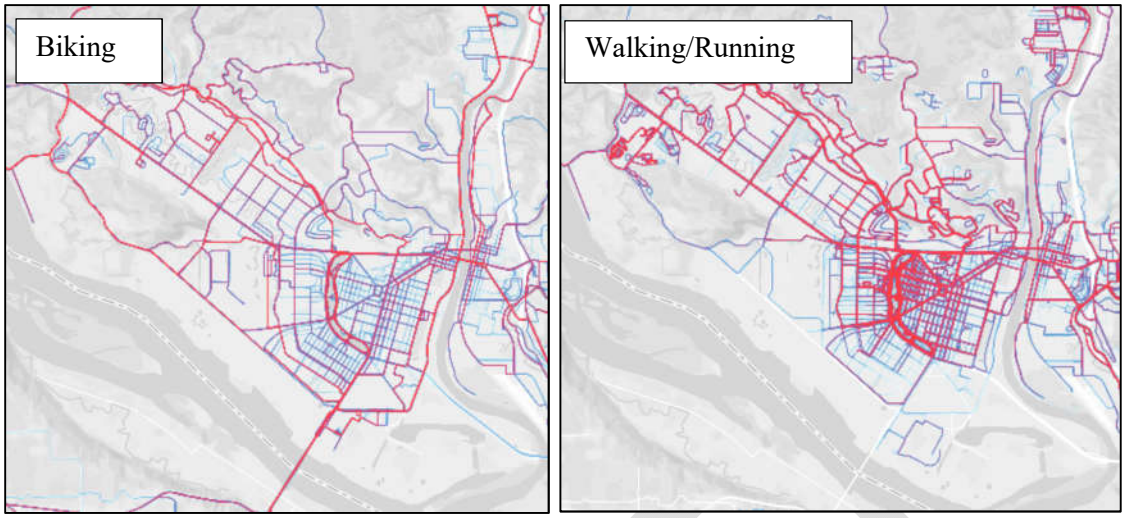


Figure 2 - Strava heat map. Biking records on the left, walking/running records on the right.

Past efforts to improve biking and walking in Longview

Longview and the Cowlitz County area have made many efforts over the years to improve non-motorized transportation, with limited results. The first reference to a City of Longview bicycling policy was in 1981. However, over the past 40 years bicycling has failed to become a major mode of transportation in Longview. It is believed that past efforts lacked the structure and energy that this Bicycle and Pedestrian Master Plan captures.

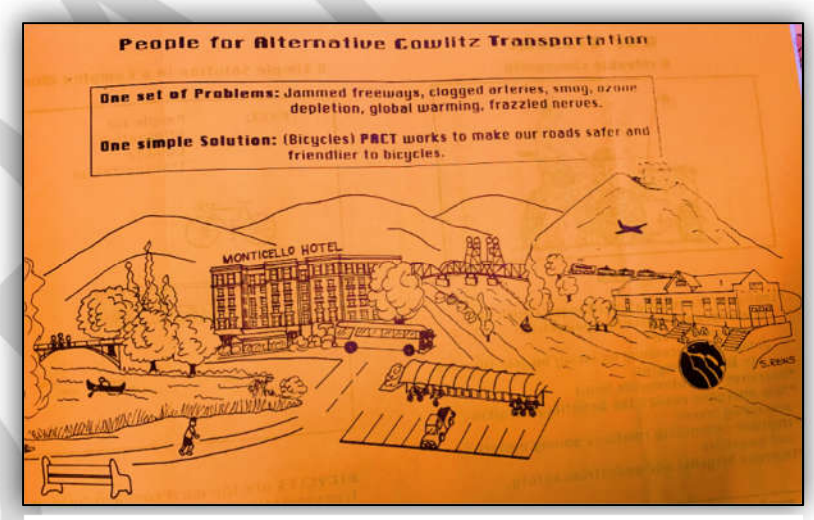


Figure 3 - Flyer from People for Alternative Cowlitz Transportation (PACT) from 1994

Here is a timeline of past efforts and their contribution to the city's active transportation system:

- City of Longview Resolution No. 1198 (1981) – established a bicycling policy in Longview and promoted safety as the number one objective

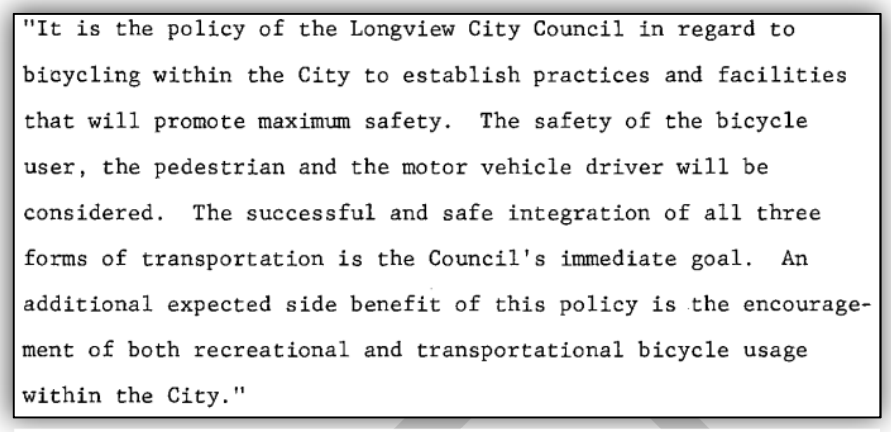

"It is the policy of the Longview City Council in regard to bicycling within the City to establish practices and facilities that will promote maximum safety. The safety of the bicycle user, the pedestrian and the motor vehicle driver will be considered. The successful and safe integration of all three forms of transportation is the Council's immediate goal. An additional expected side benefit of this policy is the encouragement of both recreational and transportational bicycle usage within the City."

Figure 4 - Snapshot from Resolution 1198 regarding bicycle policy in Longview.

- City of Longview Bicycle Plan (1999) – the City's first written plan to address bicycling. This is believed to be a draft document that was never adopted, since many of the recommendations do not exist today.
- City of Longview Comprehensive Plan (2006) – lists many policy objectives that improve active transportation. Some notable ones include working with schools to provide safe routes between neighborhood and learning facilities and strengthening the link between land use and all modes of transportation.
- Cowlitz-Wahkiakum Council of Governments Cowlitz Regional Trails Plan (2006) – advised the region to establish bicycle and pedestrian ways in new construction and reconstruction, proposed a network of on-street and off-street trails, and recommended actively pursuing outside sources of funds to build these facilities.
- Cowlitz-Wahkiakum Council of Governments Great Streets Concept for Longview and Kelso (2012) –Recommended improvements along several of Longview's major corridors, like Washington Way and Ocean Beach Highway.
- Cowlitz-Wahkiakum Council of Governments Bicycle and Pedestrian Assessment (2016) – created a list of short term and long term top priorities and refined the proposed active transportation network.
- City of Longview Comprehensive Plan (October 2019) describes the land use and transportation vision for the city. This plan states the needs to accommodate bicyclists and allow for transportation choices.
- Cowlitz-Wahkiakum Council of Governments 2045 Regional Transportation Plan (2018) - provides an overarching vision and 27-year direction for the regional transportation system serving the Longview-Kelso-Rainier metropolitan area. Goal 3 of the Plan explains the development of an integrated non-motorized transportation system

There is a need for coordination between adjacent cities, the county and the regional planning organization to make a connected regional active transportation system. Jurisdictional comprehensive plans and

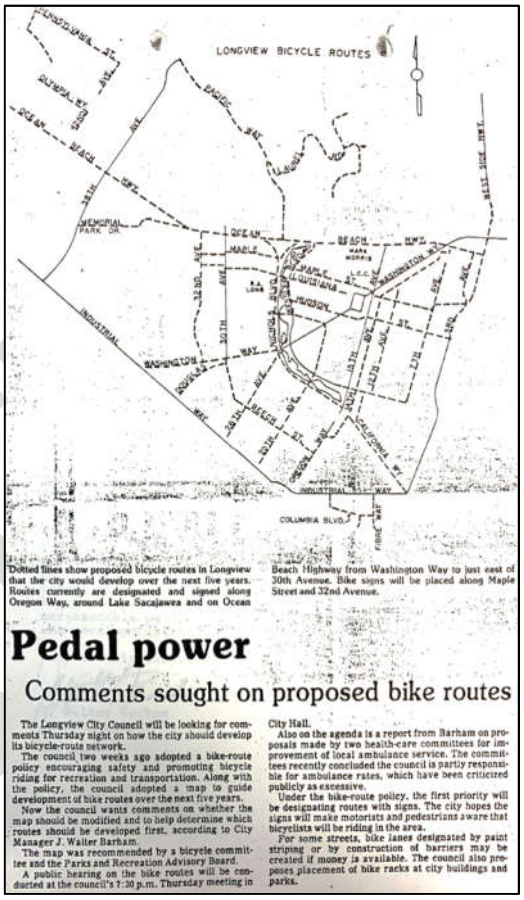
transportation plans include cycling and active transportation as general goals. In the future, planning documents need to give equal weight to non-motorized transportation.

Pedestrian Infrastructure Overview

Pedestrian travel is accommodated and enhanced by sidewalks, shared use paths, crosswalks, curb ramps and other infrastructure that provides safety, separated space, and enhances visibility for pedestrians. It is appropriate to think of Longview's pedestrian infrastructure as three areas: Central Longview, Hillside Longview, and West Longview.

Central Longview comprises areas the Old and New West sides, the downtown business district, the Highlands and areas east of downtown, extending to the Cowlitz River. In these areas, pedestrian travel commonly occurs along maintained sidewalks, which largely are on both sides of the street. There are isolated areas where sidewalk does not exist, most notably along areas of 3rd and 9th Avenues. A lack of curb cuts can make some intersections in this area challenging for the disability community.

Hillside Longview comprises areas north of Ocean Beach Highway and Pacific Avenue. Streets on the hillside are a mixture of streets with sidewalks and roads with shoulders. On many of the streets, pedestrians either travel on the shoulder of the road, or when narrow, in the travel lane. Pedestrians in these areas are also challenged by steep grades.


LONGVIEW BICYCLE ROUTES

Dotted lines show proposed bicycle routes in Longview that the city would develop over the next five years. Routes currently are designated and signed along Oregon Way, around Lake Sacajawea and on Ocean Beach Highway from Washington Way to just east of 30th Avenue. Bike signs will be placed along Maple Street and 32nd Avenue.

Pedal power

Comments sought on proposed bike routes

The Longview City Council will be looking for comments Thursday night on how the city should develop its bicycle-route network.

The council two weeks ago adopted a bike-route policy encouraging safety and promoting bicycle riding for recreation and transportation. Along with the policy, the council adopted a map to guide development of bike routes over the next five years.

Now the council wants comments on whether the map should be modified and to help determine which routes should be developed first, according to City Manager J. Walter Barham.

The map was recommended by a bicycle committee and the Parks and Recreation Advisory Board.

A public hearing on the bike routes will be conducted at the council's 7:30 p.m. Thursday meeting in City Hall.

Also on the agenda is a report from Barham on proposals made by two health-care committees for improvement of local ambulance service. The committees recently concluded the council is partly responsible for ambulance rates, which have been criticized publicly as excessive.

Under the bike-route policy, the first priority will be designating routes with signs. The city hopes the signs will make motorists and pedestrians aware that bicyclists will be riding in the area.

For some streets, bike lanes designated by paint striping or by construction of barriers may be created if money is available. The council also proposes placement of bike racks at city buildings and parks.

Figure 5 - Newspaper article from 1981 discussing proposed bike routes in Longview

West Longview includes the Columbia Valley Gardens (CVG), Mint Valley, Robert Gray, and Robbins areas plus the neighborhoods south of Ocean Beach Highway. Similar to the hillside area, pedestrian travel commonly occurs along sidewalks, the shoulder of the roadway, or within the travel lanes. Walking through older areas of West Longview can be challenging, particularly for pedestrians in wheelchairs, and even where sidewalks exist, proximity to major roads can lead to an uncomfortable walking environment. The newer development areas in West Longview, while often containing significant pedestrian infrastructure, such as sidewalks, and curb cuts are often not connected to pedestrian features in adjoining subdivisions. Currently there are no plans to connect these areas to future subdivisions.

In all areas of Longview, there are needs to improve sidewalks and other pedestrian infrastructure, like crosswalk striping, signage, and ADA ramps to improve to key crossing locations. In some areas, repeated use by pedestrians has created desire paths where sidewalks would be used.

Bicycle Infrastructure Overview

Bicycles are permitted on all streets and roads in Cowlitz County, including Interstate 5. The City of Longview has designated posted bike routes and bike and walking trails as documented on the GIS website and on the figures that follow. The existing trails map is misleading because many of the routes do not meet the safety and design features to be considered part of an "all ages and abilities" network.

In Longview, bike routes can take many forms including:

- Bicycle lanes
- Shared roadways
- Trails and multi-use paths
- Sidewalks

Bicycle Lanes

Designated exclusively for bicycle travel, bicycle lanes are delineated from vehicle travel lanes with striping and pavement markings . Bicycle lanes work great on lower speed and volume roadways, but they are not appropriate on arterial and collector streets where higher traffic volumes and speeds warrant greater separation. Bicycle lanes help to define the road space for bicyclists and motorists, reduce the chance that motorists will stray into the cyclists' path, discourage bicyclists from riding on the sidewalk, and remind motorists that cyclists have a right to the road. Bicycle lanes work best when designed as part of a comprehensive bike lane plan that encourages connectivity across town and across districts. The City of Longview currently has about 5 miles of bicycle lanes, many of which are not connected. Many of these routes are poorly striped or signed and should be upgraded to current standards as time and budget allow.

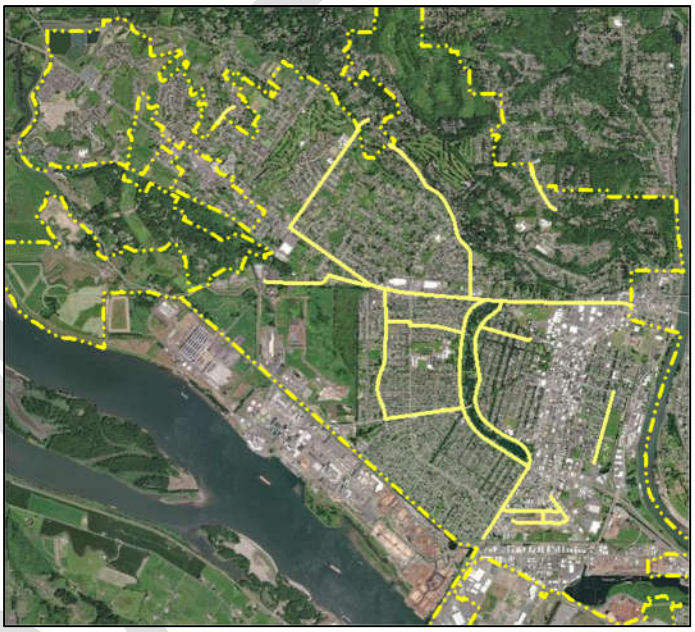


Figure 6 - Map of existing posted bikeways and trails in Longview, from GIS. Several newer routes are not shown yet.

Figure 7 - Bike lanes provide dedicated roadway space for cyclists. Shown are new bike lanes on California Way.

Table 1:Bicycle Lanes Inventory

Route	From	To	Length (miles)	Notes
Pacific Way	Pacific Pl (west end)	Ocean Beach HWY	1.5	Poorly painted, does not continue to intersections
38th Ave	Ocean Beach Hwy	Pacific Way	1.1	Does not continue to Ocean Beach Hwy intersection
7th Ave	Hudson St	Douglas St	0.8	Warn pavement markings
Beech St	California Way	Oregon Way	0.5	LTS-3 facility
Alaska St	California Way	Cul-de-sac	0.5	Under construction spring 2022
11th St	Alaska St	Beech St	0.1	Under construction spring 2022
California Way	11th Ave	7th Ave	0.2	LTS-3 facility, heavy truck route
Columbia Heights Rd	Laurel Dr	Cascade Dr	0.4	Does not connect to any other bikeways
46th Ave	Olympia Way	Ohio St	0.2	Does not connect to any other bikeways

Shared Roadway

The least expensive type of bikeway, shared roadways, accommodate vehicles and bicycles in the same space. The most suitable roadways for shared vehicle/bicycle use are those with low-posted speeds (25 MPH) or low traffic volumes (3,000 ADT or less). Curb-to-curb widths are usually too narrow to allow for striped bicycle lanes and the typical street cross-section includes two vehicle travel lanes with on-street parking.

Figure 8: Bike route signage on Louisiana St

Most of the Longview's local streets and many neighborhood streets can be classified as shared roadways, as they accommodate bicyclists without the need for separated bicycle facilities. Some of the existing streets feature "Bike Route" signage. Shared lane marking treatments, also called "sharrows", can benefit cyclists by improving visibility, but are not currently used on streets in Longview. The City of Longview currently has 3 miles of signed, shared roadways.

Table 2: Shared Road Inventory

Route	From	To	Length (miles)	Notes
Maple Street	19th Ave	Kessler Blvd	0.4	No Pavement markings, only signage.
Louisiana Street	32nd Ave	Nichols Blvd	0.7	No pavement markings, only signage
32nd Ave	Ocean Beach Highway	Washington Way	1.1	No pavement markings, only signage. High traffic volumes.
Olive Way	Ocean Beach Highway	Memorial Park Dr	0.4	No pavement markings, only signage
Memorial Park Dr	Olive Way	38th Ave	0.6	No pavement markings, only signage. Stops short of 38th.

Trails and Connections

Pathways (also referred to as trails, multi-use paths, and shared-use paths) are used by pedestrians, cyclists, in-line skaters, and runners. Pathways are typically paved (asphalt or concrete) but may also consist of an unpaved, gravel surface.

In general, pathways are desirable for slower-speed recreational cycling, or walking, particularly by families and children. In Longview, they are also used by commuters for at least part of their commute.

An example of a trail or multi-use path is the gravel trail (Ditch #6 Trail) which is on the top of the dike along Pacific Way, a dike managed by the Consolidated Diking Improvement District No 1 (CDID #1.) There are also many unimproved miles of trail on the banks of the CDID ditch network that the City and CDID hope to improve for mutually beneficial use for maintenance access and trails.

The City of Longview currently has about 10 miles of trail and multi-use paths.

Table 3: Trails and Multi-use Paths inventory

Route	Location	Length (miles)	Notes	Surface
Ditch #6 Trail	West Longview	2.6 miles	Pedestrian path	Small Gravel
Highlands Trail	Central Longview	1.3 miles	Lighting	Paved
Ditch #4 Trail	Central Longview	0.8 miles	Fronts onto existing 7th Avenue Park	Large Gravel
Lake Sacajawea Loop	Central Longview	3.7 Miles	Heavily used pedestrian (Recreational) path	Small Gravel
Altrusa Park trail	West Longview	0.8 miles	Located behind residential houses	Gravel
South cutoff slough	West Longview	0.6	Located behind residential houses	Gravel

Sidewalks

On Ocean Beach Highway (State Route 4), the designated and signed bikeway is the sidewalk on the north side on the street. It is a wider sidewalk, about 8 feet. Bicycles are encouraged to use the sidewalks with "Bike Route" signage. The bike/sidewalk combination extends a total of 5.5 miles from Washington Way to Coal Creek Road. Bicycling on the sidewalk can be dangerous due to many commercial and residential driveways and then the added danger of crossing at intersections in vehicle drivers' right-turn blind spot.

Other Supporting Infrastructure

There are other forms of infrastructure that support walking and bicycling in Longview. These range from signage, end of trip facilities, and transit connections. These other types of infrastructure improve the overall experience of someone walking or biking.

Signage

Signage provides two main benefits: to aid in wayfinding and to notify vehicle drivers of the presence of other road users. "Bike Route" signage was placed on Ocean Beach Highway, Louisiana St, and other "signed" bicycle routes. The signage is infrequent and provides limited wayfinding aid because the orientation of some signs makes it unclear where the actual bike path leads.

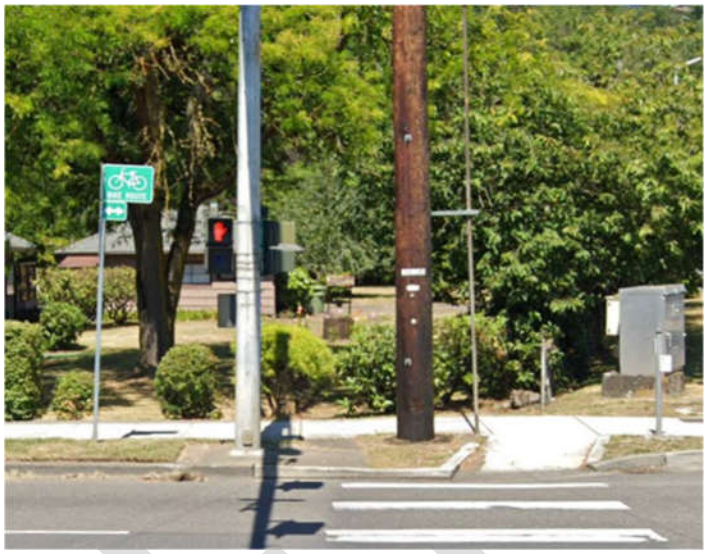


Figure 9: It is not clear for whom this signage is intended on Ocean Beach Highway at 15th Avenue/Cascade Way.

End of Trip Facilities

End of Trip facilities include bike racks, bike lockers, and bike charging areas. These facilities make biking to destinations more pleasant and easier for commuters. Without locations for people to securely lock their bikes, transportation via bike will remain low.

There are a limited number of bike racks in the core downtown area. The largest concentration of bike racks is along the recently rebuilt Commerce Street in Downtown Longview, and outside of public buildings, like the Longview Public Library. Outside of the downtown area, there are few if any bike racks. The Longview School District provides bike racks at most schools in town. Unfortunately, the rack design does not allow bikes to be locked up for security. River Cities Transit recently built a new transit center in downtown Longview. The transit center has bike racks, as do all the buses.

Figure 10: Sample bike racks around town. Clockwise from top left: historic Merk Building on Commerce Street, Transit Center, Japanese garden, City hall.

Bike Lockers are large covered areas that must be opened by a key. Bike lockers allow someone to store their bike overnight, out of the weather, and kept safe. In Longview, bike lockers can only currently be found at PeaceHealth, where there are eight parking spaces and the Cowlitz Indian Tribe clinic, where there are two spaces. Future development code changes may encourage construction of more bicycle lockers in Longview.

Figure 11 - Electric-assist bicycle charging facility

Electric Assist Bikes are increasingly popular with individuals who need assistance while riding their bicycles due to enjoyment, fitness level, or terrain. Charging Stations provide a place for bike battery charging. There are not any known bicycle charging stations in this area.

Figure 12 – Bike lockers

Connections to Transit

There are five transit agencies that operate in Longview. These include River Cities Transit, CC Rider, Cowlitz Indian Tribe, Lower Columbia CAP, and Wahkiakum on the Move. River Cities Transit, CC Rider, and Lower Columbia CAP buses have bike racks on the front bumper to carry bikes. These routes serve as important multi-modal connections for people walking and biking because they expand the area that can be traveled.

The Cowlitz Indian Tribe has pickup locations throughout the region: Centralia/Chehalis (Amtrak Station), Napavine, Onalaska, Salkum, Ethel, Mary's Corner, Mossyrock, Winlock, Toledo, Vader, Ryderwood, Castle Rock, Toutle, Silver Lake, Rose Valley, Carrols, Kalama, Woodland, Lexington and Outside city limits for Kelso/Longview.

Figure 13 - RiverCities Transit Map, June 2022

Chapter 3: Recommended Policies

This chapter lays out a policy vision of how to continue and expand improvements to increase and promote walking and bicycling in the City of Longview. The objectives and actions are designed to guide the way the public improvements are made, where resources are allocated, how programs are operated, how department priorities are determined, and how private development is designed. Recommended policies are organized into the categories of:

- Developing a Bicycle and Pedestrian Network
- Jurisdictional Coordination
- Traffic Capacity & Demand Management
- Education, Outreach and Safety Programs
- Funding Sources & Grants
- Active Transportation Planning and Bicycle-Pedestrian-Supportive Land Uses Zoning Codes

The policies proposed here will guide development of laws and regulations to require private developments to construct and contribute to development of bike/ped infrastructure, and direct public projects to complete bike/ped infrastructure, according to the adopted network plan. As policies are considered for adoption or implementation, policy makers should consider the following:

- They must recognize that tools such as transportation impact fees are not available to governments in Cowlitz County.
- Resulting local laws and regulations requiring private developments to construct and contribute to development of bike/ped infrastructure shall use the Longview bicycle and pedestrian network plan as the basis for establishing proportionality of a project's impacts to its contribution to public infrastructure.
- Resulting local policy shall require public projects to complete bike/ped infrastructure, according to the adopted network plan. These policies will provide appropriate city-level details to support public improvements for bicycles and pedestrians.
- Local bike/ped construction standards will be adopted to implement these polices. Such polices shall will provide clear guidance of local requirements and be in compliance with County and State bicycle and pedestrian laws, standards, and best practices.

Goal 1 - Developing a Bicycle and Pedestrian Network

Objective 1.1 Develop and adopt a Bicycle and Pedestrian Network Master Plan that identifies existing, missing and future connections, consistent with the Comprehensive Plan transportation goals, objectives, and policies for multi-modal transportation [Goal TR-B].

Action 1.1.1 Establish policies to require construction of bicycle paths, lanes, routes, roadways, and improvements where "reasonably practicable" and where the cost of establishing it would be not be "excessively disproportionate to the need or probable use" (RCW 35.77.015)

Action 1.1.2 Evaluate and amend, as needed, development regulations to ensure that planning and engineering project approval is consistent with the adopted bicycle and pedestrian master plan.

Objective 1.2 Implement the City of Longview Bicycle and Pedestrian Master Plan to provide multimode transportation and recreation opportunities.

Action 1.2.1 Complete the recommended bikeway and walkway network map by prioritizing closing existing gaps, and considering innovative design solutions for constrained locations to provide accessible bicycling and walking corridors throughout the City of Longview.

Action 1.2.2 Establish a list of "quick Build" projects. See: https://www.greaterplaces.com/whats-new-city-design/i/11416103/quick-build-programs for info on these types of projects. The key is they are implemented within 1 year of the planning, perhaps on a pilot/study basis

Action 1.2.3 Adopt requirement that every public transportation project addresses bike/ped improvements.

Action 1.2.4 Install signage along all bikeways to assist with wayfinding and to increase safety awareness of bicyclists.

Action 1.2.5 Integrate bicycle and pedestrian facilities into new construction and reconstruction (including overlays) of roadway projects where bikeways have been designated using optimum designs and practices.

Action 1.2.6 Design a variety of bike facility types that provide transportation and recreation opportunities for all levels of cyclists with a focus on meeting the needs of inexperienced cyclists.

Action 1.2.7 Include health and equity in bicycle and pedestrian project prioritization criteria.

Action 1.2.8 Implement a continuous network of shared-use lanes, bike lanes, bicycle boulevards, and bike routes that are integrated with current and future trails that support bicycle use and that serve commuting, recreation, and utilitarian trips.

Action 1.2.9 Provide safe and accessible bicycle and pedestrian facilities that link with local and regional community centers (downtowns, schools, parks, neighborhood centers) and pathway systems, as well as regional facilities and destinations. Prioritize bicycle and pedestrian and transit improvements that provide routes to grocery stores and farmers' markets.

Action 1.1.10 Implement a continuous network of sidewalks, pedestrian pathways, and shared use facilities that serve all pedestrian user groups, including commuting, recreation, and utilitarian trips.

Action 1.2.11 Provide sidewalks on both sides of streets that are within activity centers as identified as high-priority projects in this Plan. With an option for walkways on at least one side of street in hilly or constrained right-of-way situations.

Action 1.2.12 Provide adequate bicycle and pedestrian facilities on City bridges.

Action 1.2.13 Adopt standards for 'bike boxes' bike signals and other safety features at signalized intersections.

Action 1.2.14 Pursue recognition as a Bicycle Friendly Community following adoption of this Master Plan

Action 1.2.14 Designate or hire a Pedestrian and Bicycle Program Coordinator to focus on implementation of this Master Plan.

Objective 1.3 Encourage existing and require new, large employers developments, and other organizations to provide secure short- and long-term bicycle parking in employment and commercial areas, in multifamily housing, at schools, and at transit facilities, including covered or secured lockable bike parking lockers.

Action 1.3.1 Develop bicycle parking standards and minimum quantities of secure short-term and long-term bicycle parking tied to land uses zoning codes. Amend Municipal Code Chapter 19.78 Off-Street Parking and Loading.

Action 1.3.2 Incentivize the development of bicycle parking by offering reduced automobile parking minimums for developments that include bicycle parking. Amend Municipal Code Chapter 19.78 Off-Street Parking and Loading.

Action 1.3.3 Spearhead bicycle lockers by installing a number of lockers on City-owned parking lots at least equal to 5% of vehicular parking spaces.

Objective 1.4 Increase the number of bicycle-transit trips and pedestrian access to transit.

Action 1.4.1 Provide on-street bicycle and pedestrian connections to transit centers and bus stops.

Action 1.4.2 Provide secure bicycle storage facilities at park-and-rides and transit centers.

Action 1.4.3 Install community bike repair station(s) at key transit stops for use by transit users as well as the entire community

Objective 1.5 Develop and improve trails within existing trail corridors and parks and future commercial and residential subdivisions.

Action 1.5.1 Provide on-street bicycle and pedestrian connections to trails in parks.

Action 1.5.2 Amend Title 13 to include a Park Code which guides development standards for parks and provides specific development guidelines supporting trail construction.

Action 1.5.3 Amend Title 19 to include an additional Code which guides development trail standards for future commercial and residential subdivisions.

Action 1.5.4 Identify locations where the City can collaborate with the Consolidated Diking Improvement District No. 1 for the development of trails and safe trail crossings of City Streets.

Goal 2 - Jurisdictional Coordination

Objective 2.1 Facilitate coordination and cooperation among local, state, and federal jurisdictions in development of the bikeways and pedestrian facility recommendations.

Action 2.1.1 Establish and maintain regular communications between City of Longview and Cowlitz County, City of Kelso, City of Longview Complete Streets Advisory Committee, RiverCities Transit, City of Longview Parks Department, Cowlitz Wahkiakum Council Of Governments (CWCOG), Washington State Department of Transportation, and Six Rivers Regional Trail Committee, Consolidated Diking Improvement District #1 (CDID) and other affected agencies, regarding bicycle and pedestrian planning issues.

Action 2.1.2 Work with jurisdictions, including CDID, to identify bicycle and pedestrian routes throughout the city that also improve access to and maintenance of existing drainage systems and stormwater facilities.

Action 2.1.3 Work with jurisdictions to identify bicycle and pedestrian routes throughout the county, and ensure that they connect with city facilities.

Goal 3 - Traffic Capacity & Demand Management

Objective 3.1. Encourage use of alternative types of transportation, particularly those that reduce mobile emissions (bicycle, walking, carpools, and public transit) by implementing Transportation Capacity & Demand Management Strategies aimed at reducing the number of drive alone trips.

Action 3.1.1 Publicize the availability of bicycling and pedestrian maps and other bicycling resources as well as connections to public transit through the City of Longview website, bicycle shops, schools, employers, and other locations.

Action 3.1.2 Provide guidance for traffic analysis to determine vehicle traffic capacities and demands to consider road-diets to provide physical space for other modes of transportation within an existing street right of way corridor.

Objective 3.2 Ensure bicycle and pedestrian facilities are designed to the most recent federal, state and local design guidelines and best practices.

Action 3.2.1 Ensure compliance with the Americans with Disabilities Act (ADA).

Action 3.2.2 Support excellence among staff by ensuring exposure to innovative, tested new designs, such as those documented by the National Association of City Transportation Officials Cities for cycling project.

Action 3.2.3 Implement a city-wide training program to educate engineers, planners, and public decision-makers about the needs of bicyclists and pedestrians.

Goal 4 - Education, Outreach, and Safety Programs

Objective 4.1 Promote bicycle and pedestrian safety and increased bicycling and walking through education and outreach activities.

Action 4.1.1 Continue existing and pursue new adult and youth bicycle and pedestrian education and safety programs, such as workshops on bicycle commuting and pedestrian safety. Consider adding bicycle safety training to Parks & Recreational programs as well as a 'Bicycle Learning Park' where people of all ages and abilities can practice bicycle skills on an off-street, safe space.

Action 4.1.2 Collaborate with schools to utilize federal and state transportation funds to provide walking facilities near schools and support educational and incentive programs to encourage more students to bicycle or walk to school.

Action 4.1.3 Promote the use of a City Right of Way Permits for temporary street closures (ciclovias) for bicycle and pedestrian social encouragement and safety public outreach.

Objective 4.2 Promote increased bicycling and walking for transportation.

Action 4.2.1 Encourage employers to provide incentives and support facilities for employees that commute by walking or bicycling

Action 4.2.2 Encourage jurisdictions to provide incentives to businesses and residents completing new and re- development of properties that include bicycle- and pedestrian-friendly facilities and design.

Action 4.2.3 Collaborate with River Cities Transit to promote use of transit and bicycle use.

Objective 4.3 Promote bicycle and pedestrian safety and increased bicycling and walking through enforcement activities.

Action 4.3.1 Establish and maintain stricter law enforcement of traffic violations by all parties, particularly in high activity zones (urban areas, intersections, near schools and universities, along popular bicycling routes, etc.), and emphasize positive enforcement for safe bicycling and walking behavior by children.

Action 4.3.2 Recognize increasing numbers of cyclists and pedestrians as a safety strategy.

Action 4.3.3 Direct Longview Police to conduct at least one well publicized traffic sting for 'safe routes to schools' and one specifically for bicycle users at intersections annually.

Objective 4.4 Maintain and improve the quality, operation, and integrity of bikeway and sidewalk network facilities.

Action 4.4.1 Develop and implement a bikeway and sidewalk maintenance program, including sweeping, pot hole repair, and hazard removal along bicycle routes and sidewalks, including illegally parked cars, as funding and priorities allow. Include special consideration for fall leaf removal and winter snowplowing.

Action 4.4.2 Establish policies and protocols to ensure that repair and construction of transportation facilities minimizes disruption to the cycling and walking environment to the extent practical.

Action 4.4.3 Use available crash data to monitor bicycle- and pedestrian-related crash levels related to public transportation or public activities/exercise annually, and target a 10 percent reduction on a per capita basis over the next twenty (20) years.

Action 4.4.4 Develop trails maintenance standards to ensure clean, accessible trails and limit trash, graffiti and destruction of the facilities.

Goal 5 - Funding Sources and Grants

Objective 5.1 Work to fund construction of the bicycle and pedestrian improvements in this Plan and maximize the amount of local, state, and federal grant funding for bikeway and walkway facilities that can be received by City of Longview.

Action 5.1.1 Seek funding for bicycle and pedestrian transportation projects through current local, regional, state, and federal funding programs while seeking to form local partnerships to leverage those funds to maximize the use of available dollars.

Action 5.1.2 Include cost of short-term projects in City of Longview's Capital Improvement Plan to prioritize future funding.

Action 5.1.3 Aggressively pursue grants to fund the top-priority bicycle and pedestrian projects.

Action 5.1.4 Maintain current information regarding regional, state, and federal funding programs for bikeway, walkway, and trial facilities along with specific funding requirements and deadlines.

Action 5.1.5 Partner with other agencies to pursue funding for bicycle and pedestrian projects as stand-alone grant applications or as part of larger transportation improvements.

Objective 5.2 Pursue voluntary and private funding sources for bicycle improvements.

Action 5.2.1 The Complete Streets Advisory Committee will pursue options for implementing a voluntary fund.

Action 5.2.2 The Complete Streets Advisory Committee will work to develop partnerships with the private sector to promote this fund.

Action 5.2.3 Incentivize neighborhoods to form Local Improvement Districts for sidewalk or multi-modal path construction by offering public funds for 1/4 -1/2 the cost of the project (during low interest rate years).

Action 5.2.4 Use elections and advisory votes to ask questions about residents support for taxes and LIDs to pay for multimodal transportation infrastructure.

Goal 6 - Active Transportation Planning and Bicycle-Pedestrian-Supportive Land Uses Zoning Codes

Objective 6.1 Use zoning regulations to encourage active transportation by requiring transit-oriented development, waiving parking requirements and incorporating bike/ped infrastructure.

Action 6.1.1 Allow/require design review of new road projects & subdivision development proposals in the planning stage by the Complete Streets Advisory Committee.

Action 6.1.2 Include low-speed roadway designs as bicycle and pedestrian projects.

Action 6.1.3 Amend Title 19 and/or Title 12 road standards to limit the construction of new cul-de-sacs and connect existing cul-de-sacs with bicycle and/or pedestrian access ways.

Action 6.1.4 Adopt new mixed-use zones, which encourage a dense mix of uses and higher-density residential land uses with road standards that include provisions for sidewalk and bicycle routes or concepts.

Action 6.1.5 Amend Section 12.50.040 of the Longview Municipal Code to include a minimum bikeway width of 6 feet on all Primary and Secondary Arterial streets.

Action 6.1.6 Amend Title 19.78.150 of the Longview Municipal Code to update the bicycle parking code. Recommended changes include increasing the number of bicycle parking spaces for all developments, adding requirement for long-term/covered parking on apartment and commercial developments, and allowing reduction in automobile parking spaces if long-term bicycle parking is provided.

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Chapter 4: Recommended Network

This chapter identifies gaps in the current bicycle and pedestrian network and lists recommended improvements. First is a section on the bicycle network and then one on the pedestrian network. Although they are separated here, they must be consider as one and the same. Every trip starts and ends with walking, so consider sidewalks as the prerequisite to all other modes of transportation. The main reason for separating the network here is that their design methods and funding sources may be different. As we fill gaps in the existing network and then make improvements, we will realize the interconnectedness of bicycling and walking.

The ultimate goal of the bicycle and pedestrian network is to achieve bikeway and pedestrian corridors for people of "all ages and abilities". The recommended network consists of an interconnected web of on-street bikeways, shared streets, sidewalks, and off-street multi-use trails. The network overlaps jurisdictional boundaries. Success in the network will result from partnerships between adjacent public agencies to ensure the public has a seamless experience on safe facilities. Consider where the network overlaps with transit routes, schools, workplaces, and housing. The distance between destinations provides the energy for all transportation. Connecting destinations with an "all ages and abilities" network is what will transform Longview into a leader in active transportation for its residents and visitors.

Bicycle Network Recommendations

A team of volunteers, City staff, and bicycle advocates assembled the follow list of recommended improvements to the bicycle network. These improvements create a bicycle network that follows the same logic of the street classification system: build safe, connected facilities where people want to travel. Three main facility types are used to achieve the bicycle network: bikeways, shared streets, and trails. Bikeways provide dedicated space for bicycling within an existing right-of-way. They are either separated paths along a roadway corridor or a painted and/or buffered space within an existing roadway. Shared streets provide shared space for bicyclists and other mode to coexist within an existing roadway. These are only appropriate on low-speed, low-traffic volume streets and are typically designed with signage, traffic calming, and/or paint markings to remind drivers that there may be cyclists present. Trails are off-street facilities with a surface of gravel or pavement that are used for biking, walking, or other non-motorized forms of transportation. Many of the trails projects fall within CDID #1 drainage rights-of-way and will rely on collaboration with CDID #1 and may be constructed using grant funding for trails. All three facility types contribute to the interconnectedness of the network and contribute to a seamless experience for people moving through the City. The following table breaks down the types and mileage of the proposed improvements by type.

Table 4: Breakdown of project types and mileage of proposed improvements

Type	Mileage		
	Existing	**Proposed**	**Total**
Bikeways	5.08	50.17	55.25
Shared streets	1.01	13.59	14.60
Trails	15.4	19.13	34.54
Total	21.5	82.89	104.39

The next table provides the details of each project proposed as part of the network. For each recommended project, there is a recommended cross-section based on the design program in Chapter 6. These cross-sections aim to create an "all ages and abilities" network of level of traffic stress LTS 1 or 2 streets. The public can use the cross-sections to visualize the proposed street improvements. The map that follows the table illustrates the recommended bicycle network, as described in the table. Some project IDs are not shown due to limited space on the map. See the City's website for a full, interactive map (https://www.mylongview.com/658/Complete-Streets).

Table 5: List of recommended bicycle improvements

Project ID	Project Name	Type	Jurisdiction	From Street	To Street	Cross-Section	Length (miles)
1	46th Ave	Bikeways	City	Ocean Beach Hwy	Olympia Way	32A	0.36
2	Pacific Way	Bikeways	Count	Pacific Pl	Coal Creek Rd	36A	3.43
3	Peardale Ln	Shared streets	City	7th Ave	Cul-de-sac	36B	0.14
3	Peardale Ln	Shared streets	City	Cul-de-sac	1st Ave	24A	0.14
4	28th Ave	Shared streets	City	Washington Way	RA Long High School	24A	0.49
4	28th Ave	Shared streets	City	Ocean Beach Hwy	RA Long High School	24A	0.39
5	Oak St	Bikeways	City	38th Ave	30th Ave	20A	1.03
5	Pennsylvania St	Bikeways	City	38th Ave	30th Ave	20A	1.04
6	30th Ave	Bikeways	City	Ocean Beach Hwy	Pacific Way	36C	0.76
7	30th Ave	Bikeways	City	Ocean Beach Hwy	Washington Way	36C	1.02
8	30th Ave	Bikeways	City	28th Ave	Douglas St	32C	0.30

Project ID	Project Name	Type	Jurisdiction	From Street	To Street	Cross-Section	Length (miles)
8	30th Ave	Bikeways	City	Douglas St	Washington Way	TBD	0.04
9	38th Ave	Bikeways	City	Memorial Park Dr	Ocean Beach Hwy	44A	0.51
10	38th Ave	Bikeways	City	Memorial Park Dr	Industrial Way	44B	0.58
11	Louisiana St	Shared streets	City	32nd Ave	30th Ave	36B	0.21
12	Louisiana St	Bikeways	City	30th Ave	Nichols Blvd	36C	0.45
13	Louisiana St	Bikeways	City	Kessler Blvd	17th Ave	36A	0.56
13	Louisiana St	Bikeways	City	Nichols Blvd	Kessler Blvd	36A	0.11
14	18th Ave	Bikeways	City	Olympia Way	Washington Way	50A	0.24
15	Olympia Way	Shared streets	City	42nd Ave	46th Ave	36B	0.50
16	Olympia Way/48th Ave	Shared streets	Count	46th Ave	Pacific Way	36B	0.91
17	32nd Ave	Bikeways	City	Ocean Beach Hwy	Washington Way	36C	1.11
17	32nd Ave	Bikeways	City	Washington Way	Douglas St	36C	0.08
17	32nd Ave	Bikeways	City	Ocean Beach Hwy	Olympia Way	36C	0.18
18	Ditch 3	Trails	CDID	Oregon Way	Tennant Way	TBD	1.41
19	42nd Ave	Bikeways	City	Ocean Beach Hwy	Pacific Way	36C	1.13
20	California Way	Bikeways	City	Tennant Way	11th Ave	50B	0.31
20	California Way	Bikeways	City	7th Ave	Industrial Way	50B	0.35
21	Coal Creek Rd	Bikeways	Count	Pacific Way	Ocean Beach Hwy	TBD	0.27
22	Douglas St	Shared streets	City	Alder St	28th Ave	36B	0.79
23	Mt Solo Road	Bikeways	City	Industrial Way	Ocean Beach Hwy	36C	0.82
24	Ohio and Pine St	Bikeways	Count	48th Ave	46th Ave	32A	0.41

Project ID	Project Name	Type	Jurisdiction	From Street	To Street	Cross-Section	Length (miles)
24	Ohio and Pine St	Bikeways	Count	46th Ave	42nd Ave	32A	0.42
25	Olympia Way	Bikeways	City	Ocean Beach Hwy	Civic Circle	50A	0.60
26	Olympia Way	Shared streets	City	30th Ave	32nd Ave	32B	0.17
27	Pennsylvania St	Bikeways	Count	42nd Ave	48th Ave	20A	0.75
28	Prudential Blvd	Bikeways	City	38th Ave	Industrial Way	60A	0.75
29	Robbins St	Shared streets	City	Ocean Beach Hwy	Oriole Dr	36B	0.40
30	Tennant Way Frontage	Bikeways	WSDOT	3rd Ave	7th Ave	TBD	0.24
31	Washington Way	Bikeways	City	Kessler Blvd	17th St	50B	0.68
31	Washington Way	Bikeways	City	30th Ave	Nichols Blvd	50B	0.76
31	Washington Way	Bikeways	City	Nichols Blvd	Kessler Blvd	50B	0.12
31	Washington Way	Bikeways	City	34th Ave	30th Ave	50B	0.43
32	Washington Way	Bikeways	City	Catlin St	16th Ave	80A	0.80
33	Douglas St	Bikeways	City	Kessler Blvd	7th Ave	50A	0.53
33	Douglas St	Bikeways	City	Kessler Blvd	7th Ave	40A	0.15
34	Bypass Ditch	Trails	CDID	Ocean Beach Hwy	Robbins St	TBD	0.27
35	50th Ave	Shared streets	City	Ocean Beach Hwy	Oriole Dr	36B	0.50
36	1st/3rd Ave	Bikeways	WSDOT	Peardale Ln	Allen St	50B	1.46
37	Broadway	Bikeways	City	Civic Circle	7th Ave	30A	0.59
38	Hemlock St	Shared streets	City	Nichols Blvd	32nd Ave	24A	0.66
38	Hemlock St	Shared streets	City	Washington Way	Kessler Blvd	36B	0.27
39	20th Ave	Shared streets	City	20th Ave Bridge	Nichols Blvd	36A	0.09
39	20th Ave	Shared streets	City	Beech St	Beech St	36B	0.01
39	20th Ave	Shared streets	City	Washington Way	Kessler Blvd	36B	0.44

Project ID	Project Name	Type	Jurisdiction	From Street	To Street	Cross-Section	Length (miles)
39	20th Ave	Shared streets	City	Alabama St	Arkansas St	24A	0.22
39	20th Ave	Shared streets	City	Nichols Blvd	Beech St	36B	0.42
39	20th Ave	Shared streets	City	Beech St	Alabama St	36B	0.14
40	SR-432	Bikeways	WSDOT	Washington Way	Memorial Park Dr	TBD	1.01
40	SR-432	Bikeways	WSDOT	Memorial Park Dr	Mt Solo Rd	TBD	1.57
40	SR-432	Bikeways	WSDOT	Mt Solo Rd	Ocean Beach Highway	TBD	1.21
41	Kessler Blvd	Bikeways	City	Ocean Beach Hwy	15th Ave	40A	1.67
42	Oriole Dr	Shared streets	City	Robbins St	50th Ave	36B	0.45
43	Vandercook Way	Bikeways	City	Washington Way	Maple St	50A	0.68
44	15th Ave	Bikeways	City	Washington Way	Nichols Blvd	80A	1.01
44	15th Ave	Bikeways	City	Rail Trail	Ocean Beach Hwy	36A	0.07
44	15th Ave	Bikeways	City	Ocean Beach Hwy	Washington Way	80A	0.41
45	Oregon Way	Bikeways	City	Nichols Blvd	Industrial Way	80B	0.82
46	Rail Trail	Trails	Rail	Ocean Beach Hwy	Nevada Dr	TBD	3.52
47	Drain 12	Trails	CDID	Ditch 6	Cutoff Slough	TBD	0.66
48	26th Ave	Bikeways	City	Nichols Blvd	Beech St	50A	0.55
48	26th Ave	Bikeways	City	Beech St	Highlands Trail	24B	0.31
49	42nd Ave	Shared streets	City	Ocean Beach Hwy	Olive Way	24A	0.22
50	12th Ave	Bikeways	City	Washington Way	Douglas St	50A	1.18
51	14th Ave	Bikeways	City	Vandercook Way	Douglas St	50A	0.98

Project ID	Project Name	Type	Jurisdiction	From Street	To Street	Cross-Section	Length (miles)
52	7th Ave	Bikeways	City	Douglas St	Tennant Way	50A	0.15
52	7th Ave	Bikeways	City	Hudson St	New York St	50A	0.36
52	7th Ave	Bikeways	City	New York St	Washington St	40C	0.26
53	7th Ave	Bikeways	City	California Way	Home Depot	36A	0.23
53	Ditch 10	Trails	CDID	38th Ave	Industrial Way	TBD	0.81
54	20th Ave	Shared streets	City	Hemlock St	Olympia Way	24A	0.46
55	Civic Circle	Bikeways	City	Olympia Way	Washington Way	60A	0.13
55	Civic Circle	Bikeways	City	Washington Way	Olympia Way	60A	0.09
55	Civic Circle	Bikeways	City	Olympia Way	Washington Way	60A	0.13
55	Civic Circle	Bikeways	City	Washington Way	Olympia Way	60A	0.09
56	Nichols Blvd	Bikeways	City	Oregon Way	Ocean Beach Hwy	40A	1.74
57	NW Nichols Blvd	Bikeways	City	Louisiana St	Ocean Beach Hwy	40A	0.41
58	Ditch 8	Trails	CDID	46th Ave	Mt Solo Rd	TBD	1.07
59	Beech St	Bikeways	City	Oregon Way	28th Ave	32C	0.84
60	Memorial Park Dr	Shared streets	City	38th Ave	Industrial Way	TBD	0.84
61	Hudson St	Bikeways	City	3rd Ave	Washington Way	50A	0.96
62	Bypass Ditch	Trails	City	Ocean Beach Hwy	Ditch 8	TBD	0.54
63	Cascade Way	Shared streets	City	Laurel Rd	15th Ave	36B	1.34
64	Laurel Rd	Shared streets	City	Pacific Way	Columbia Heights Rd	36B	1.35
65	Columbia Heights Rd	Bikeways	City	City limits	Laurel Rd	TBD	0.70

Project ID	Project Name	Type	Jurisdiction	From Street	To Street	Cross-Section	Length (miles)
65	Columbia Heights Rd	Bikeways	City	Fishers Lane	Cascade Dr	TBD	1.07
66	Olympia Way	Bikeways	City	16th Ave	15th Ave	60A	0.10
67	Ditch 12	Trails	Private	38th Ave	Olive Way	TBD	0.34
67	Ditch 12	Trails	City	38th Ave	Olive Way	TBD	0.27
67	Ditch 12	Trails	Private	38th Ave	Olive Way	TBD	0.09
67	Ditch 12	Trails	City	38th Ave	Olive Way	TBD	0.08
67	Ditch 12	Trails	Private	38th Ave	Olive Way	TBD	0.07
68	Ditch 6 West	Trails	CDID	48th Ave	County	TBD	0.80
68	Ditch 6 West	Trails	CDID	Coal Creek Rd	Lagoons	TBD	0.52
69	Cutoff Slough	Trails	CDID	34th Ave	32nd Ave	TBD	0.71
69	Cutoff Slough	Trails	CDID	36th Ave	34th Ave	TBD	0.81
69	Cutoff Slough	Trails	CDID	38th Ave	36th Ave	TBD	0.34
69	Cutoff Slough	Trails	CDID	42nd Ave	38th Ave	TBD	1.01
69	Cutoff Slough	Trails	City	50th Ave	46th Ave	TBD	0.69
69	Cutoff Slough	Trails	CDID	42nd Ave	46th Ave	TBD	1.14
70	Ditch 1	Trails	CDID	Ditch 5	32nd Ave	TBD	0.35
70	Ditch 1	Trails	CDID	32nd Ave	30th Ave	TBD	0.19
71	Ditch 6	Trails	CDID	Pacific Way	Rail Trail	TBD	0.56
72	Ocean Beach Hwy	Bikeways	WSDOT	38th Ave	Washington Way	TBD	3.04
72	Ocean Beach Hwy	Bikeways	WSDOT	Coal Creek Rd	38th Ave	TBD	2.51
73	Ditch 5	Trails	CDID	38th Ave	Douglas St	TBD	1.72
74	Olive Way	Bikeways	City	Ocean Beach Hwy	Memorial Park Dr	TBD	0.36
74	Olive Way	Bikeways	City	Memorial Park Dr	46th Ave	TBD	1.51
75	Ditch 4	Trails	CDID	Tennant Way Frontage Rd	Hudson St	TBD	0.82
76	Golf Course Cut-Through	Trails	City	Pennsylvania St	42nd Ave	TBD	0.34

Project ID	Project Name	Type	Jurisdiction	From Street	To Street	Cross-Section	Length (miles)
77	Windemere St	Shared streets	City	Merlin St	46th Ave	32B	0.27
77	Merlin St	Shared streets	City	Windermere St	48th Ave	32B	0.05
77	48th Ave	Shared streets	City	Ocean Beach Hwy	Merlin St	32B	0.09
78	Pacific Way	Bikeways	City	Ocean Beach Hwy	Railroad	50A	0.13
79	Commerce Ave	Bikeways	City	15th Ave	Vandercook Way	50A	0.15
80	Laurel Park Dr	Shared streets	City	Laurel Rd	Columbia Heights Rd	24A	0.21
81	Parkview Dr	Shared streets	City	Laurel Park Dr	Cascade Middle School	24A	0.27
82	34th Ave	Shared streets	City	Oak St	Ocean Beach Hwy	32B	0.34
83	34th Ave	Bikeways	City	Oak St	Pennsylvania St	20A	0.37
84	52nd Ave	Shared streets	City	Ocean Beach Hwy	Oriole Dr	36B	0.49
85	46th Ave	Shared streets	City	Ocean Beach Hwy	Olive Way	24A	0.32

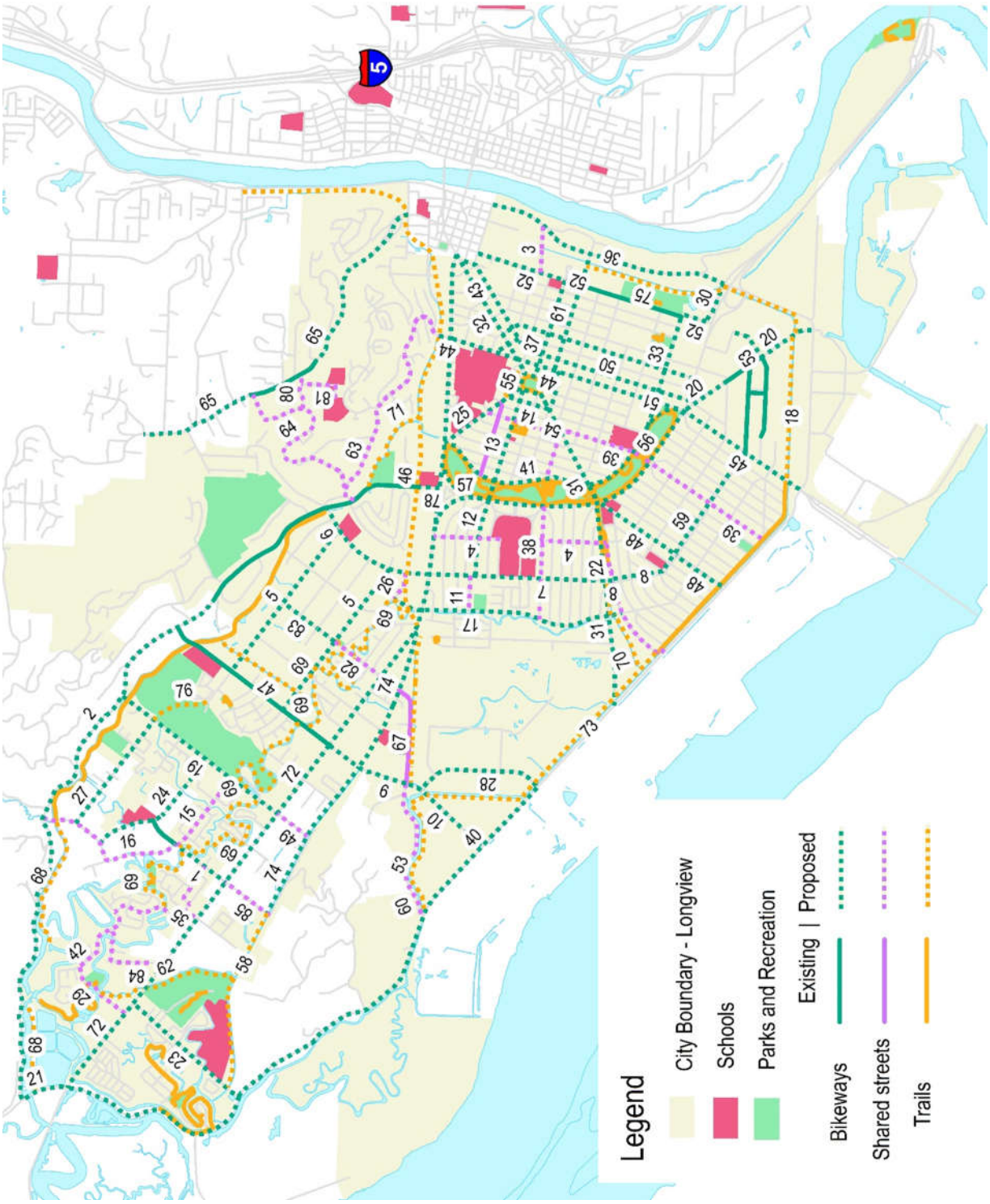

Figure 14: Map of recommended bicycle projects.

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Pedestrian Network Recommendations

A team of volunteers, City staff, and pedestrian advocates assembled the following list of recommended improvements to the pedestrian network. This list includes about 12 miles of sidewalk improvements and it intends to fill gaps in the existing pedestrian network to create a seamless, accessible network for all to enjoy. Many sidewalk gaps will fill with development activities. However, in areas of older developments where sidewalks were not installed at the time of development, the City may utilize grant funding or property owners may form a Local Improvement District (LID) to construct sidewalks.

Table 6: List of recommended pedestrian improvements

Project ID	Project Name	From Street	To Street	Area	Length (mi)
1	15th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	16th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	17th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	18th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	19th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	21st Ave	Highlands Trail	Connect to Ave	Central	0.01
1	20th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	23rd Ave	Highlands Trail	Connect to Ave	Central	0.01
1	24th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	25th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	27th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	28th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	29th Ave	Highlands Trail	Connect to Ave	Central	0.01
1	Beech St	Highlands Trail	Connect to Ave	Central	0.01

Project ID	Project Name	From Street	To Street	Area	Length (mi)
2	California Way	Industrial Way	Baltimore St	Central	0.57
3	Tennant Way Frontage Rd	7th Ave	3rd Ave	Central	0.24
4	7th Ave	Tennant Way Frontage	west side	Central	0.07
5	3rd Ave	Tennant Way	Waste Control	Central	0.59
6	Douglas St	11th Ave	9th Ave	Central	0.06
6	Douglas St	8th Ave	7th Ave	Central	0.06
7	9th Ave	Florida St	Delaware St	Central	0.24
7	9th Ave	Delaware St	Douglas St	Central	0.11
8	Peardale Ln	Cul-de-sac	1st Ave	Central	0.13
9	Harding St (north side)	28th Ave	27th Ave	Central	0.14
10	28th Ave	Larch St	Lilac St	Central	0.05
11	Ocean Beach Highway (south side)	Nichols Blvd	Kessler Blvd	Central	0.14
12	Fishers Ln	Columbia Heights	midblock	Hillside	0.08
13	Columbia Heights Rd	Fishers Ln	Cascade Dr	Hillside	0.97
14	Pershing St	32nd Ave	30th Ave	West Longview	0.33
15	Pennsylvania St	30th Ave	38th Ave	West Longview	1.04
16	Pine St	30th Ave	34th Ave	West Longview	0.50
17	Ohio St	30th Ave	34th Ave	West Longview	0.50
18	Oak St	30th Ave	38th Ave	West Longview	1.03
19	32nd Ave	Ocean Beach Hwy	Pershing St	West Longview	0.90
20	34th Ave	Pennsylvania St	Olympia St	West Longview	0.43
21	36th Ave	Pennsylvania St	Ocean Beach Hwy	West Longview	0.71

Project ID	Project Name	From Street	To Street	Area	Length (mi)
22	38th Ave	East side gap		West Longview	0.13
22	38th Ave	East side gap		West Longview	0.10
22	38th Ave	East side gap		West Longview	0.03
22	38th Ave	East side gap		West Longview	0.12
23	46th Ave	Ocean Beach Hwy	Ohio St	West Longview	0.55
24	Ohio St	42nd Ave	46th Ave	West Longview	0.47
25	Pennsylvania St	42nd Ave	48th Ave	West Longview	0.75
26	Mt. Solo Rd	East side gap		West Longview	0.19
26	Mt. Solo Rd	East side gap		West Longview	0.24

ADA Ramps

ADA ramps are a crucial component to making Longview's bicycle and pedestrian network accessible to all ages and abilities. ADA ramps are included during the design and construction of all street projects due to Federal law and regulations. ADA ramps are being replaced and upgraded throughout the City using existing funding programs.

The City's Accessibility Advisory Committee (ACC) is dedicated to removing accessibility barriers in the right-of-way and the highest priority ADA ramps are recommended for upgrade. Current ADA ramp statistics are shown below. About 74% of City ramps do not exist or are non-compliant. Since this is a priority of the AAC, this Bicycle and Pedestrian Master Plan does not go into detail on the prioritization of these ramp upgrades. The City should continue to fund ADA ramp upgrades and include them within the scope of street reconstruction projects.

January 2021	Rating						
Categories	150+	100-150	50-100	10-50	0	#	%
No ramps	19	187	249	83	17	555	24%
Non-compliant	38	331	539	253	22	1171	50%
Compliant	83	127	263	117	9	620	26%
Total	140	645	1051	453	48	2346	100%

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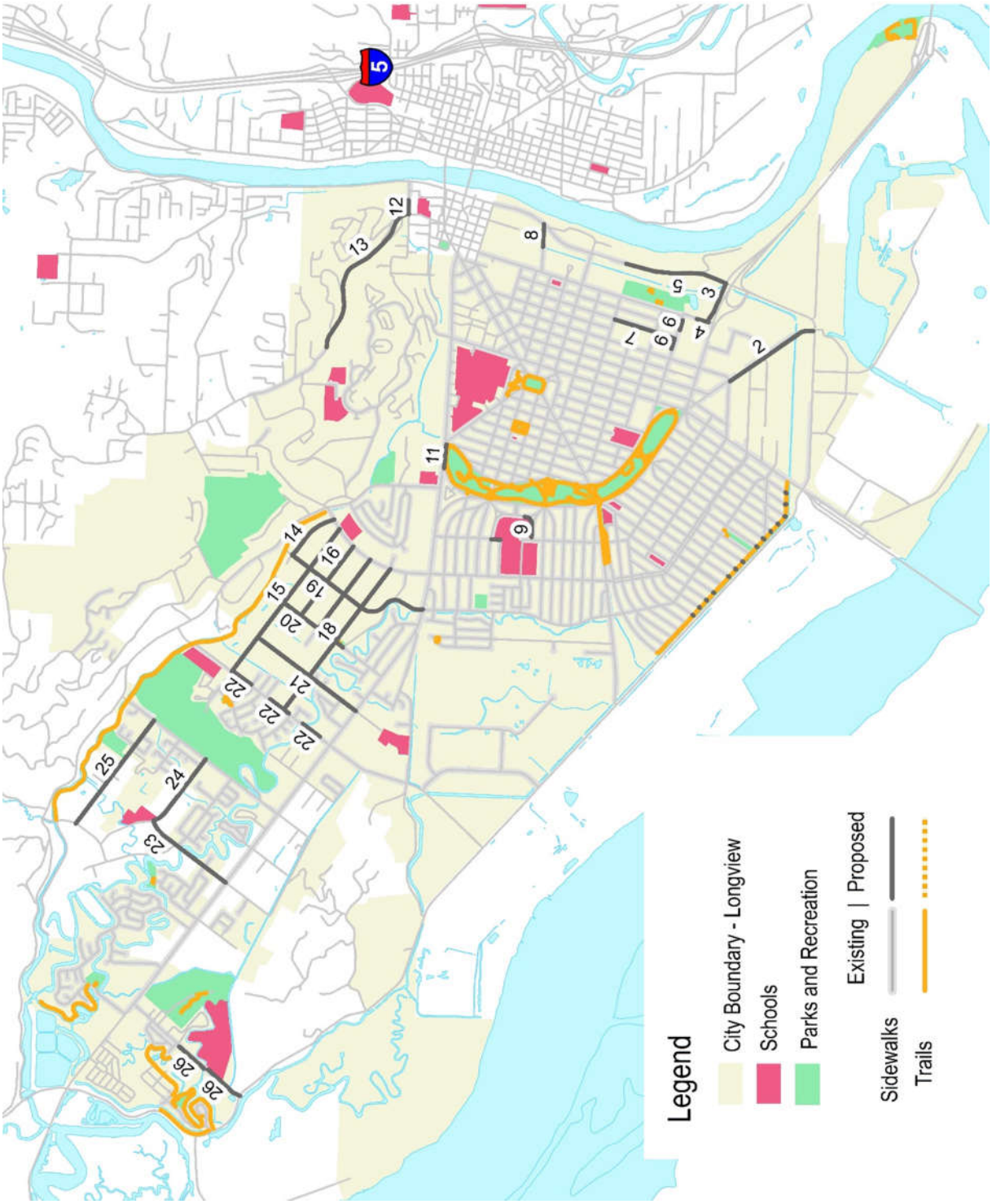

Figure 15: Map of recommended pedestrian projects

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Chapter 5: Bicycle Parking Standards

To encourage more people to choose bicycling, this Master Plan recommends the installation of a network of secure bicycle parking facilities. Secure bicycle parking is a critical utility that makes cycling a real transportation option for people. Access to secure bicycle parking can determine whether someone chooses to ride a bike or not since bicycles are one of the top stolen items in most communities as well as the components often being stolen even when the bicycle frame is securely locked to a rack. Because many of today's bicycles are often high-cost and valuable items, many people will not use a bicycle unless they are sure that there is secure parking available at their destinations. Similarly to how as a motorist you expect there to be secure parking facilities for your car or truck at your destination, people who choose to bike expect there to be a parking space to secure their bike at the end of their trip.

City Municipal code section 19.78 regulates off-street parking facilities for cars, motorcycles, and bicycles. This chapter outlines bicycle parking facility types and the requirements of short- and long-term parking, as well as other types of end-of-trip facility options. It is informed from research and best practices of supportive policies, to ensure that the City of Longview policy is supportive of developing the most appropriate bicycle parking facilities possible.

Bicycle parking facilities need to be conveniently located and adequate in both quantity and quality to encourage active transportation by bicycle, to reduce bicycle theft. In addition, to eliminate inappropriate parking, benefiting everyone.

Bicycle parking is highly cost-effective compared to automobile parking. Typically, 8 to 10 bicycles can be parked in the space required for one automobile. Additionally, a bicycle rack can be purchased for $100 to $200 dollars and can be retrofitted onto almost any surface. Bicycle parking encourages more local purchasing, lower crime rates, improved employee/student performance, and a healthier community.

Bicycle Parking Types

Bicyclists need parking options that can provide security against theft, vandalism, and weather. Like automobile parking, bicycle parking is most effective when it is located close to trip destinations, is easy to access, easy to find and located in a public space which allows casual observers to discourage theft. Where quality bicycle parking facilities are not provided, determined bicyclists lock their bicycles to street signs, parking meters, lampposts, benches, or trees. These alternatives are undesirable as they are usually not secure, may interfere with pedestrian movement, and can create liability or damage. The lack of bike parking infrastructure also implies to visitors and residents alike that 'bikes are not welcomed here'

Bicycle parking can be broadly defined as either short-term or long-term parking. There is also a third type of parking, event parking, that combines elements of both short-term and long-term parking.

- Short-term: Bicycle parking meant to accommodate visitors, customers, festival participants, messengers and others expected to depart within 4 hours; our program should require an approved standard rack, appropriate location and placement, and weather protection where required.
- Long-term : Bicycle parking meant to accommodate employees, students, residents, commuters, and others expected to park more than 4 hours. This parking is to be provided in a secure approach, weather-protected manner and location.

Short-Term Bicycle Parking

Short-term bicycle parking facilities are intended to provide short-term (under 4 hours) bicycle parking, and include racks which permit the locking of the bicycle frame and one wheel to the rack and support the bicycle in a stable position without damage to wheels, frame or components. Wherever possible, bicycle parking should be covered to protect the bike from rain and other elements. Short-term parking spaces are designed for short stops such as running errands, attending an appointment, shopping, or grabbing lunch with a friend.

Covered parking areas should have at least seven feet of ceiling clearance, but not so high as to allow rain easily blow under the roof. If located outdoors, the space shall be hard-surfaced, well-drained and illuminated. A properly-positioned inverted, U-shaped rack, commonly referred to as a bike staple, is considered 2 bicycle parking spaces.

Short-term bicycle parking can be found in the right-of-way or on private property. The City maintains a GIS database of on-street, right-of-way bike racks. Private property owners are responsible for providing off-street, private bike racks for their facilities. By collaborating Public and Private entities, the public will be better served for their bicycle parking needs.

Recommendations for short-term bicycle parking include the following:

- Bicycle parking spaces should be at least six feet long and two-and- a-half feet wide, and overhead clearance for covered spaces should be at least seven feet.
- A five-foot aisle for bicycle maneuvering should be provided and maintained beside or between each row of bicycle parking.
- Bicycle racks or lockers should be securely anchored to the surface or structure.
- Bicycle parking should be located in a highly visible location allowing random people to observe bicycle parking providing a degree of security.

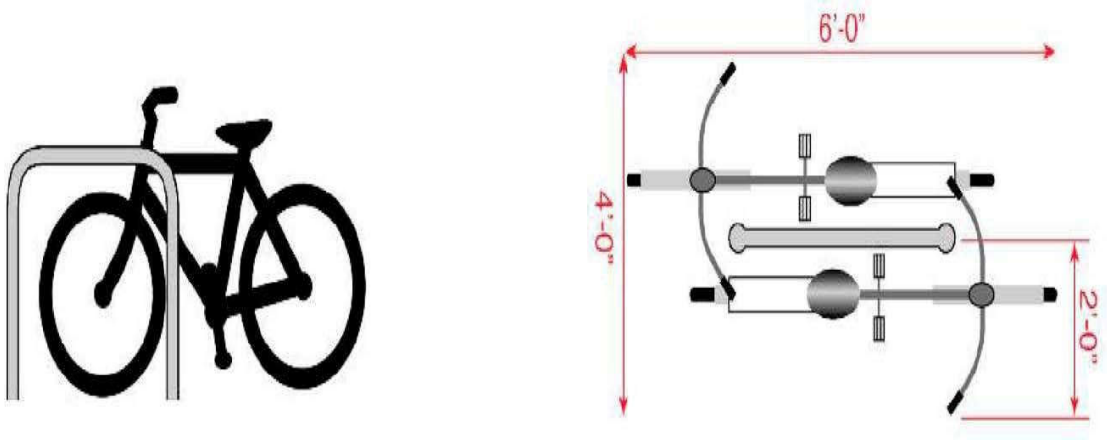

Figure 16: The Bike Staple, typical bike rack design

Figure 17: Map of existing public bike rack locations.

Figure 18: Round rack bike parking at the River Cities Transit Center

Long-Term Bicycle Parking

Long term bicycle parking is designed for the parking of one bicycle by an employee, resident, student, commuter or other person expected to park his or her bicycle for approximately 4 hours or more. These spaces are intended to be secure for longer periods and therefore need to give the user a sense that their bike will not be stolen or vandalized.

Long-term parking facilities are more expensive to provide than short-term facilities, but are also significantly more secure. Although many bicycle commuters would be willing to pay a nominal fee to guarantee the improved safety of their bicycle, long-term bicycle parking should be free wherever automobile parking is free. Potential locations for long-term bicycle parking include large employers and institutions where people use their bikes for commuting, and not consistently throughout the day. Additionally, City-owned parking lots should provide some long-term bicycle parking spaces. There are various options used including lockers, indoor garage space, and outdoor shelters or covered parking. Design should be considerate of different styles of bikes such recumbents, folding, and power assisted bikes that have longer or wider frames than a commuter-style bike.

Figure 19: Example long-term bicycle storage: bike locker diagram(top left) cycle safe lockers at Cowlitz Tribe Clinic (top right) and indoor bike storage room (bottom)

Event Parking

The goal of event parking is to reduce motor vehicle trips and parking demand, reduce the number of bicycles locked to street poles, fences, and trees, reduce the number of bicycles being walked through crowded spaces, such as Lake Sacajawea or the County fair, and raise the visibility and acceptance of bicycling for transportation. Cities with bike parking experience at events recommend that event organizers reserve space for bike parking equal to a minimum of 2% of the total expected crowd attendance. Bike parking for 5% or greater is ideal. An average length of 6 feet and a width of 2 feet should be reserved for parking a single bike. For temporary use, 10 bicycles will fit in one car parking spot. Bicycle parking should be visible from the main entrance to the event.

Temporary parking structures can be rented from event organizers in Portland; or Longview organizations could collaborate and share the investment for a portable parking structure that should last for many years.

Figure 20: 10 bikes parked in 1 car space

Figure 21: Portable event bike parking examples

Other Considerations

Changing Facilities

Aside from bicycle parking, other end-of-trip facilities for bicyclists include changing areas, clothes lockers and showers, which allow bicyclists to clean up after riding. In order to best encourage bicycle commuting, these facilities need to be located at places of employment, so that an employee can bicycle in, then shower and change before starting work. Shower and locker facilities may exist in some office buildings and other employment centers in Longview. Health and fitness clubs can offer an alternative place to shower/change for commuter cyclists, but only function for commuter cyclists if the facilities are located conveniently close to the place of employment. Many of these businesses offer a 'morning shower rate' that can be paid by business owners or employees. In encouraging riders to try cycle commuting, facilities such as showers, lockers, and bike parking becomes nearly as important as providing the bicycle facilities themselves. The City of Longview should strongly encourage and support local efforts encouraging bicycle and walking commuting and to develop ordinances that require shower and locker facilities based on employment densities.

Bicycle Racks & Placement

A bicycle rack shall be a stationary device of steel tubing or stock, not less than one inch in diameter nor more than 3 inches in diameter, or 2.25 inches square, which provides bicycle-locking points between one and 3 feet off the ground and a gap near the bottom for pedal clearance, such that a person can lock a bicycle frame and one bicycle wheel to the tubing with a standard, 4-inch-by-8-inch or larger, U-shaped bicycle lock. A bicycle rack shall be securely anchored to the ground or adjacent structure with anchor bolts drilled into the hard surface below.

To properly secure a bicycle, the rack shall be designed such that there are 2 or more contact points between a bicycle and the rack. A rack which only allows securing of a wheel, such as a low-profile rack, grid rack or comb rack, may not be used to meet the requirements of this section.

An existing Wave rack may be used to comply with the requirements of this section; however, new racks may not use wave racks for provision of new bicycle parking spaces.

A decorative or custom rack that meets all of the requirements of this subdivision shall be permitted.

A rack used to meet the requirements of short term parking shall allow a bicycle to have both wheels on or near the ground or floor surface to ensure the rider does not have difficulty with parking and securing the bicycle. Additional racks providing more than the required number of bicycle parking spaces may be provided in alternative designs, such as wall-hung, vertically-stored or placed on a second, raised tier of storage.

Where sidewalks are too narrow, bicycle parking can be placed in the street in lieu of on-street vehicle parking. Clustered racks can be installed in a car parking space protected by bollards or curbs. Alternatively, racks can be installed on sidewalk curb extensions where adequate sight distance can be provided. Installing bicycle parking directly in a car parking space incurs only the cost of the racks and bollards or other protective devices.

A curb extension may be installed but it should be recognized that it is more expensive to install, and can be prohibitively expensive if substantial drainage and/or utility work is necessary. Costs may be less if the curb extension is installed as part of a larger street or pedestrian improvement project.

While on-street bicycle parking may reduce automobile parking, auto parking loss can be mitigated by: adding auto parking spaces by consolidating driveways, moving fire hydrants, or otherwise finding places

where auto parking can be allowed where it is currently prohibited. Bicycle and motorcycle parking can also be combined.

On-street bicycle parking may be installed at intersection corners or at mid- block locations. Mid-block on-street parking may be closer to cyclists' destinations, although it could force cyclists to dismount and walk to the parking site if access from the street is difficult or dangerous. Combining a mid-block pedestrian crossing with mid-block on-street parking facilities could mitigate this situation.

Bicycle Rack Material Choice

There are many different material choices for bike racks. The City intends to standardize these options into a bicycle rack material and placement standard. The following table summarizes some of the commonly available material types.

Rack Material - Coating	Relative Purchase Cost	Durability	Cautions
Carbon steel - galvanized	Usually lowest	Highly durable and low-maintenance; touch-up, if required, is easy and blends seamlessly	Utilitarian appearance; can be slightly rough to the touch
Carbon steel - powder coat* (TGIC or similar) * When applied to carbon steel, TGIC powder coat should be applied over a zinc-rich primer or galvanization to prevent the spread of rust beneath the surface or at nicks in the finish	Generally marginally higher than galvanized	Poor durability	Requires ongoing maintenance; generally not durable enough for long service exposed to weather; not durable enough for large scale public installations
Carbon steel - thermoplastic	Intermediate	Good durability	Appearance degrades over time with scratches and wear; not as durable as galvanized or stainless
Stainless steel - no coating needed, but may be machined for appearance	Highest	Low-maintenance and highest durability; most resistant to cutting	Can be a target for theft because of salvage value; maintaining appearance can be difficult in some locations

Figure 22: APBP Guide to Bike Parking – Rack Materials & Coating

Bicycle Parking Supportive Policies

This section outlines existing policies that guide the development of bicycle parking. It considers best practices of short-term and long-term parking, both locally and internationally. Finally, specific recommendations are provided for City of Longview to support the development of bicycle parking

Bicycle Parking Standards in Longview

Longview's Comprehensive Plan doesn't mention bicycle parking as a consideration for encouraging bicycling in the community. This should be a consideration in future Comprehensive Plan updates.

Bicycle Parking Standards Best Practices

Best practices in bicycle parking standards outline specific guidelines for minimum quantities of parking spaces at different land uses. A recommended example is shown in the figure below.

The recommended parking standards should provide information about desired quantity and requirements for bicycle parking facilities. It should outline what are unacceptable styles of racks, and should provide diagrams and examples. The City of Longview should maintain all bicycle parking facilities within the public right-of-way. The term "Class I" is for short-term and "Class II" for long-term parking facilities. It is recommended to provide sheltered parking if more than ten Class II spaces are available.

Use	Recommended Bicycle Parking	Class and Percent of Bicycle Parking
Multi-Dwelling Units	1 space per 2 units except elderly, which is 1 space per 20 units	100% Class II
Emergency Services	1 space per 3,000 sq. ft. of floor area	20% Class I; 80% Class II
Human Services Facilities	1 space per 3,000 sq. ft. of floor area	20% Class I; 80% Class II
Neighborhood Parks	4 spaces per acre	100% Class II
Community Parks	5% of auto spaces	20% Class I; 80% Class II
Elementary Schools	1 space per 25 students	20% Class I; 80% Class II
Middle Schools	1 space per 40 students	20% Class I; 80% Class II
High Schools	1 space per 60 students	20% Class I; 80% Class II
Commercial Lodging	1 space per 20 rooms	100% Class I
Restaurants with drive-thru	1 space per 1,000 sq. ft. of floor area	20% Class I; 80% Class II
Restaurants without drive thru	1 space per 1,000 sq. ft. of floor area	20% Class I; 80% Class II
General Retail Sales	1 space per 4,000 sq. ft. of floor area	20% Class I; 80% Class II
Office Campus	1 space per 3,000 sq. ft. of floor area	20% Class I; 80% Class II
Light Industrial	1 space per 10,000 sq. ft. of floor area	20% Class I; 80% Class II
Heavy Industrial	1 space per 10,000 sq. ft. of floor area	20% Class I; 80% Class II

Figure 23: Sample bicycle parking standards

Additional recommended bicycle standards

- Bicycle parking must be provided at the ground level, and may be provided in floor, or wall racks that must hold bicycles securely by the means of the frame. Bicycles may be tipped vertically for storage, but not hung above the ground. If the bicycle parking is placed in the public right-of-way, it shall not obstruct pedestrian walkways and shall meet all of the requirements outlined in obtainment of the street use permit.
- Where required bicycle parking is provided with racks, the racks must meet the following standards:
    - The parking spaces shall be at least 2' wide and 6' long with an overhead clearance of at least 7', and with a 5' access aisle
    - The rack must hold the bicycle securely by means of the frame. The frame must be able to be supported so that the bicycle cannot be pushed or fall to one side in a manner that will damage the wheels
    - The bicycle frame and one wheel can be locked to the rack with a high-security, U-shaped shackle lock if both wheels are left on the bicycle; and
    - The rack must be securely anchored with theft resistant hardware
- Where bicycle parking is provided with lockers, such lockers must meet the following standards:
    - An area of at least 6' of horizontal distance shall be provided around the entrance of each locker that is free from obstructions, an overhead clearance of at least 7', and with a 5' access aisle; and
- The lockers must be securely anchored

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Chapter 6: Design Program

The City of Longview's vision is a community in which residents and visitors of all ages and abilities are able to travel safely and conveniently on the city's transportation network. In order to accomplish this vision, the City developed the following design program for active transportation facilities that promote safe and convenient access and travel for all road users. Strong design guidelines will allow the City of Longview to implement pedestrian and bicycle improvements more effectively in the future.

This design program intends to guide two key stakeholders groups: Engineers when they design improvements to the City's bicycle and pedestrian network and the Complete Streets Committee for reference when reviewing road and development plans. The City depends on Engineers to design future projects according to these design program guides as well as current best practices. To ensure independent review and oversight of the plans developed by Engineers, the City will seek advice from the Complete Streets Committee regarding complete streets elements, transportation system plans and design criteria, and when otherwise needed to fulfill the goals of the City's Complete Streets program.

This design program is grounded in three guiding principles:

- Pedestrians and bicyclists are welcome on all City streets, except when prohibited on limited-access highways. Any improvements should make the conditions for walking and bicycling safer, more convenient, and more desirable.
- Pedestrian and bicycle facilities are designed for use by people from all ages and abilities. Pedestrian facilities shall be designed to meet ADA accessibility requirements. Bicycle facilities shall be designed for minimum traffic stress. With these minimum design standards, the City aims to accommodate all people interested in active transportation.
- The City views movement by all road users as a greater public value than storage of private automobiles in the public right-of-way. When necessary to fill gaps in the network or provide a connection to a popular destination, the City will remove on-street parking to accommodate safe and convenient bicycle and pedestrian circulation.

These design guidelines are intended to be somewhat flexible and evolve over time. The guiding principles will help when judging the merits of new technologies and methods of providing space for bicycles and pedestrians. Innovations in transportation engineering occur regularly and the savvy engineer will stay current on trends, best practices, and case studies. We included reference to current National, State, and industry best practices to help direct engineers and citizens alike to the documents containing more information on design considerations. Engineers must apply professional judgement when recommending improvements in the right-of-way on a project-by-project basis.

National and State Guidelines and Best Practices

The City of Longview's Bicycle and Pedestrian Master Plan design program is based on current federal and state bikeway and walkway design guidelines. The active transportation profession considers the following resources best practices. This is not an exhaustive list, but it shows the basic building blocks for a successful design program. Agencies update these standards periodically, planners and engineers should reference the current editions when projects reach the design phase. These guidelines are not a substitute for engineering judgement applied on every project to consider other factors, such as right-of-way, drainage, safety, traffic volumes, and cost.

- United States Department of Transportation, Federal Highway Administration (FHWA)
  - Road Diet Informational Guide (2014) (https://safety.fhwa.dot.gov/road_diets/guidance/info_guide/rdig.pdf)
  - Separated Bike Lane Planning & Design Guide (2015) (https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/separatedbikelane_pdg.pdf)
  - Bikeway Selection Guide (2019) (https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf)
  - On-Street Motor Vehicle Parking and the Bikeway Selection Process (2021) (https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/FHWA-SA-21-009_On_Street_Motor_Vehicle_Parking.pdf)
  - Manual on Uniform Traffic Control Devices (MUTCD) http://mutcd.fhwa.dot.gov
  - Small Town and Rural Multimodal Networks (2016) https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/
- United States Access Board Public Rights- of-Way Accessibility Guidelines (PROWAG) https://www.access-board.gov/prowag/
- American Association of State Highway and Transportation Officials (AASHTO)
  - Guide for the Development of Bicycle Facilities, 2012 (https://nacto.org/wp-content/uploads/2015/04/AASHTO_Bicycle-Facilities-Guide_2012-toc.pdf)
  - Policy on Geometric Design of Streets and Highways, 2001.
- National Association of City Transportation Officials (NACTO)
  - Urban Bikeway Design Guide (https://nacto.org/publication/urban-bikeway-design-guide/)
  - Urban Street Design Guide (https://nacto.org/publication/urban-street-design-guide/)
  - Don't Give Up at the Intersection (https://nacto.org/wp-content/uploads/2019/05/NACTO_Dont-Give-Up-at-the-Intersection.pdf)
- Washington State Department of Transportation (WSDOT)
  - Design Manual – Division 15 (https://wsdot.wa.gov/Publications/Manuals/M22-01.htm)
    - Chapter 1510: Pedestrian Facilities
    - Chapter 1515: Shared-Use Paths
    - Chapter 1520: Roadway Bicycle Facilities
  - State Active Transportation Plan - 2020 and Beyond https://wsdot.wa.gov/travel/commute-choices/bike/plan
- Massachusetts Department of Transportation Separated Bike Lane Planning & Design Guide (https://www.mass.gov/lists/separated-bike-lane-planning-design-guide)
- CROW Design Manual for Bicycle Traffic https://crowplatform.com/product/design-manual-for-bicycle-traffic/

Longview Design Guidelines

This design guide is divided into two sections: Corridor Design Criteria and Intersection Design Criteria. Corridors are considered linear travelled ways used by vehicles, bicycles, or pedestrians. Intersections are point, mixing zones where road users of different modes cross paths. The design treatments used for these two types of transportation facilities are listed below along with examples of how they are applied.

For this Master Plan, we are focused on developing a connected network of corridors for pedestrians and bicyclists. Pedestrian corridor design is straightforward and specified in Longview Municipal Code Title 12: a minimum of 5' sidewalk is required on both sides of all streets in Longview, except for alleys. Bikeway corridor design is slightly more complicated.

Many of the recommended bikeways will be built on existing streets that are constrained to the limits of existing street pavement and curbs. When budget allows, on-street facilities should be upgraded to grade- and horizontal- separated facilities, similar to those found in the Netherlands and Denmark. Vehicular traffic volumes and speeds are the main design factors that dictate bikeway corridor design. Our end goal is to create a network that is safe and convenient for the widest range of users.

Longview's driving vision is a bikeway network for people of all ages and abilities. This means that children, parents, athletes, and mature adults can all utilize bikeways. Many of these people do not bicycle today due to the lack of safe facilities. Research shows that about 50% of the people identify as "interested but concerned", which means they would bicycle if safe, separated facilities were provided. People who identify in this group have the lowest tolerance for traffic stress. Bikeway stress is measured in terms of "level of traffic stress" or LTS. Longview's goal is to develop a network of bikeways that meet the LTS 1 standard for all ages and abilities. Bikeways designed at this level typically provide grade and/or horizontal separation from vehicular traffic. On some streets, due to limited budget, it may be necessary to develop the initial bikeways to LTS 2 and then over time improve to LTS 1. Safe, connected bikeways invite people of all ages and abilities to utilize active transportation for their daily needs.

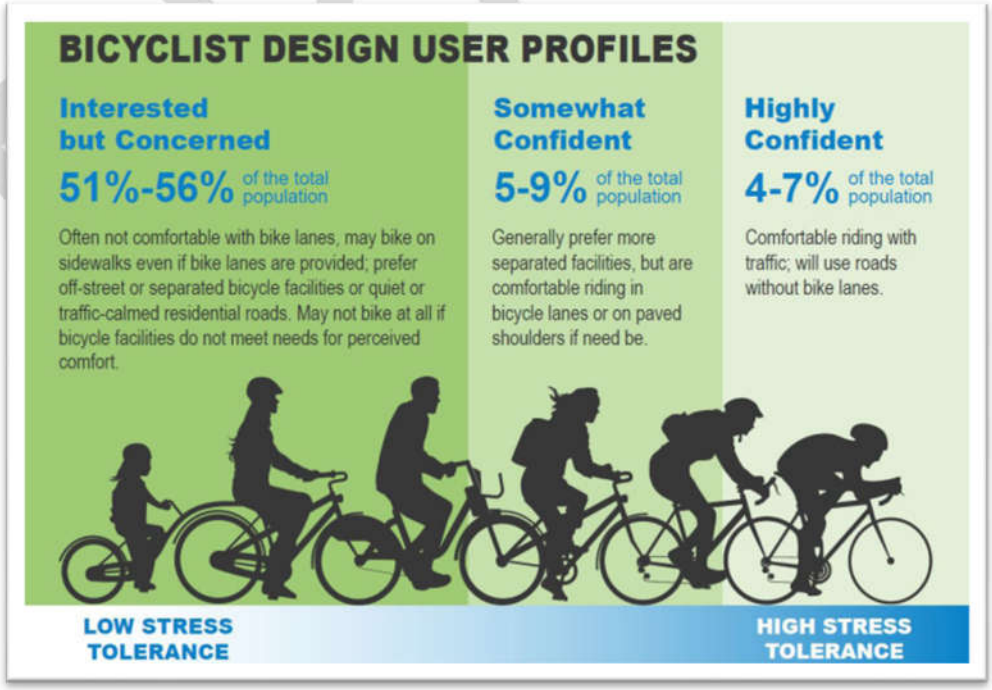


Figure 24: Bicyclist design user profiles (City of Portland)

When designing a bikeway treatment to be applied to a street in Longview, the engineer should consult the following graphic showing the recommended bikeway type based on vehicular traffic speed and volume. Both of these metrics should be determined by performing a traffic study, or by using data from a recent traffic study within the last 5 years. Vehicular speed should be compared to the posted speed to determine if speed reduction measures should be installed. Once the designer can identify the two variables for this chart, locate the intersection and determine the type of facility that is recommended. This chart comes from the FHWA Bikeway Selection Guide.

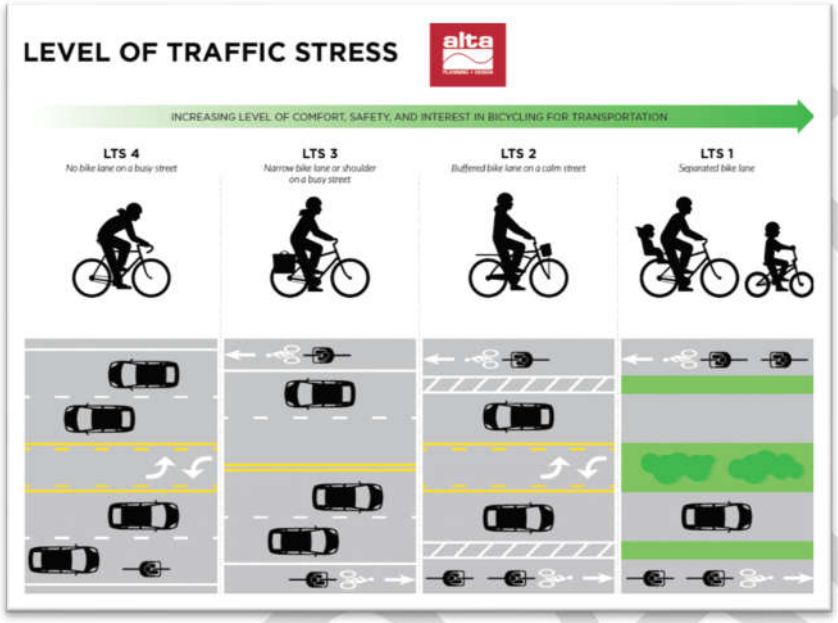


Figure 25: Level of Traffic Stress (LTS) and example street cross-sections

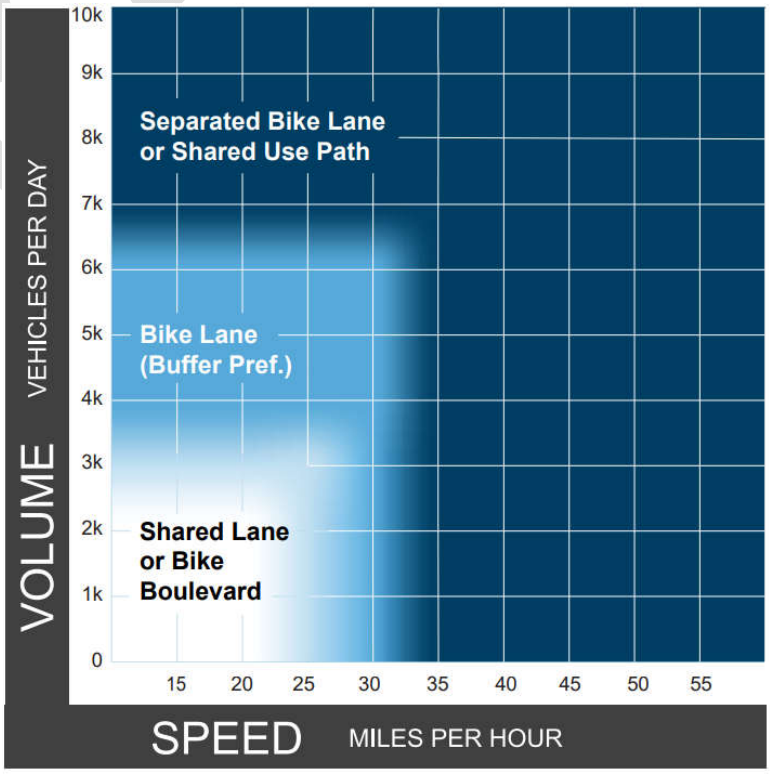


Figure 26: Bikeway selection guide (FHWA)

Corridor Design Criteria

We have defined the following table of minimum and maximum criteria for this design program's corridor recommendations. Corridors include vehicle-travelled way, bikeways, and walkways. This specifies the minimum and maximum widths of corridor facilities to give the engineer a starting point for compiling their recommended cross-sections.

Table 7: Corridor Design Criteria

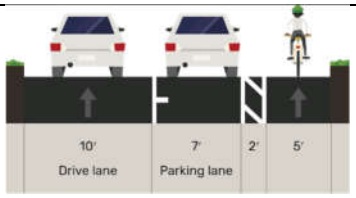
Corridor type	Minimum width	Notes
Sidewalk	5'	Provide landscape strip with street trees between sidewalk and curb whenever possible
Bike lane	5'	If 3' buffer is provided, minimum width can reduce to 4'. Whenever possible provided 3'+ buffer alongside bike lane. Bike lanes on both sides of street, serving both directions of travel, is preferred.
Multi-use trail, two-direction	10'	Install bollards to prevent vehicular travel, but allow cyclists and pedestrians to pass through
Vehicle lane	10'	12'maximum
Parking lane	7'	8' maximum

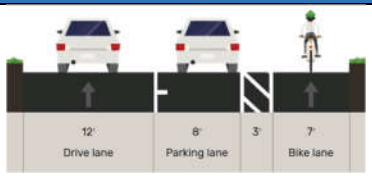
Bikeway Treatment Menu

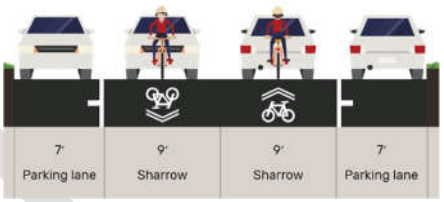
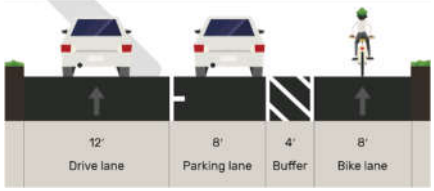
The City developed the following menu of treatments for various street widths and traffic patterns to aid in bikeway design. We applied the design criteria for corridors from the previous section to several standard street widths found throughout Longview. This provides designers with cut-and-paste cross-sections for their projects to help visualize the improvements. Locations where each treatment could be applied are provided, although specific applications will be verified on a project-by-project basis. These cross-section treatments were developed based on standard street widths and using the free, online street design tool Streetmix.net. This treatment menu is designed to establish Longview's basic bicycle network by utilizing existing street pavement. Treatments should be expanded in the future to include permanent grade and horizontally separated facilities as funding and need increase.

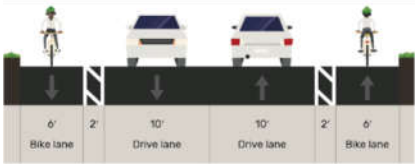
Table 8: Bikeway Treatment Menu, for street widths from 20' to 80'

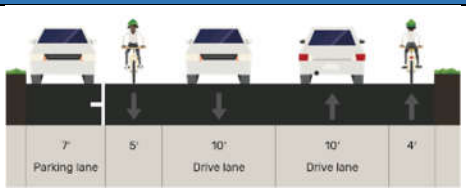
Street width = 20'				
Treatment ID	Description	Application	Potential Locations	Cross-section
20A	Advisory bike lanes	When street is narrow and has low vehicle volume and speed	Pennsylvania and Oak Street	

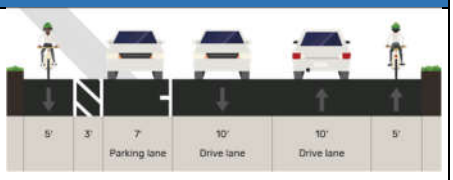
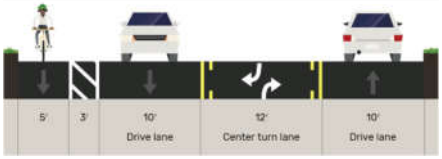
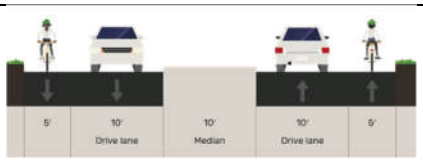
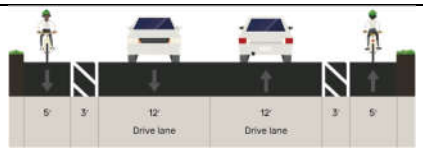
Street width = 24'				
Treatment ID	Description	Application	Potential Locations	Cross-section
24A	Shared street	When street is narrow and has low vehicle volume and speed	Maple St, from 19th Ave to Kessler Blvd	
24B	One-way parking protected bike lane	When street is divided by a median and parking is needed	26th Ave, south of Beech St	

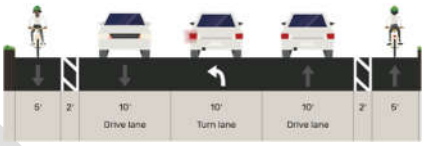
Street width = 30'				
Treatment ID	Description	Application	Potential Locations	Cross-section
30A	Parking protected bike lanes with median and parking	When street is divided by median and parking and bike lane needed	Broadway	

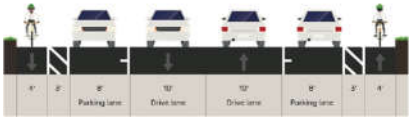
Street width = 32'				
Treatment ID	Description	Application	Potential Locations	Cross-section
32A	Bike lanes	When street is narrow and has low vehicle volume and speed	46th Ave	
32B	Shared street	On narrow streets with parking on both sides and shared bicycle route	Douglas St, from Highlands Trail	
32C	Half street, parking protected bike lanes with parking	When parking is needed and a bike lane and the street has a median	Beech St; 30th Ave where divided by median	

Street width = 36'				
Treatment ID	Description	Application	Potential Locations	Cross-section
36A	Buffered bike lanes	When bike lanes needed on both sides of a collector street	Louisiana St, from Civic Circle to 30th 30th Ave, from Ocean Beach Hwy to Washington Way	
36B	Shared street	When street needs parking on both sides and has low vehicle volume and speed	Hemlock St, from Kessler Blvd to Washington Way	

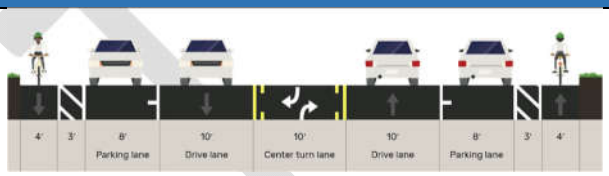
Street width = 36'				
36C	Constrained bike lanes	When parking needed on one side and it's a major bike route	30th Ave, from Ocean Beach to Pacific Way 32nd Ave from Ocean Beach to Douglas Street	

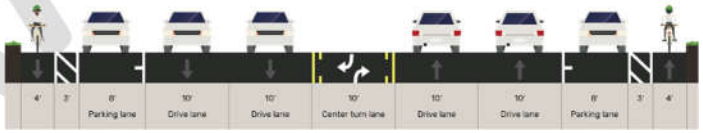
Street width = 40'				
Treatment ID	Description	Application	Potential Locations	Cross-section
40A	One-way bike lane, with parking on both sides	When parking is needed on both sides, and a couplet of bike lanes can be provided in close proximity	Kessler Blvd, from Douglas St to Ocean Beach Hwy Nichols Blvd Douglas St in front of hospital	
40B	One-way bike lane, with center turn lane	When an intersection requires turning movements, and a couplet of bike lanes can be provided in close proximity	Rare circumstances where only one side of bike lane is needed	
40C	Constrained pedestrian crossing with bike lane	When road narrows due to pedestrian island and car and bike lanes shrink to minimum widths	7th Ave at pedestrian crossing at Fairgrounds	
40D	No parking, buffered bike lane	When street is too narrow for parking and buffered bike lane desired	Alaska St	

Street width = 44'				
Treatment ID	Description	Application	Potential Locations	
44A	Buffered bike lanes with parking on one side	When bike lanes needed on both sides of a collector street, and parking desired on one side	38th Ave, from Ocean beach Hwy to Memorial Park Dr	
44B	Buffered bike lane, left turn pocket	When a left turn pocket needed, and maintaining buffered lanes through the intersection	Hudson St, at 3rd Ave 38th Ave at intersection with Ocean Beach	

Street width = 50'				
Treatment ID	Description	Application	Potential Locations	Example Cross-section
50A	Parking-protected bike lanes	When parking is required on both sides of street AND traffic volume is high	Vandercook Way, from Washington Way to 12th Ave Olympia Way, from Civic Circle to Ocean Beach Hwy 7th Ave 12th and 14th St	
50B	4 lane to 3 lane road diet with bike lanes	Reducing number of travel lanes in order to add bike lanes and center turn lane	Washington Way road diet	

50C	Two-way buffered bike lane, center turn lane, one side parking	When vehicle turning movements are needed, when parking is desired on one side	Another option, but two sides of bike lanes preferred	

Street width = 60'				
Treatment ID	Description	Application	Potential Locations	Example Cross-section
60A	Parking-protected bike lanes	When parking is required on both sides of street AND traffic volume is high	Prudential Blvd Civic Circle (if reverted to 2 way traffic)	

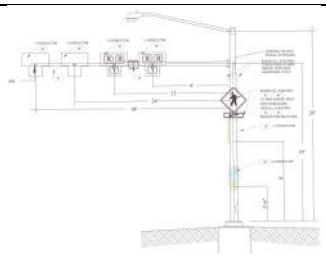
Street width = 80'				
Treatment ID	Description	Application	Potential Locations	Example Cross-section
80A	Parking-protected bike lanes	When parking is required on both sides of street AND traffic volume is high	15th Ave	

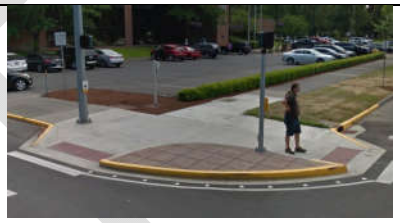
Intersection Design Criteria

In order to provide a connected network of bicycle and pedestrian facilities throughout the City, staff must design intersections to offer safe and convenient crossings for bicyclists and pedestrians. In these mixing zones, road users cross paths with travelers moving by other modes. Riders negotiate right-of-way based on traffic laws and location-specific cues. Pavement markings, signage, and signals are all used to communicate who has the right-of-way at any moment along our streets. Since bicyclists and pedestrians are the most physically vulnerable users of the roads, safety is the number one priority when changing or improving intersections.

Bicyclists and pedestrians are accommodated at intersections with a variety of treatment options. The table below highlights several of the common methods found in Longview and others that could be implemented. The focus of intersection design is to provide clear communication to encourage safe crossings by all users.

Table 9: Intersection design treatment menu

Description	Application	Example
Pedestrian pushbutton	Gives pedestrian priority to cross a street, when the signal is not set to recall, triggers cycle change	Existing at most signalized intersections around the city
Leading pedestrian interval	Gives pedestrian a head start to cross street before vehicle traffic receives green light.	Existing at 15th and Broadway
Bike box	Advance placement: Before a signalized intersection stop bar, allows bicyclists to advance in bike lane ahead of vehicles (with or without green paint, but always with bike symbol)	 Example: NW Broadway in Portland, OR
Two-stage turn queue	Bike box through to the opposite side of the intersection, allows bicyclist space to wait before making left turn	 Example: SW Main St in Portland, OR
Rectangular Rapid-Flashing Beacon (RRFB) signals	At mid-block or unsignalized intersections, provides advanced warning of pedestrian crossing and	 Example: 30th Ave at Olympic Elementary
High-Intensity **A**ctivated Cross**W**al**K** Beacon (HAWK) signals	At major ped/bike crossings, stops cross vehicle traffic to allow other users to cross	

Description	Application	Example
Bicycle signal	A special pushbutton located adjacent to the roadway intended to allow cyclists to trigger signal without getting off bicycle	 Example: SE Cesar Chavez Blvd and SE Taylor St, Portland OR
Curb ramp	Bring the pedestrians/bikes down to the street level, compliant with ADA	
Raised crosswalk	When there is a desire to lower traffic speeds (speed hump), bring the street up to the sidewalk/bikeway level	Civic circle
Refuge island	Provides protection for bicyclists and pedestrians when crossing a busy street, shortens the crossing distance	Oregon Way at Beech St
Diverter	Reduces vehicle traffic by detouring vehicles to another intersection to limit volumes on a bikeway	None in Longview, some in Portland, OR

Striping and signage:		
Crosswalk striping	Highlights pedestrian and bike crossings, when warranted per MUTCD	Visible at many marked crosswalks in Longview
Bikeway crossings of streets	Labels bikeway crossing major streets (sometimes with green paint) to warn drivers of the bikeway continues through intersection	None in Longview, many in Portland.
Sharrows	Indicates to drivers that the street is shared and to expect bicyclists	None in Longview, many in Portland.

Chapter 7: Education and Outreach Strategies

Bicycling and walking programs are an essential and effective complement to infrastructure investments. The goals of education and encouragement programs are to:

- Share walking and bicycling information widely to residents and visitors
- Increase expertise, knowledge, confidence, and acceptance of walking and bicycling
- Foster a culture of bicycling and walking as safe, convenient modes of transportation.

Programs can ensure that more residents will know about and use new and improved facilities, learn about the benefits of bicycling and walking, and receive positive reinforcement about why and how to integrate bicycling and walking into their everyday lives. In essence, these efforts market bicycling and walking to the general public and provide the maximum "return on investment" in the form of more people bicycling and walking and a higher degree of safety and awareness around non-motorized transportation.

This chapter outlines the education and outreach strategies to encourage walking and bicycling in Longview. It describes recommendations for potential encouragement, education and enforcement programs that have been successful in other communities.

Existing Education and Outreach Efforts

Education and Outreach programs in Longview are designed to raise awareness of walking and bicycling; connecting current and future users to existing resources; educating them about their rights and responsibilities; and encouraging residents to walk and bicycle more often.

Key target audiences include motorists; current and potential (interested) cyclists and pedestrians; students, children and families; school personnel; and employees (through employer programs). Education, encouragement and enforcement programs enable pedestrians and cyclists to safely and easily use the bicycle network.

Bicycling Organizations

- League of American Bicyclists: http://www.bikeleague.org/
- Cascade Bicycle Club: https://cascade.org
- People for Bikes: https://www.peopleforbikes.org/
- Washington Bikes: https://wabikes.org/
- North Carolina's Safety Research Center - https://www.pedbikeinfo.org/about.cfm

Pedestrian Organizations

- Longview Parks and Recreation: https://www.mylongview.com/196/Recreation
- Cowlitz on the Move: https://www.cowlitzonthemove.org/
- Washington State Center for Safe Routes to School: http://www.saferoutes-wa.org/
- Transportation Choices: http://www.transportationchoices.org
- River City Transportation Services: https://rctransit.org/
- Feet First – http://www.feetfirst.org
- National Center for Safe Routes to School: http://www.saferoutesinfo.org/index.cfm
- America Walks: http://www.americawalks.org

- Walk Friendly Community http://walkfriendly.org/
- North Carolina's Safety Research Center https://www.pedbikeinfo.org/about.cfm
- WSDOT Safe Routes to School https://wsdot.wa.gov/LocalPrograms/SafeRoutes/default.htm
- River City Transportation Services: https://rctransit.org/

Recommended Actions for Longview

Longview has beginnings of Safe Routes to School efforts, bicycle/walking education, and encouragement programs. Starting fresh however provides the opportunity to introduce the latest programs. The following lists provided ideas or starting points for Longview's education and outreach programs.

- Longview should apply for and achieve recognition as a Bicycle Friendly Community from the League of American Bicyclists
- Longview should apply for and achieve recognition as a Walk Friendly Community from http://walkfriendly.org/
- Longview City Council should empower the Complete Streets Committee to:
    - Encourage Longview Police Department (LPD) to re-introduce the LPD bicycle patrol program
    - Work with the Longview School District (LSD) to create a Safety and School Education/Encouragement Program for 5th grade and above
    - Work with LPD and LSD on Safe Routes to School efforts.
    - Encourage and work with LCC staff to introduce an active transportation effort using the League of American Bicyclists guidelines
    - Encourage businesses to promote biking & walking to work using the League of American Bicyclists guidelines
    - Develop a coordinated Active Transportation education, encouragement, and public awareness campaign with community partners.
        - Develop an open streets, "ciclovia", event to allow community members to take over popular streets with their bikes. This could be centered around Squirrel Fest, 4th of July, other community-wide events, or just designated days through the summer like Portland's "Sunday Parkways"
        - Develop a Longview History walk/bike route. This would connect people to the City's many historic buildings, parks, and important places. It could be a self-guided route found on Strava, RidewithGPS, or Garmin or it could be a guided route lead by community volunteers. The City could collaborate with the Longview Historic Preservation Commission, Cowlitz County or the City of Kelso to make it a larger regional historic route.

Complete Streets Advisory Committee

The City of Longview currently has a Complete Streets Advisory Committee that provides advice to the City Council on technical issues related to walking and bicycling.

It is a strategic body dedicated to understanding the specific needs and issues of bicycles and pedestrians. The committee comments on transportation planning policy from a unique perspective. The Complete Streets committee will advise decision makers on the importance of bicycle and pedestrian issues. Common charges of committee include some or all of the following:

- Review and provide resident input on project planning and design as it affects bicycling and walking (e.g., corridor plans, street improvement projects, signing or signal projects, and parking facilities)
- Review and comment on changes to zoning, development code, comprehensive plans, and other long-term planning and policy documents
- Participate in the development, implementation and evaluation of Bicycle and Pedestrian Master Plans and standards
- Provide a formal liaison between City Council, staff, and the public
- Develop and monitor goals and indices related to walking and bicycling
- Promote bicycling and walking, including bicycle and pedestrian safety and education

The City should consider expanding the Committee to include representatives of the School District, Police Department, Lower Columbia College, Downtowners, and representatives from the largest employers.

Partner with LSD to create a School Education/Encouragement Program

Helping children walk and bicycle to school is good for children's health and can reduce congestion, traffic dangers and air pollution caused by parents driving children to school. Safe Routes to School programs address all of the "Six E's" approach using Engagement, Equity, Engineering, Encouragement, Education and Evaluation strategies to improve safety and encourage children walking and bicycling to school. The City of Longview should work with school districts to implement the first phase of a school education and encouragement program. This phase will use a walkabout (also known as a bicycle and pedestrian audit) to assess walking and biking conditions of streets adjacent to elementary schools. Parents, students, neighbors, and city planners and/or traffic engineers should be invited to join in the walkabout. Safety concerns, issues, and ideas should be recorded. After the bicycle and pedestrian audit is conducted, parent maps for each elementary school showing recommended routes to reach school, along with high-traffic intersections and routes to avoid, should be produced and distributed. Other SRTS activities can include pedestrian and bicycle assemblies, walking school buses, bicycle rodeos, and other encouragement programs.

Expanding Active Transportation Education and Awareness Campaigns

The City of Longview has the opportunity to increase education and outreach materials available to all residents through citywide efforts and partnership efforts with established groups/organizations like Lower Columbia College, Longview Parks and Recreation, Longview Active Transportation Group, Safe Routes to School, business organization and Complete Streets Advisory Committee. In addition, community leaders can 'lead by example'.

Rethinking Auto-Centric Street Design

Sharing facilities with other road users requires education of all the users about their rights, responsibilities, and how to behave courteously, safely, and visibly. Due to the growing need to address concerns of both cyclists and motorists as they use Longview roads and multi-use paths, a citywide "Share the Road" campaign is recommended. A citywide campaign utilizing Public Service Announcements (PSAs), billboards, advertising on transit vehicles and benches, signage; as well as other outreach methods, will communicate the "Share the Road" message to all roadway users. Additionally, create bicycle parking places throughout the city as well as at organized events like Squirrel Fest, Go Fourth Festival, etc.

Improving Bicyclists' Behavior

Longview can work with partners to develop an outreach effort aimed at bicyclists. Educating bicyclists on being courteous to other roadway users and lawful riding will address behavior issues (perceived and actual) such as wrong way riding, sidewalk riding, and safe riding habits (clothing, helmets, etc.). Potential partners include local bike shops, Safe Routes to School, Lower Columbia College, prison work release and various employers in the city.

Encouraging a League Certified Instructors (LCI) per the League of American Bicyclists program would provide trained instructor(s) who could lead training programs. Additionally, a bicycle riding 'park' could be developed to provide a place for parents and schools to teach bicycle riding techniques as well as road rules and regulations.

Cultivating Public Awareness

Communicating the connected nature of the variety of bicycle and pedestrian facilities through different outreach methods PSAs, specific events and celebrations, booths at citywide gatherings (Farmer's Market, Squirrel Fest, Go Fourth Festival, etc.) – and letting residents and visitors know about the active transportation network and how to use it is a key step to seeing more people out walking and biking. The City of Longview should create and regularly update an active transportation page on the city website. Since the city also provides financial support to many festivals and has an interest in reducing motor vehicle congestion, the city can also encourage non-motorized vehicle parking at citywide events. Providing information about events, projects and resources, related to walking and bicycling can empower residents to choose active transportation for their daily needs.

Group Rides

Group rides can encourage more people to bicycle. The City can be a key sponsor for these rides. Volunteers from the Complete Streets committee can help organize and lead these types of rides.

- Santa Ride
- Lower Columbia School Garden Bike Tour
- Ride of Silence
- City Mayor led ride
- Slow Roll Ride
- Creation of a local bike club

Open Streets Events

Open Streets are periodic street closures that create a temporary park that is open to the public for walking, bicycling, dancing, roller-skating, etc. They promote health by creating a safe and attractive space for

physical activity and social contact. Events can be weekly or one-time occasions. They could also become part of our regular festivals.

Bicycle Friendly Community

The League of American Bicyclists recognizes communities that improve bicycle conditions through education, encouragement, enforcement and evaluation programs. Communities can achieve platinum, gold, silver and bronze status or an honorary mention. Bicycle friendliness can indicate that a community is healthy and vibrant. Like good schools and attractive downtowns, bicycle friendliness can increase property values, spur business growth and increase tourism.

Bike to Work Day

Bike to work day can be a citywide event promoting bicycling to work. The event could include energizer stations where volunteers set up a table with promotional items, coffee and snacks along popular bicycle commuting routes during the morning and afternoon commute hours. Related to this, businesses could be encouraged to make walking and biking to work part of their employee fitness efforts.

Ride in Rain Challenge

Washington Bikes invites seasoned pedalers, new bike riders, and cyclists from all over our state to bike as much as possible for any reason during November 1-30. The idea of the Ride in the Rain Challenge is to turn a common barrier to biking — inclement weather — on its head and celebrate biking during the rainiest month of the year. We're confident that if you can ride during the rainiest month and enjoy it, you'll see how possible it is to bike all year round!

Internal City Education and Outreach

A key component to a successful complete streets education and outreach program is having a variety of stakeholders educated on and advocating for the benefits of active transportation facilities. The Complete Streets committee is currently lead by the City Engineer in the Public Works department. Other City departments should be included when implementing the educational goals of this Plan:

- Human Resources – encourage active transportation by City employees by providing incentives to bike/walk to work and recognition of active lifestyles
- Street maintenance – provide advice on maintenance considerations when designing and building new bicycle and pedestrian infrastructure
- Transit – encourage multi-modal connections by offering training on how to load your bike onto the bus or how to make connections to key bike/walk routes.
- Community Development

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Chapter 8: Implementation Plan

This Bicycle and Pedestrian Master Plan contains many proposed improvements. This section of the plan identifies the course of action for implementing recommended policies as well as capital improvements related to bicycling and walking. The Implementation Plan is organized as a 4 Step program and is guided by the following general principles:

- Step 1: Update Policies: Improving the way the City and other agencies accomplish tasks to accommodate bicyclists and pedestrians in everyday activities is of greatest importance. Formal adoption of the Bicycle and Pedestrian Master Plan is the first step to improving bicycling and walking in Longview. The next step is making formal changes to the Longview Municipal Code and Public Works Standards to codify the policy changes recommended in Chapter 3 and ensure new infrastructure is built in the spirit of this Plan.

- Step 2: Fill In Gaps: Filling in gaps especially with our bicycle infrastructure can be challenging and sometimes may require costly improvements. However, strategically filling in gaps can vastly improve the network. Many gaps can be filled with low-cost striping and signage improvements. These "quick-build" projects can instantly grow the perception that bicycles are welcome in Longview and give people the courage to get out on their bikes.

- Step 3: Fix Broken Infrastructure: A commitment should be made to repairing infrastructure that currently exists but is broken or in disrepair. Improve Unsafe and Unaccommodating Intersections Unsafe intersections or places that appear hostile towards pedestrians and bicyclists create a negative environment for all non-motorized users. This discourages walking and bicycling, and may contribute to a culture that is not supportive of non-motorized activity. This step includes continuous improvements to existing infrastructure to fine-tune and improve for all to enjoy.

- Step 4: Grow The Network: Improvements should be made to make the bicycle and pedestrian network larger and more intricate. To reduce project costs as future road project are implemented, bicycle and pedestrian facilities should be included as roads are resurfaced or reconstructed. Some improvements will be required outside of regular road maintenance, as timing might not coincide. As funding is scarce, it will be important to identify opportunities for dedicated bicycle and pedestrian funding, as well as seeking funding sources at the county, state, and Federal level.

Funding

Securing adequate funding for programs, projects, and maintenance, continues to be a challenge for many cities. Potential funding sources and programs are discussed below that are administered by local, state, and the Federal government. Private sector funding opportunities are discussed briefly, as well. It should be recognized the Committee would not support bicycle licensing fees or bicycle sales tax, nor any funding strategy that discourages bicycling and/or walking. Bicyclists & pedestrians pay their fair share in federal taxes as well as car fees since most cyclists and pedestrians own a motor vehicle.

The current infrastructure needs in Longview strain the city's already limited budget. Diversifying the city's transportation network to better accommodate bicyclists and pedestrians further highlights the need to dedicate adequate funding not only to maintain the city's existing infrastructure, but also to seek outside sources to make it possible for the bicycle and pedestrian network to grow.

All public agencies must ensure that pedestrian facilities on public rights-of-way are accessible to persons with disabilities. This requirement is based on Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act of 1990 (ADA) and its amendments. These amendments also have resulted in the creation of ADA Accessibility Guidelines (ADAAG) and the U.S. Access Board Public Right of Way Access Guidelines (PROWAG), which apply more appropriately to city streets.

Grant funding sources are identified on federal, state and local levels. Finally, the chapter closes with a discussion of supportive policies that can bolster and institutionalize the development of a high-quality walkway and bikeway network.

Funding Strategies

Chapter 3 of this Plan presents a set of goals, policies, and actions for developing and bicycle and pedestrian network in the City, as well as encouraging walking and bicycling through supportive development and programs. The action items provide an overview of key strategies for encouraging development of bicycle and pedestrian infrastructure on a policy level. The implementation strategies presented below are targeted actions for the City and the Complete Streets Advisory Committee to focus their efforts on. These strategies are the first step toward implementing this Plan.

Strategy 1: Fund Bicycle and Pedestrian Projects with the Capital Budget

As previously noted, the recommended infrastructure projects have been prioritized to identify projects which provide the highest benefits for the least cost. Therefore, City of Longview will undertake the following action items:

- Pursue implementation of low cost/low effort and high priority improvements first.
- Incorporate sidewalk and bicycle projects into upcoming public works projects, such as re-striping a street for bike lanes when it is repaved, regardless of the priority the bicycle or pedestrian project.
- Require all street projects to include bike and pedestrian elements.
- Be prepared to work quickly when a fast-moving improvement project is identified (e.g., due to safety concerns, etc.) to integrate bicycle and pedestrian elements where possible.

Strategy 2: Leverage Local Funds to Pursue Grant Opportunities

It is important to recognize that bicycle and pedestrian projects are less likely to be completed if they rely exclusively on City Budget capital. In addition, City staff should undertake the following actions related to grant funding:

- Pursue grant funding and partnerships to provide the infrastructure and programmatic recommendations.
- If promising grant programs or partnership opportunities are identified, or construction of another roadway project makes construction of a lower priority project possible, then the City should pursue that project regardless of priority.
- Work with local government agencies to leverage grant funding.
- Research and recommend council propose a levy lid lift for transportation funding.
- Recommend Council adopt the full amount of car tab fees for transportation projects.
- Research local sales and gas tax increase measures that could be presented to voters to fund transportation projects.
- Possible public grant sources include, but are not limited to:
    - WSDOT's Safe Routes to Schools: Provide children a safe, healthy alternative to riding the bus or being driven to school.
    - WSDOT's Pedestrian and Bicycle Safety Program: Aid public agencies in funding cost-effective projects that improve bicycle and pedestrian improvements.

- Washington Wildlife and Recreation Program: Acquisition and development of local and state parks, water access sites, trails, critical wildlife habitat, natural areas, and urban wildlife habitat.
- RCO's Non-Highway and Off-Road Vehicle Program: Develop and manage recreation opportunities for those who use off-road vehicles and facilities for those who pursue non-motorized trail activities.
- WSDOT's City Safety Grants: Reduce the number of deaths and serious injuries that result from traffic crashes.
- WSDOT's Transportation Alternatives Program: Strengthen the cultural, aesthetic and environmental aspects of the intermodal transportation system.
- National Park Service's National Recreational Trails Program: Rehabilitate and maintain recreational trails and facilities that provide a backcountry experience.
- FHWA's Public Lands Highways Program: Improve access to and within federal lands "served by the public lands highway."
- WSDOTs Surface Transportation Block Grants: Metropolitan Planning Organizations provide federal funding for projects on any Federal-aid highway, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities.
- FTA's Public Transportation Grants: Get people out of their cars and onto buses, trains, vanpools, and other commute options.
- TIB's Urban Arterial Program: Funds projects in the areas of Safety, Growth and Development, Mobility, and Physical Condition
- TIB's Urban Sidewalk Program: Funding for pedestrian projects
- CDBG Block Grants: Provide services to the most vulnerable in our communities

Strategy 3: Establish Public/Private Funding Opportunities and other Partnership Opportunities

Several opportunities exist to partner with schools, RiverCities Transit, and other organizations to develop programs and implement construction projects in conjunction with development. Potential action items include:

- Ensure that identified pedestrian and bicycle facilities are constructed when development occurs, rather than utilizing City resources.
- Work with partner organizations to identify opportunities for public/private funding.
- Sell annual trail or park passes
- Sell advertising space in bike maps
- Encourage the establishment of "Friends of" groups
- Pursue partnerships with utilities for green streets.
- Encourage LID's for sidewalks where missing by putting advisory votes on ballots to gauge interest. Ask council to offer ¼ funding incentive for any neighborhood that passes an LID for sidewalks and bike lanes during low interest rate environments.
- The Bikes Belong Grant Program strives to put more people on bicycles more often by funding important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. These projects include bike paths and rail trails, as well as mountain bike trails, bike parks, BMX facilities, and large-scale bicycle advocacy initiatives. Since 1999, Bikes Belong has awarded 203 grants to municipalities and grassroots groups in 48 states and the District of Columbia, investing nearly $1.6 million in community bicycling projects and leveraging close to $550 million in federal, state, and private funding. http://www.bikesbelong.org/grants
- American Trails and the National Trails Training Partnership provide a list of funding sources including public and private funding. The resources section of their webpage also includes updates on current legislation, grant writing resources, and more.

https://www.americantrails.org

- The People for Bikes Community Grant Program supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride. Please review the following information carefully before submitting a grant application. Proposals that are incomplete or do not fall within our funding priority areas will not be considered. Explore the Grants Finder to see successful grants from past cycles. https://www.peopleforbikes.org/grant-guidelines

Strategy 4: Integrate Bicycle and Pedestrian Planning into City of Longview's Planning Process

This plan presents a vision for the future of bicycling and walking in City of Longview. To ensure that the vision is implemented, the Plan must become a living document that is incorporated into the day-to-day activities of planning, design, funding, construction, and maintenance in the community.

Action items include:

- Update the Bicycle and Pedestrian Plan as necessary, minimum of every five years.
- Require that all new road projects are reviewed in the planning phase by the Complete Streets Advisory Committee. Require all new road projects to be bicycle and pedestrian friendly.
- Ensure consideration for bicycle and pedestrian travel through construction zones.
- Require development projects to construct sidewalk on all streets, except as per Chapter 19 of City of Longview's development code.
- Collaborate with other jurisdictions on bicycle and pedestrian projects when possible.
- Stay true to the Longview Complete Streets ordinance by treating Bicycle and Pedestrian projects equally with projects for motor vehicles.
- Support the U.S. Department of Transportation's efforts to treat Bicycle and Pedestrian projects equally with projects for the automobile. The future Surface Transportation Act may include a proposed Metropolitan Mobility Program that could drastically change the way investments in transportation are made in the next transportation bill.

Strategy 5: Benchmark Bicycle and Pedestrian Growth

In order to evaluate the impact of the City's Bicycle and Pedestrian Program, the City should track progress in development of the bicycle and pedestrian networks, as well as tracking the state of cycling and walking in the city. Actions include:

- Annually publish the amount of sidewalks and bike lanes constructed by Public Works. The list will be broken down by sidewalk and bike lane constructed as part of a road project, in addition to showing sidewalk and bike lane constructed as standalone, "retrofitting" projects. This will help meet the benchmarking goal of this plan.

Year	Jan 1 Miles	Miles Added
2020	182.28	0
2021	182.28	0.98

Figure X: Sidewalk Network

Year	Jan 1 Miles	Miles Added
2020	3.4	0
2021	3.4	1.50

Figure Y: Bike Lane Network

- Collect data regarding crashes involving bicyclists and pedestrians. This information will be drafted in an annual report on bicycling and walking in City of Longview. Present the annual state of bicycling and walking in City of Longview at an annual joint meeting between the City Council and the Complete Streets Advisory Committee.

Year	# of crashes	# of injuries	# of fatalities	# of peds	# of bikes
2017	22	18	3	17	6
2018	28	26	1	17	11
2019	22	20	2	15	8
2020	20	20	0	15	5

Figure Z: Bike/Ped crash statistics

Current City of Longview Bicycle and Pedestrian Program Funding

Most bicycle facilities and sidewalks in the city are developed in conjunction with capital road projects or private development projects. Most communities that construct bicycle facilities leverage local money as a match for outside funding sources. Capital road projects are funded by gas tax revenues augmented by multiple state and federal grants, including several Federal-Aid Highway Programs. City code also requires that development projects upgrade street frontage to current standards specified in the city code.

Some agencies have created infill project or "spot" improvement programs within their annual street and road budgets. Gaps in the sidewalk and bike networks are filled in via an ongoing program that would be allocated through the City Street Fund during annual updates to the city Transportation Improvement Program (TIP).

Sidewalk and bike facility proposals for the infill program can come from multiple sources including citizen requests. Proposals would evaluated for safety, proximity to destinations and connection to other transportation modes (i.e.: bus routes) among other factors. Projects with the highest scores undergo a detailed examination including construction estimates to insure that the maximum number of most beneficial projects is constructed each year.

The following table gives current cost estimates for typical elements of a street retrofit project to include sidewalks or bicycle facilities.

Table 10: Cost examples for typical complete streets elements

Element	Typical Cost	Unit
Striping (Plastic)	$ 15,000 to $30,000	per mile
Bicycle Symbols (Plastic)	$400	per each
Signs	$ 550	per each
Sidewalk (One Side based on 5-ft wide)	$50	per linear foot
ADA ramps	$3,000 to $5,000	per each

Local Funding Options Considered

The Complete Streets Advisory Committee considered a range of local funding options. Below is a summary of the benefits and drawbacks of these options.

- A Local Option Gas Tax uses an efficient collection system that already is in place and would divert a very high percentage of revenue collected to projects. The local maximum is $0.034/gallon and would require a vote. This option is for counties and would have to be a countywide measure.
- Vehicle Licensing Fees are collected when owners register their vehicles. City of Longview has formed a TBD to charge a local fee of $20. A portion of this funding could be dedicated to pedestrian and bicycle project funding.
- A Commercial Parking Tax may be imposed by a city and may be applied to the gross commercial parking proceeds or number of parking spaces offered to tenants or patrons.
- A fee-in-lieu of a tax could be charged for the privilege of parking a motor vehicle in a facility operated by a commercial parking business. The fee would be in the form of a flat charge added to a vendor's parking charge. This option was determined to be infeasible in City of Longview as no significant parking facility exists.
- Street User Maintenance Fees/Transportation Utility Fees are
- collected to offset the impact that various land uses such as industrial uses with heavy trucks have on the road system; a proxy measure (e.g. average daily trip measures) is used to determine an impact rate and assess the fee.
- Utility Taxes apply to gross revenue generated by the utility in exchange for the privilege of using public rights of way for extending services to customers. The tax may be imposed on all entities that use public rights of way to deliver services to customers, whether they are municipal or private utilities.
- A portion of the existing Local Sales Tax could be used to improve pedestrian and bicycle infrastructure.
- A Bike Tax would apply to the sale of all new bicycles sold within the city with proceeds dedicated to improving bicycle infrastructure.
- A Bicycle Licensing Fee would charge a fee for riding in the city. Registration fees tend to deter bicycling and are difficult to enforce, particularly with cyclists coming from other jurisdictions. In addition, registration fees seldom provide more revenue than they cost.
- Property Tax Levy/Local Ad Valorem Measures assess a tax rate on the value of real and personal property. Given the relatively small cost of bike and pedestrian system improvements in comparison the City's overall budget, and the ability to phase construction of these improvements,

a debt-free approach may have more appeal with voters.

- Local Improvement Districts (LIDs) are most often used by cities to construct localized projects such as streets, sidewalks or bikeways. Through the LID process, the costs of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as traffic trip generation.

Performance Measures and Reporting

According to the City's Complete Streets code, LMC 12.70, the public works director or designee shall report to the city council on an annual basis to review achievements and performance measures to evaluate progress made implementing complete streets and identify opportunities for improvement. Performance measures shall be determined by the public works director and may include, but are not limited to:

1. Number of bicycle facilities created or improved;
2. Number of pedestrian facilities created or improved;
3. Number of ADA accommodations created or improved;
4. Number of exceptions or waivers;
5. Miles of streets or paths that received complete streets elements;
6. Transportation projects undertaken and the extent complete streets elements were included;
7. Planned transportation projects for the next year and the extent to which each of the projects will include complete streets elements.

By reporting annually, the City Council and the public will be update on progress towards the overarching goal of completing all streets in Longview.

Proposed Construction Program

This Master Plan lays out an ambitious program for constructing the entire on-street bicycle network, approximately 63 miles of proposed bikeways and shared streets, within the next 10 years. On-street bikeways are priority because they have the biggest impact on active transportation utilization and will help build momentum to fund the trails network. Sidewalk gaps, ADA upgrades, and pedestrian pushbutton upgrades should be addressed during new development and street construction projects.

To accomplish the goal, the City should target to install an average of 6.3 miles of bikeway improvements per year. We will rely on a variety of funding mechanisms, including grants, Transportation Benefit District (TBD) funds, and City Maintenance staff to deliver these projects. The following table outlines a proposed schedule for the next three years of construction. Projects with "grant" listed under Funding/Source have been secured. Other projects are noted as "Not funded". The City may use the existing City Striping crew to accomplish many of the bikeway projects. This implementation plan shows through 2024. After 2024, the City should reevaluate priorities and tackle the remaining recommended projects listed in Chapter 4. Priority trails projects are also shown. These are outside of the City's jurisdiction, but the City should support their development and pursue convenient connections where the trails intersect with on-street network.

Table 11: Proposed bicycle project implementation schedule

Year	Project ID	Project Name	From, To Street	Length (miles)	Funding/ Source
2022	1	46th Ave	Ocean Beach Hwy to Olympia Way	0.36	Funded Grant -TIB
	5	Oak St	38th Ave to 30th Ave	1.03	Not funded
	5	Pennsylvania St	38th Ave to 30th Ave	1.04	Not funded
	19	42nd Ave	Ocean Beach Hwy to Pacific Way	1.13	Not funded
	20	California Way	Tennant Way to 11th Ave and 7th Ave to Industrial Way	0.66	Funded TBD
	52 and 53	7th Ave	Broadway to Washington St and Douglas St to Tennant Way	0.77	Not funded
	78	Pacific Way	Ocean Beach Hwy to Railroad	0.13	Not funded
	82 and 83	34th Ave	Pennsylvania St to Ocean Beach Hwy	0.71	Not funded
2023	6/7	30th Ave	Pacific Way to Washington Way	1.78	Funded Grant - TIB
	25	Olympia Way	Ocean Beach Hwy to Civic Circle	0.60	Funded Grant - TIB
	31	Washington Way	Industrial Way to Civic Circle	1.99	Funded Grant - NHS
	48	26th Ave	Nichols Blvd to Highlands Trail	0.86	Not funded
	59 and 8	Beech St/30th Ave	Oregon Way to Washington Way	1.18	Funded Grant - TA
	61	Hudson St	3rd Ave to Washington Way	0.96	Funded Grant - TIB
	14	18th Ave	Olympia Way to Washington Way	0.24	Not funded
2024	12 and 13	Louisiana St	30th Ave to Civic Circle	1.12	Not funded
	37	Broadway St	Civic Circle to 7th Ave	0.59	Not funded
	44	15th Ave	Ocean Beach Hwy to Washington Way	0.41	Not funded
	45	Oregon Way	Nichols Blvd to Industrial Way	0.82	Not funded
	50	12th Ave	Washington Way to Douglas St	1.18	Not funded
	51	14th Ave	Vandercook Way to Douglas St	0.98	Not funded
	79	Commerce Ave	15th Ave to Vandercook Way	0.15	Not funded
Priority Trails Projects					
Year to be deter-mined	46	Rail Trail	Ocean Beach Highway to Nevada Dr	3.52	Not funded
	69	Cutoff Slough	32nd Ave to 50th Ave	4.70	Not funded
	73	Ditch 5	Highlands Trail (Douglas St) to 38th Ave	1.72	Not funded

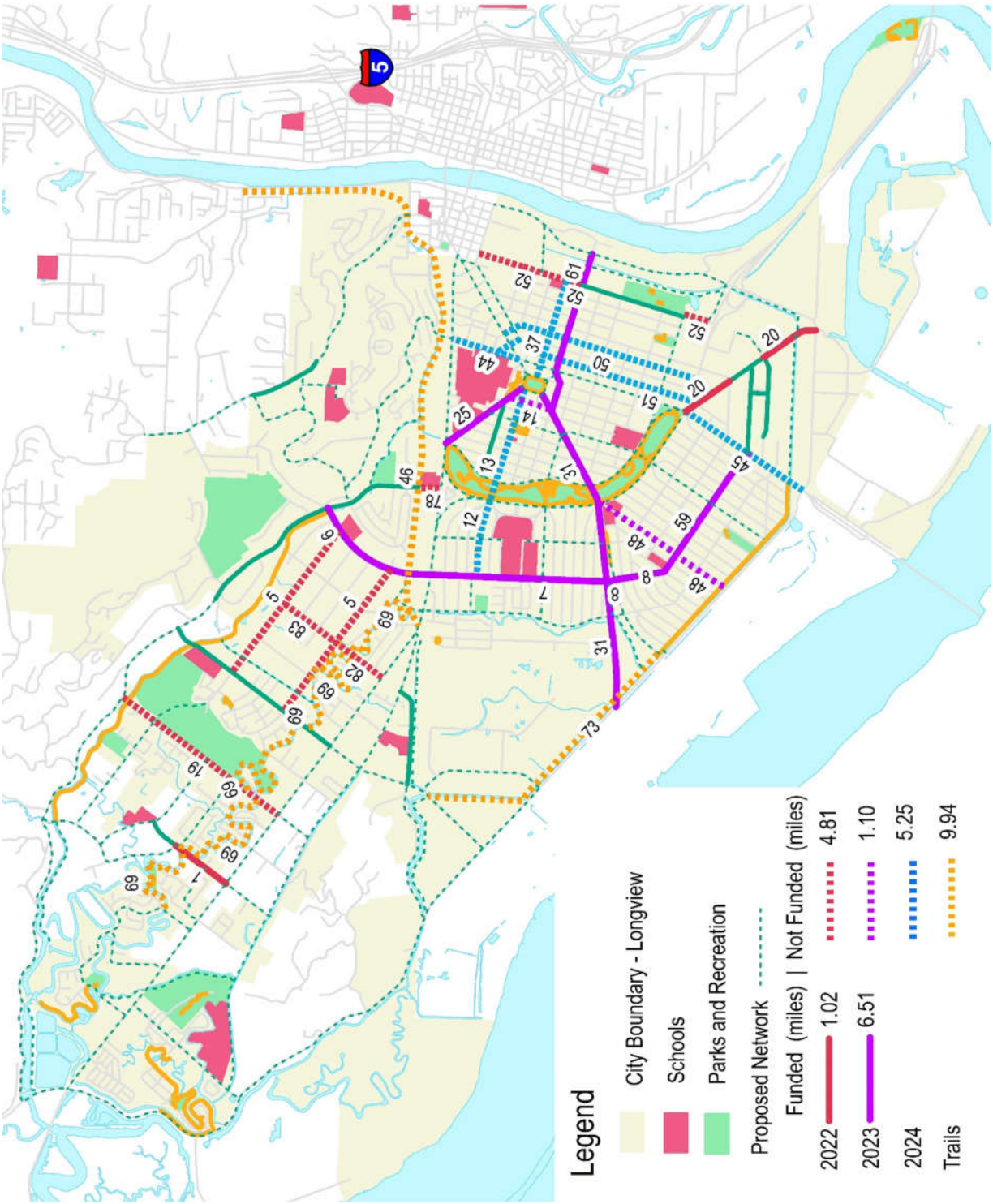

Figure 27: Proposed bicycle project implementation plan (2022 through 2024)