Transportation Plan

Appendix C – Bicycling, Walking, & Rolling Plan

City of Tumwater 2025 Comprehensive Plan

Balancing Nature and Community: Tumwater's Path to Sustainable Growth

DRAFT VERSION OCTOBER 6, 2025

December 2025

Ordinance No. O2025-010

CITY OF TUMWATER

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Abbreviations Used in Document

LTS – Level of Traffic Stress

1. Introduction

A. Vision

The purpose of the Tumwater Bicycling, Walking, & Rolling[1] Plan is to establish a strategy to improve city-wide bicycle and pedestrian facilities, making the community's active transportation network safe, accessible, and inviting for all users.

To achieve this, Tumwater will develop new or strengthen existing bicycling and walking connections to key destinations such as transit centers, activity centers, trails, schools, and employment sites. The strategy also prioritizes providing frequent, high quality crossing opportunities for active transportation users, especially along transit routes and in densely populated areas.

In Tumwater, historic development patterns and the rising popularity of cars changed the ways people connected to places and communities. Railroad connections and topography initially made it difficult to include downtown on major transportation lines without steep uphill climbs on the bluff east of Deschutes River Valley. These choices altered the economic conditions and slowed the growth of Tumwater's downtown.

The construction of Capitol Blvd in 1938 moved traffic away from the historic downtown. Then in the 1950s, the construction of Interstate 5 through the historic downtown bisected Tumwater and disconnected communities. The increasing convenience and popularity in motorized vehicle travel resulted in environmental concerns such as greenhouse gas emissions, air pollution, water runoff pollution, and noise pollution.

The Bicycling, Walking, & Rolling Plan prioritizes human-scale investments that connect people and communities, enhance the environment, and revitalize local economy. The projects and priorities in this plan are guided by community engagement, gap analysis, and the work of previous Tumwater plans.

B. Active Transportation

Active transportation includes any primarily human-powered mode of transportation such as walking, bicycling, using a mobility device like a wheelchair or scooter, roller skating, skateboarding, or using electric micromobility devices including e-bikes and e-scooters. It does not include motorcycles or larger and higher speed vehicles.

All trips start and end with active transportation, like walking, rolling, or bicycling to or from a private vehicle or a bus stop.

Active transportation contributes to a healthy, active community while reducing pollution and negative health impacts from driving. Active transportation is also an important part of a

[1] Rolling includes using mobility devices like wheelchairs or scooters, roller skating or skateboarding, and using electric micromobility devices.

successful transportation system, as it reduces roadway congestion.

The Interstate 5 and US 101 create major barriers to active transportation in Tumwater. Limited crossings, many without bike lanes and sidewalks, mean that people travelling without vehicles are at a distinct disadvantage. The terrain of Tumwater similarly presents obstacles as large elevation changes are difficult to traverse when using human powered modes.

C. Reasons for Investment

There are many reasons to prioritize investments in active transportation infrastructure. Improving the active transportation system increases the safety and accessibility for users, making it easier to use. Increasing the share of trips made by alternative transportation will help Tumwater improve community health, promote accessibility, and reach its per capita vehicle miles traveled reduction and mode shift goals.

1) Access

Travel choice is influenced by many factors including ability, socioeconomic status, and infrastructure. Active transportation investments promote accessibility by increasing transportation choices available to all members of the community regardless of ability or income. Developing a safe and complete active transportation network is essential in making this mode an accessible and inviting option to users.

People who do not or cannot drive may have no other choice but to use active transportation to get to school, work, and other key destinations. Based on a statewide study, it is likely that approximately 25 to 35 percent of Tumwater's residents are unable to Dr, either due to:

- Age (both young and old)
- The costs of purchasing, operating, and maintaining a car
- A disability or condition that prevents or limits driving
- Preference not to have a car
- Lack a driver's license[2]

In addition, people who tend to drive may be temporarily unable to drive due to car repairs or maintenance.

A lack of infrastructure allowing people to use active transportation safely and conveniently creates an access concern. A safe, and convenient active transportation network provides more travel choices to all residents, regardless of age or ability.

2) Community Health

Active transportation supports Tumwater's overall transportation system, promotes healthy lifestyles, improves air quality, and enhances economic conditions and community character.

Investment in active transportation infrastructure creates opportunities for people to build exercise into their daily routine. Active lifestyles reduce the risk of associated health conditions such as obesity, diabetes, and cardiovascular disease.

[2] https://leg.wa.gov/media/41gegl2v/nondriversstudyfinalreportsummaryreport.pdf.

Increasing the share of trips made by active transportation will help reduce vehicle trips and roadway congestion in Tumwater, reducing emissions and air pollution.

Air quality due to vehicle transportation is a significant area of focus for Tumwater. Pollution from vehicle transportation contributes to asthma and other respiratory illnesses and can make existing health conditions worse. People who live near heavy traffic roadways are exposed to higher levels of air pollution from diesel and gasoline exhaust.[3]

3) Vehicle Miles Traveled

Vehicle miles traveled is defined as the miles driven by cars on roads in Tumwater. Transportation is one of the largest contributors to greenhouse gas emissions in Tumwater, so reducing vehicle miles traveled is a key part of reaching Tumwater's greenhouse gas reduction goals.

Improving access for other modes of transportation can also reduce the need for expensive road capacity projects. Tumwater strives to achieve a 27 percent reduction in per capita vehicle miles traveled compared to 2022 base-year volumes by 2040 and a 41 percent reduction by 2050.

4) Mode Shift

Tumwater is committed to increasing the share of trips made by alternatives to driving alone and active transportation is an important part of achieving this goal. Tumwater has set goals of shifting 15 percent of single occupancy vehicle trips to walking, bicycling, and transit.

5) Transit

Many people who use active transportation also take transit as part of their trip to work, school, and other key destinations.

Intercity Transit operates four routes in Tumwater and is free and accessible to all users. Used in conjunction with active transportation, taking the bus connects people with a larger travel radius and more destinations. Intercity Transit buses are also equipped with bike racks, making transit a convenient option for people who bike to and from their bus stop.

Tumwater will continue to partner with Intercity Transit to ensure bus stops are accessible, safe, and convenient so people can easily transition from active transportation to taking the bus.

D. Partnering Agencies

Tumwater routinely coordinates with agencies and community groups on transportation.

For example, Tumwater works closely with Intercity Transit to ensure transit is accommodated on City roadways. Cross coordination also occurs between Tumwater and Thurston Regional Planning Council to implement the Regional Trails Plan and other regional transportation planning and projects.

[3] Health effects from diesel pollution - Washington State Department of Ecology

Tumwater will continue to seek opportunities to partner with neighboring jurisdictions to create more connectivity between boundaries. Tumwater will also explore partner with other agencies when applying for grants to make proposals more competitive.

Tumwater provided opportunities for key stakeholders to comment on this Bicycling, Walking, & Rolling Plan. The plan was reviewed and revised in coordination with the following community groups and government entities:

- Intercity Transit
- People First
- Puget Sound Asthma Coalition
- Thurston County
- Thurston County Developmental Disability Coalition
- Thurston Regional Planning Council
- Washington State Department of Transportation

2. Framework and Analysis

A. Existing Plans

Several plans provide active transportation infrastructure that meets community priorities. The plans below include Tumwater specific plans.

1) Tumwater Transportation Plan

The Tumwater Transportation Plan serves as a guide for improvement and expansion of the transportation system to meet demands through a horizon year of 2045 and includes the Bicycling, Walking, and Rolling Plan as Appendix B. There are a number of Subarea Plans that are incorporated into the Transportation Plan update and project list development.

2) Parks, Recreation and Open Space Plan

The Parks, Recreation and Open Space Plan (2016) includes projects that serve both recreational and transportation purposes, such as trails. Existing trails maintained by Tumwater include:

- Deschutes Valley Trail
- Historic Park / Tumwater Falls Trail – 1.2 miles of dirt, paved, and brick trail connecting to Capitol Lake Interpretive Park in the Deschutes Valley
- Palermo Watershed Trail – 0.7 miles of dirt path near Tumwater Valley Golf Course.
- Pioneer Park Trails – 2.1 miles of looping dirt and paved nature paths
- Tumwater Hill Trail – 0.5 miles of dirt nature path beginning at Ridgeview Court SW adjacent to Tumwater Hill Elementary School.
- Tyee Drive Trail – 0.2 miles of mixed use trail extending from BPA easement northward.

More information about the trail system is found in the Parks, Recreation and Open Space Plan.

3) Americans with Disabilities Act Transition Plan Update

The purpose of the Americans with Disabilities Act Transition Plan is to ensure that Tumwater continues to create reasonable accessible paths of travel in the public right-of-way for everyone, including people with disabilities.

Tumwater conducted a self-assessment in 2020, inventorying sidewalks and noting deficiencies. Updated in 2021, the plan discusses methods Tumwater uses to identify, evaluate, and remove barriers. Barrier removal is prioritized based upon public input, location, condition, and cost effectiveness. A schedule for correcting these deficiencies as funding is available is needed.

4) Brewery District Plan

The Brewery District is centered around the former Olympia Brewery. This district is one of the oldest parts of Tumwater.

The Brewery District Plan aims to guide redevelopment in the area to improve transportation safety and access. Originally adopted in 2014 and amended in 2020, the plan has four goals:

- Create a stronger sense of place by facilitating pedestrian access, establishing gathering places for residents, and fostering a distinct District identity.
- Improve transportation options, safety, and access within and across the District.
- Expand economic opportunity and activity.
- Improve the function and appearance of the built environment.

Improving alternative transportation is a priority both within the Brewery District and on the streets that connect the Brewery District to other parts of Tumwater. Connections to the district are part of the bicycle priority network shown in Figure BWR-11.

5) Capitol Blvd Corridor Plan

The Capitol Blvd Corridor is Tumwater's most traveled St, developed primarily in the 1950s and 1960s. It is located between the Southgate Shopping Center area and Israel Rd.

The Capital Blvd Corridor Plan was adopted in 2015 and has three main goals:

- Improve the business conditions.
- Improve safety and expand transportation options for all users of the corridor including pedestrians, bicycles, and vehicles.
- Improve the aesthetic appeal of the corridor as a whole.

This corridor is part of the bicycle priority network shown in Figure BWR-11.

6) Old Highway 99 Corridor Plan

Old Highway 99 Corridor Plan addresses the development and improvement of Old Highway 99 from 79th Ave to 93rd Ave.

The Plan incorporated land use, environmental, and transportation considerations as necessary to determine preferred alignment, cross sections, intersection control, stormwater strategies, mitigation strategies, right-of-way needs, implementation strategies, and future project estimates.

The Plan was adopted in 2024 and is used to prioritize projects, including projects that improve active transportation along the corridor.

7) Regional Plans

Connections throughout the region are essential to provide effective services for those traveling in Tumwater. Regional plans were considered during the development of the Plan. Details of some of the other agency plans are discussed below.

a) Thurston Regional Planning Council Regional Trails Plan

The goal of the Thurston Regional Trails Plan is to establish a comprehensive, well-connected non-motorized trail network that links all communities throughout the region. Eight government entities own and operate the region's major trails.

As of 2023, 14 major trail corridors in the region provide over 57 miles of trails. These trail corridors help connect people to the outdoors for recreation and provide a safe and convenient way to travel to key destinations and economic opportunities.

The Thurston Regional Trails Plan outlines the proposed trail projects that will expand the regional trail system, enhance the current system, and increase connections within the trail network.

In Thurston Regional Planning Council's 2021 "Connect. Explore. Move. How do you trail?" survey, 20 percent of respondents used trails for commuting to work, school, or errands.[4] Respondents selected the following trails to prioritize in the next 20 years:

- **Deschutes Valley Trail** – connecting Tumwater and Olympia along the Deschutes River
- **Gate Belmore Trail** – connecting Tumwater and Olympia with Rochester and the Chehalis Reservation
- **Karen Fraser Woodland Trail Extension** – connecting Olympia southwest to Tumwater

The completion of the 0.8-mile segment of the Deschutes Valley Trail between Historical Park and Brewery Park at Tumwater Falls was the most recent milestone in the regional trail network.

The following trail corridors, extensions, and system enhancements are included in the Regional Trails Plan:

- **Capitol Lake to Belmore Trail Corridor**
  - Black Lake Trail – conceptual (20+ years)
- **Deschutes Valley Trail Corridor**
  - Tumwater Valley Dr extension – planned (2026)
  - Pioneer Park extension – planned (20+ years)
- **Tumwater to Downtown Olympia Union Pacific Line Corridor**
  - East Olympia Trail – conceptual (20+ years)
  - Bonneville Power Administration Shared Use Path – conceptual (20+ years)
- **Karen Fraser Woodland Trail Corridor**
  - Olympia Phase 4 extension, Henderson to Tumwater – planned (20+ years)

B. Key Destinations & Origins

Understanding where people want to travel is a key component to developing a transportation system that works for users.

For active transportation it is important to consider people using the system to access daily needs and connections to transit since they may not have other transportation options. Access to public education is also critical since very few of the people accessing those services can drive alone and congestion near schools for pick up and drop off is an increasing concern.

[4]https://www.trpc.org/DocumentCenter/View/12180/Regional-Trails-Plan-FINAL---December-2023.

Key destinations are shown in Figure BWR-1 and described in more detail below.

1) Schools

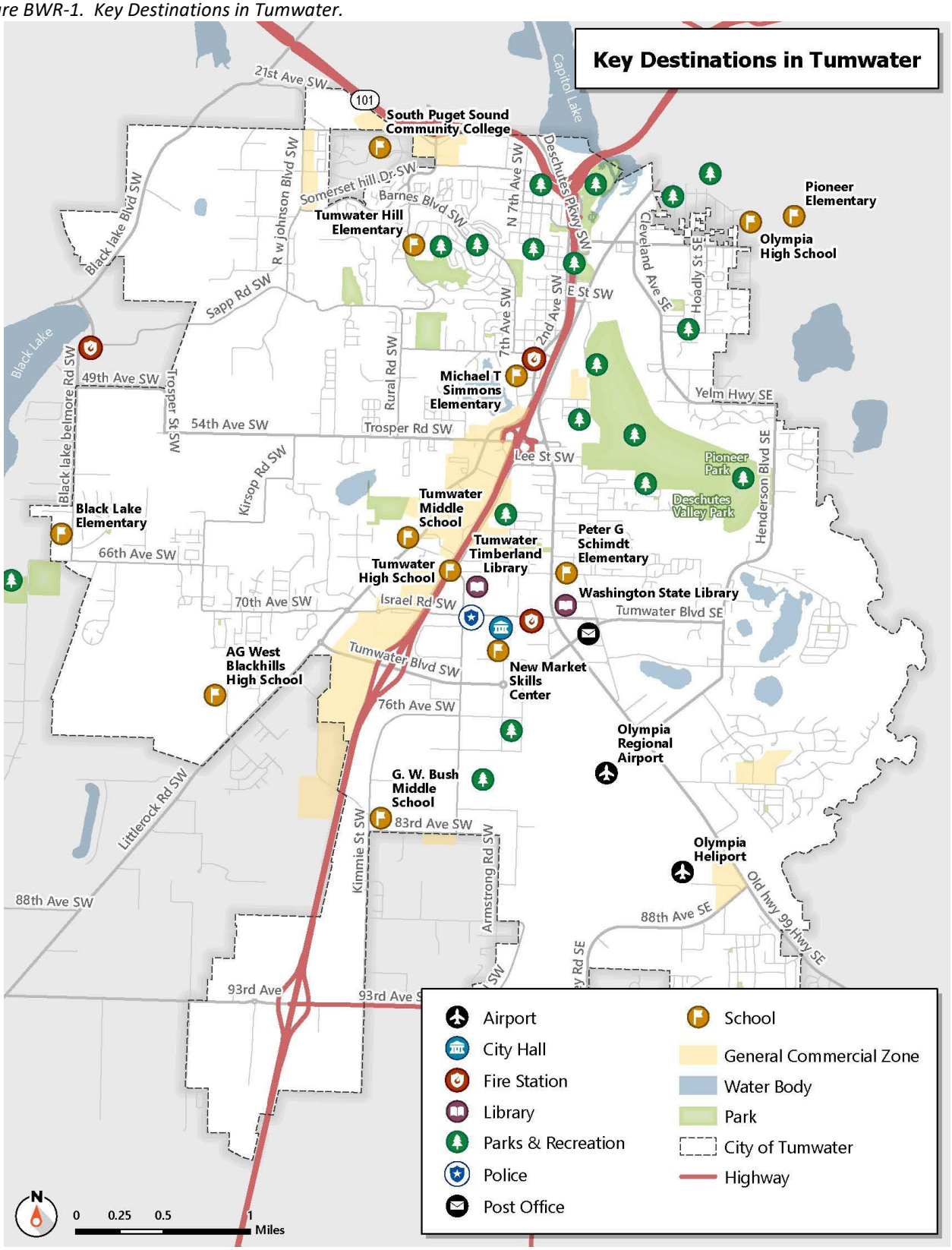
The Tumwater School District served 6,328 students as of 2025. The district includes ten K-12 schools within Tumwater's city limits.

- A.G. West Black Hills High School
- Black Lake Elementary School
- Cascadia High School
- George Bush Middle School
- Michael T. Simmons Elementary School
- New Market Skills Center
- Peter G. Schmidt Elementary School
- Tumwater High School
- Tumwater Hill Elementary School
- Tumwater Middle School

2) South Puget Sound Community College

Located in Olympia on Tumwater's northwest border, South Puget Sound Community College serves 6,000 students. The college is connected to Tumwater by designated bike routes as well as several Intercity Transit routes.

Figure BWR-1. Key Destinations in Tumwater.



3) Libraries

The Tumwater Timberland Library offers resources available to anyone with a library card.

The library provides computer access, meeting rooms, study spaces, and events, as well as books and other media. The library is also one of two locations that act as a cooling and warming center during inclement weather.

4) Food Banks

There are seven locations that function as food banks and serve Tumwater residents during certain hours[5]:

- Littlerock United Methodist Church
- Lutheran Church of the Good Shepherd
- Mountain View Church
- Northstar Church of God
- South Puget Sound Community College
- Tumwater Senior Center
- Tumwater United Methodist Church

5) Parks & Recreation

Tumwater operates 12 parks and recreation facilities, including neighborhood parks, waterfront parks, sports facilities, and trails. Parks are large attractions for active transportation users.

- **5th and Hayes Pocket Park**. This small neighborhood park features a basketball court and a playground.
- **Barclift Park**. This park has the following amenities: basketball court, picnic areas, playground, restroom, tennis court, and trails.
- **Deschutes Valley Park**. This park features picnic areas, a playground, and restrooms.
- **Tumwater Historical Park.** At 17 acres, this is one of the largest parks in Tumwater. Amenities include barbeque grills, boat launch, picnic areas, a large playground, restroom, rentable shelter, and trails.
- **Isabella Bush Park**. This park contains trails and wetlands.
- **Jim Brown Park**. This neighborhood park features basketball courts, picnic areas, a playground, and tennis courts.
- **Overlook Point Park**. This park offers picnic areas and viewpoints.
- **Palermo Pocket Park**. This neighborhood park has basketball courts and a playground.
- **Pioneer Park**. One of the largest parks in Tumwater, Pioneer Park, has the following amenities: barbeque grills, baseball field, horseshoe pits, picnic areas, a playground, restrooms, rentable shelter, soccer fields, trails, and volleyball courts.
- **Tumwater Hill Park**. This park has a baseball field, picnic areas, restroom, and trails.
- **Tumwater Valley Municipal Park**. This golf course offers 20 holes of

[5] https://tcfb.org/services/locations/pick-up/.

championship-caliber golf and a ten-acre driving range.

- **V St Park**. This small neighborhood park has a basketball court and a playground.

6) ASHHO Cultural Community Center

The ASHHO Cultural Community Center is a private event center used for meetings, conferences, retreats, fundraising events, parties, and markets.

7) Olympia Regional Airport

Operated by the Port of Olympia, the Olympia Regional Airport and the associated New Market Industrial Center covers 845 acres and supports over 500 jobs. The general aviation airport has two runways and offers aircraft service and maintenance, flight instruction, and hangar space.

Commercial passenger airline service is anticipated by not currently available, but charter flight service is offered. Shuttle services are available to transport passengers to Seattle-Tacoma International Airport.

C. Level of Traffic Stress

Tumwater is adopting new multimodal Level of Service metrics as part of the Transportation Plan update. These metrics show where the transportation system has strengths and opportunities for improvement. While congestion and delay are used to measure vehicle level of service, different multimodal level of service metrics are used for active transportation.

Level of Traffic Stress (LTS) provides a quantifiable tool to gauge the comfort and safety of active transportation infrastructure. Level of traffic stress ranges from 1, where a wide range of users feel safe and comfortable, to 4, representing the highest Level of Traffic Stress where most users feel uncomfortable and will likely not choose to walk or bicycle.

Figure BWR-2 illustrates all four levels of traffic stress.

Figure BWR-2. Level of Traffic Stress Breakdown.

Source: Fehr & Peers, 2025.

It is important to note that while levels of traffic stress 3 and 4 feel uncomfortable to most users, some people have no choice but to use active transportation on these facilities. Tumwater is committed to achieving a Level of Traffic Stress of 1 or 2 on its roadways. Achieving this goal will improve comfort for people who already use active transportation and will make active transportation a more attractive option for people who have a choice of transportation modes.

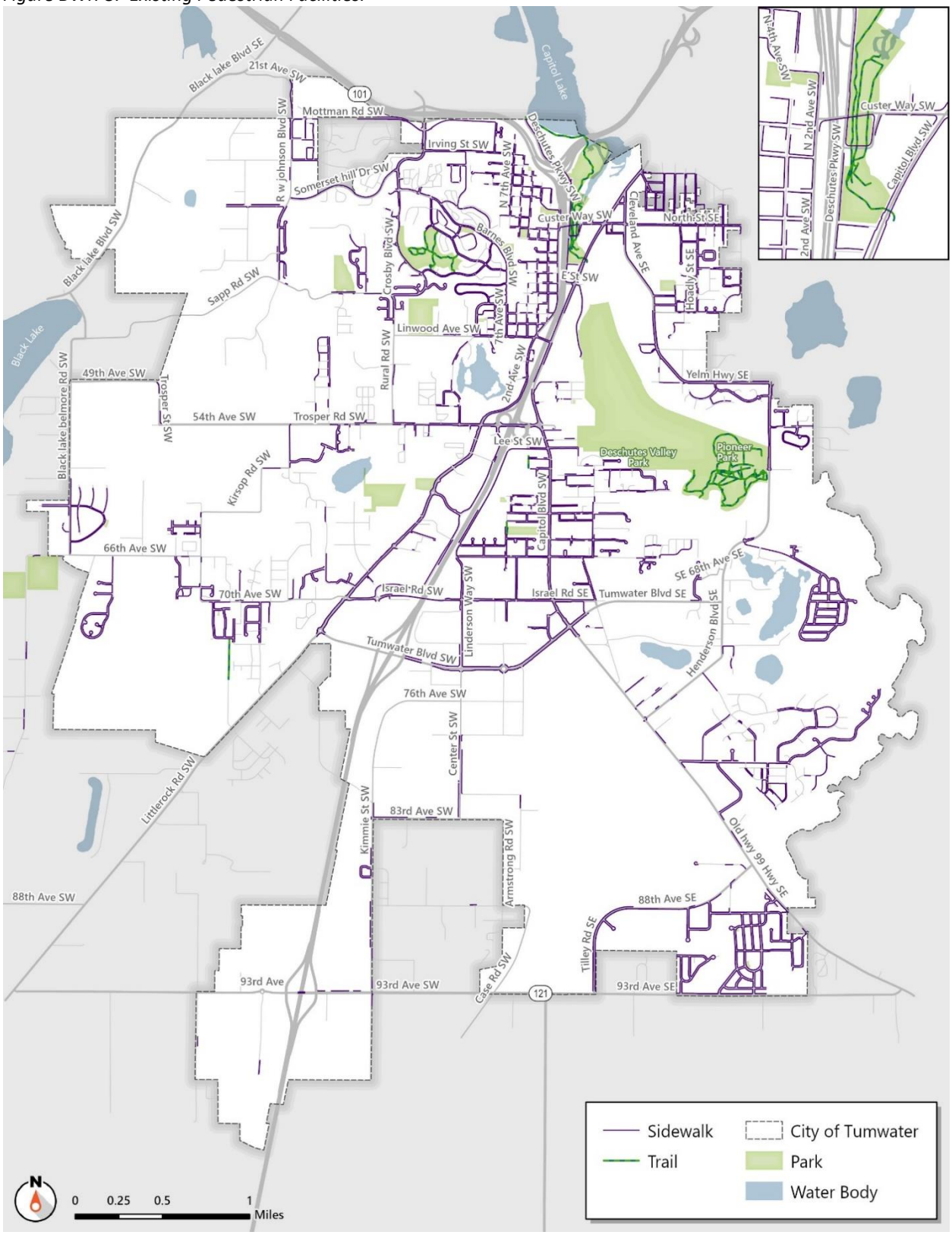
Given that levels of traffic stress for bicycling and walking are influenced by different factors, the breakdown for bike and pedestrian levels of traffic stress varies slightly.

D. Pedestrian Network Analysis: Gaps

Pedestrian facilities in Tumwater consist of sidewalks and shared-use trails. Sidewalks are available along many arterials, streets within the central business district, and in newer subdivisions. However, older residential areas often have incomplete or poorly maintained sidewalks. Tumwater has a total of 70 road miles with sidewalks of which roughly 33 miles are complete with pedestrian facilities on both sides of the St.

Figure BWR- 3 shows the existing pedestrian facilities in Tumwater.

Figure BWR-3. Existing Pedestrian Facilities.



Source: Fehr & Peers, 2025.

1) Pedestrian Level of Traffic Stress

Pedestrian Level of Traffic Stress is based on the roadway classification and presence of pedestrian facilities. Table BWR-1 illustrates the breakdown of pedestrian level of stress values while Figure BWR-4 shows how Level of Traffic Stress values apply to the pedestrian network throughout Tumwater.

Major arterials typically receive a score of 2 given the presence of sidewalks on both sides of the St. Where there are no pedestrian facilities, a score of 4 is assigned.

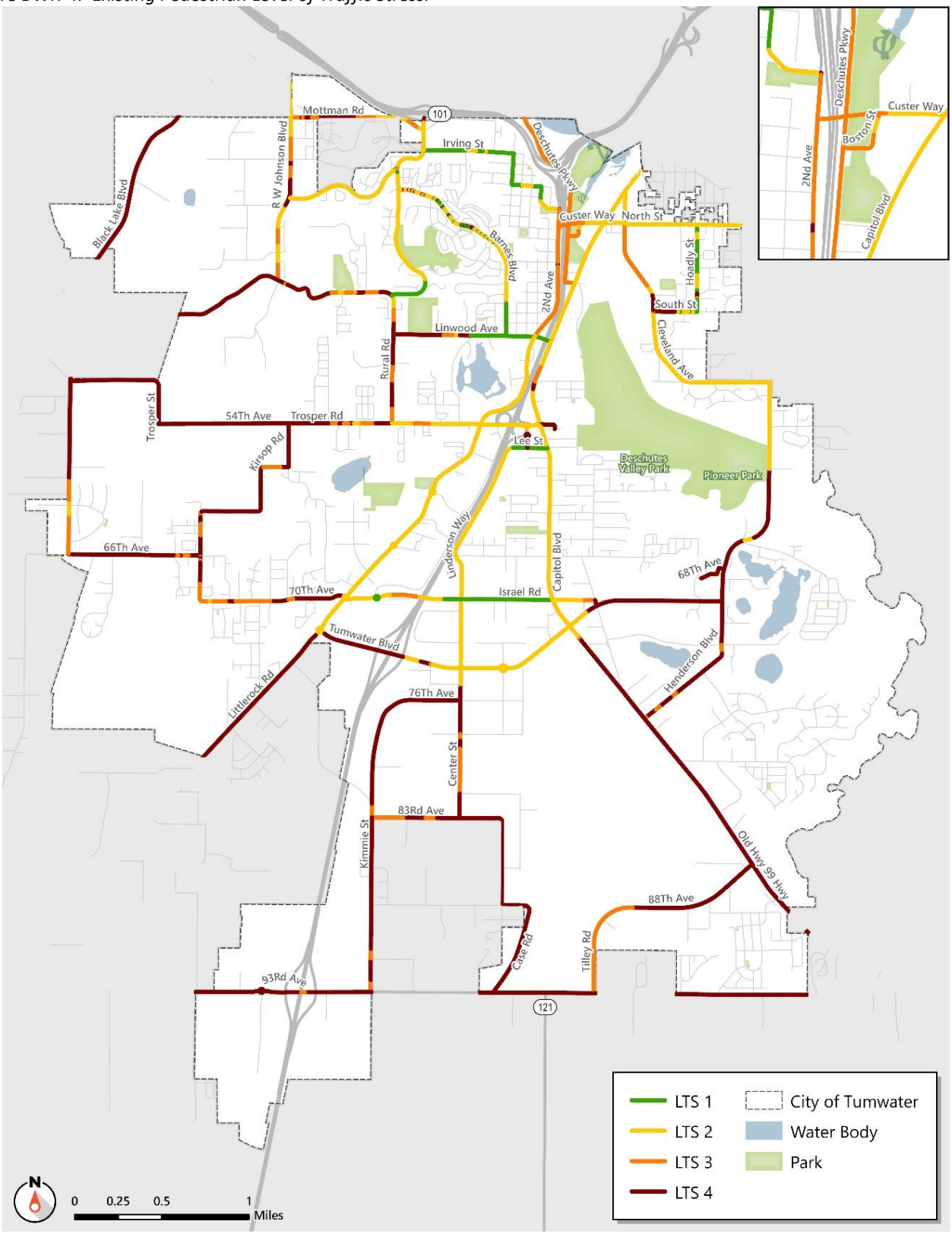
It is important to note that Pedestrian Level of Traffic Stress is limited to the variables shown in the table and does not consider sidewalk condition and necessary maintenance, presence of a landscaped buffer, or other important characteristics.

Table BWR-1. Pedestrian Level of Traffic Stress Classifications for Different Facilities.

Roadway Classification	No Pedestrian Facility	Sidewalk One Side	Sidewalk Both Sides	Separated Path/Trail
Local	4	2	1	1
Collector	4	2	2	1
Arterial	4	3	2	1

Source: Fehr & Peers, 2025.

Figure BWR-4. Existing Pedestrian Level of Traffic Stress.

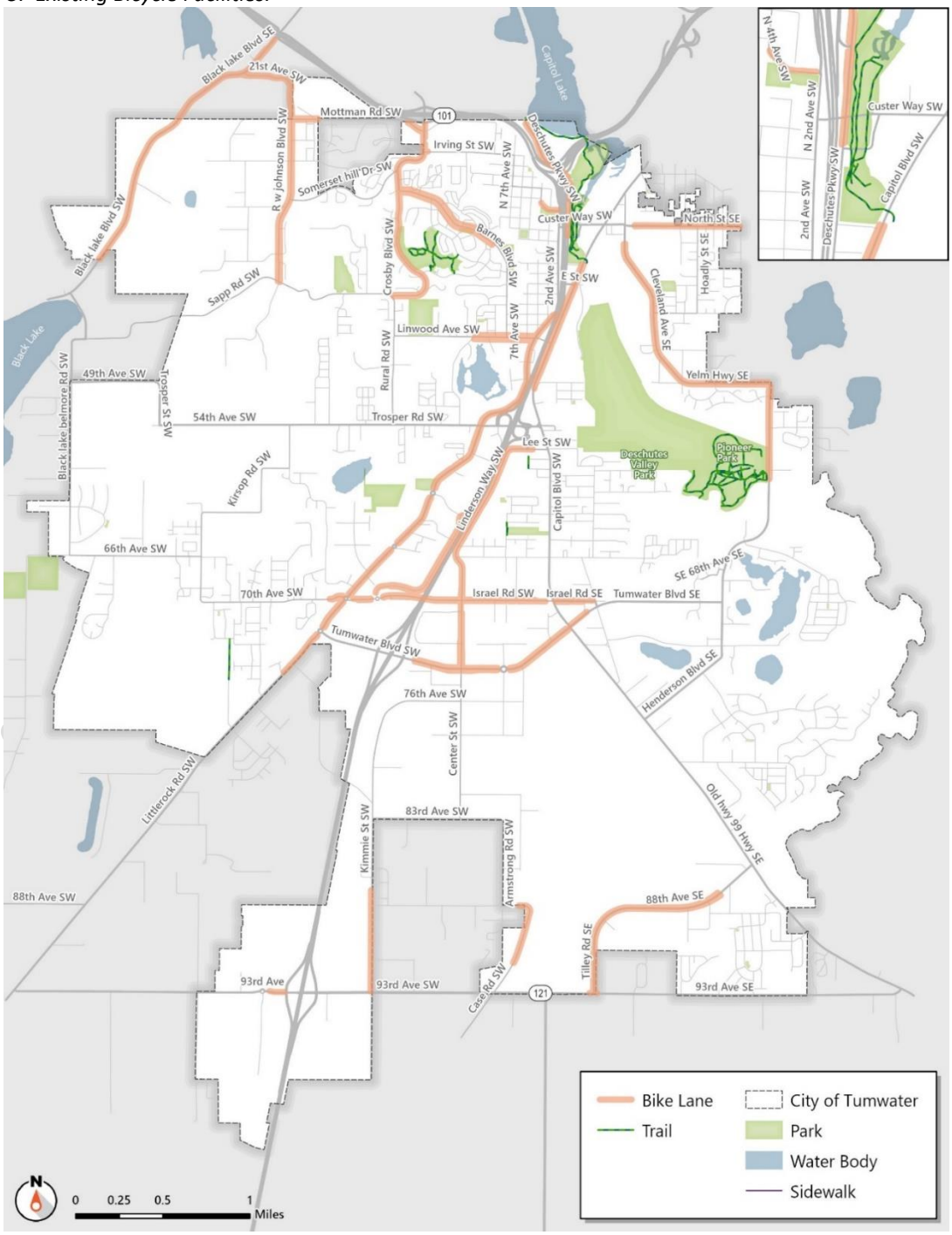


Source: Fehr & Peers, 2025.

E. Bicycle Network Analysis: Gaps & Level of Traffic Stress

The bicycle network within Tumwater primarily consists of bike lanes and shared-use trails as shown in Figure BWR-5. Of the 87 total miles in the bike network, about 27 miles (31 percent) are complete with bike facilities on both sides of the street.

Figure BWR-5. Existing Bicycle Facilities.



Source: Fehr & Peers, 2025.

2) Bicycle Level of Traffic Stress

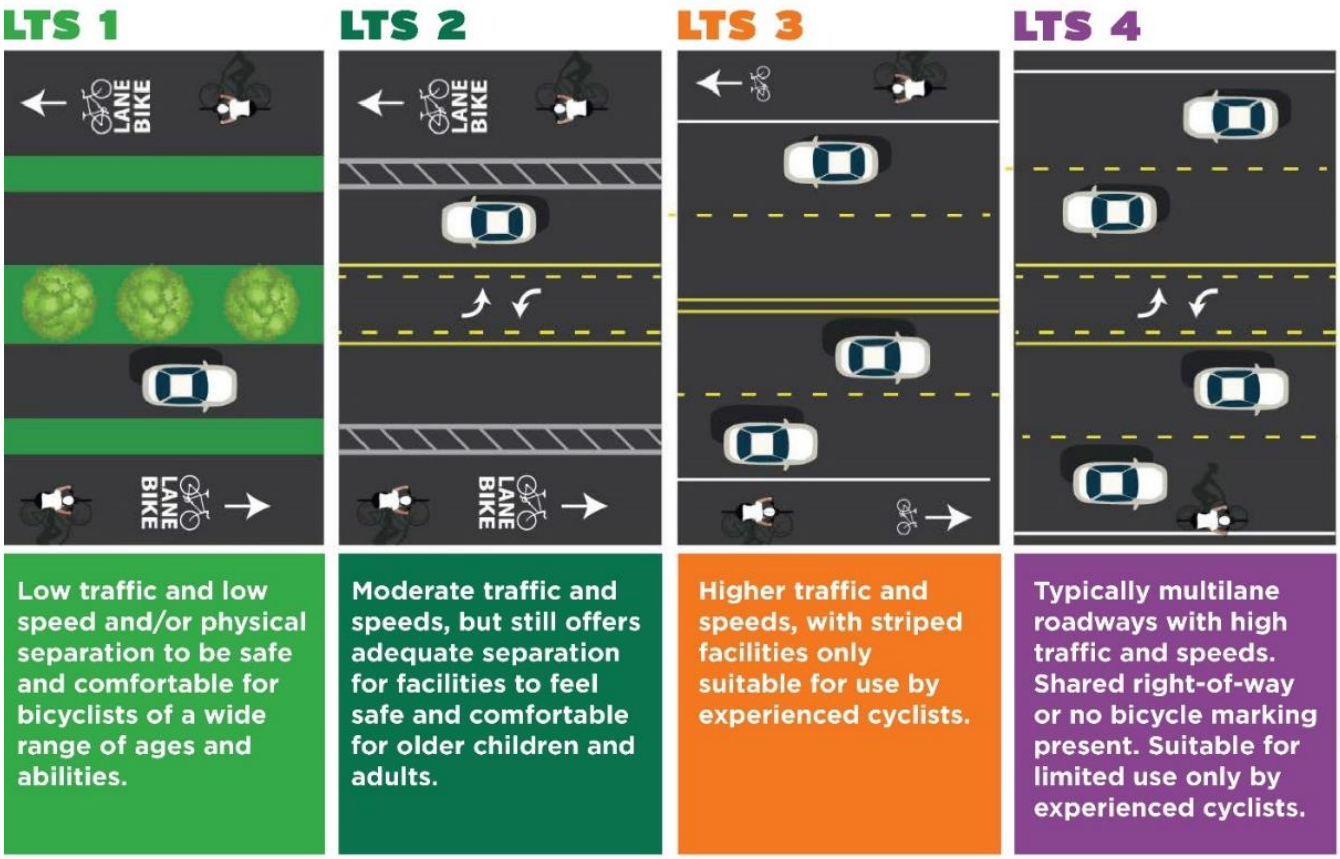
The way bicycle Level of Traffic Stress is determined is shown in Figure BWR-6**.** It incorporates factors such as posted speed limit, annual average daily vehicle traffic volume, and type of bicycle facility. Although features like buffered bike lanes and separated bike lanes are absent in Tumwater today, they are included for future reference.

Facilities like shared-use paths consistently receive a score of 1, as they are entirely separated from the roadway and are not affected by vehicular traffic. Striped bike lanes, which are common in Tumwater, score from 1 to 4 depending on the roadway speed limit and traffic volume.

Table BWR-2 and Figure BWR-7 shows the Level of Traffic Stress for bicycle facilities in Tumwater. This is further explained in Table BWR-3 which shows examples of bike facilities, and the Level of Traffic Stress score they receive.

The analysis shows the gaps within both the bicycle and pedestrian networks. However, it is crucial to acknowledge that both pedestrian and bicycle Level of Traffic Stress assessments lack considerations for factors such as maintenance, actual driver speeds as opposed to posted speed limits, roadway crossings, and facility width, which are crucial in ensuring optimal user experiences. Thus, any formulation of future bike and pedestrian projects in Tumwater should use the maps as a reference and holistically address these additional considerations.

Figure BWR-6. Bicycle Level of Traffic Stress Definitions.



Source: WSDOT, Fehr & Peers, 2025.

Table BWR-2. Bicycle Level of Traffic Stress.

Roadway Characteristics		Bicycle Facility Component					
Speed Limit (MPH)	Annual Average Daily Traffic	No Bicycle Facility	Wide Shoulder	Striped Bicycle Lane	Buffered Bicycle Lane (Horizontal)	Separated Bicycle Lane (Vertical)	Shared Use Path
25	<1,500	3	1	1	1	1	1
	1,500 – 7,000	3	2	2	2	1	1
	>7,000	4	2	2	2	1	1
30	<7,000	4	3	2	2	1	1
	7,000 – 15,000	4	3	3	2	1	1
	>15,000	4	4	3	3	2	1
35	<15,000	4	4	3	3	3	1
	>15,000	4	4	4	3	3	1
>35	Any	4	4	4	4	3	1

Source: Fehr & Peers, 2025.

Table BWR-3. Bicycle Facility Types.

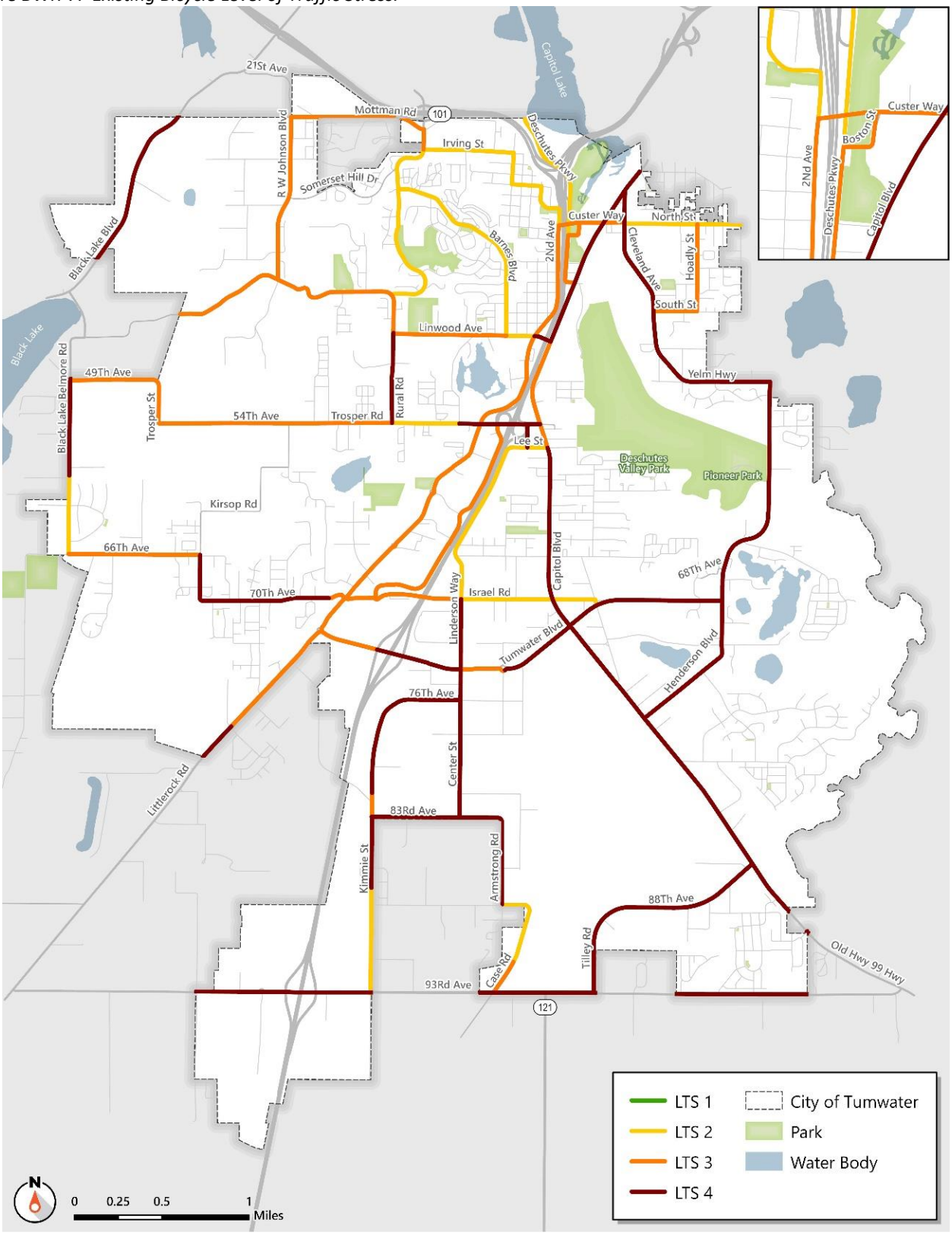
Facility Type	Description	Example
Off-Corridor Bike Network	Bike boulevards are low-volume and low-speed streets that prioritize bike travel. They incorporate signage, pavement markings, and traffic calming tools to improve the comfort and connectivity of the bike roadway network. Bike boulevards offer an alternative to bicycling on busy streets with high traffic volumes. Many bike boulevards couple speed management strategies with bike route signage to create safer streets.	
Striped Bike Lane	A conventional bike lane is a striped lane on a roadway that is designated for exclusive use by people riding bikes. Conventional bike lanes include pavement markings indicating one-way bike use. These facilities are established along roadways where there is current or anticipated bike demand and where it would be unsafe for bicyclists to ride in the travel lane.	

Facility Type	Description	Example
Buffered Bike Lane (Horizontal)	Buffered bike lanes are conventional bike lanes paired with a designated buffer space separating the bike lane from the adjacent motor vehicle travel lane and/or parking lane. These facilities are established along roadways with high travel speeds, volumes, and/or truck traffic.	
Separated Bike Lane (Vertical)	Separated bike lanes (vertical) are buffered bike lanes with vertical elements that provide further separation from motor vehicle traffic. Common vertical elements are vertical curbs, a painted buffer with planter boxes, parked cars, or a fixed barrier. These facilities keep motorists from crossing into the bike lane and to minimize maintenance costs due to decreased motor vehicle wear. They may be especially appropriate for curvy streets, areas with high drop off/pick up activity, and higher speed streets with few driveways and cross streets.	 Source: NACTO, 2019.[6]
Physically Separated Bikeway / Shared Use Paths	Physically separated bikeways are paths distinct from the sidewalks. These include shared use paths, which are paved trails for the exclusive use of pedestrians, cyclists, skaters, and other active transportation users. They are wide enough for two-way travel. They are typically separated from motorized vehicular traffic by an open space, barrier, curb, or exist in an independent corridor. They can also be one-way bike facilities separate from – but adjacent to – the sidewalk.	

Note: All images are courtesy of Fehr & Peers unless otherwise noted.
Source: Fehr & Peers, 2025.

[6] https://nacto.org/2019/11/15/bellevues-downtown-demonstration-bikeway/

Figure BWR-7. Existing Bicycle Level of Traffic Stress.



Source: Fehr & Peers, 2025.

3. The Future Network

A. Active Transportation in the Community

The goal of the future active transportation network in Tumwater is to provide safe, accessible, and convenient active transportation routes so that all users of the transportation system have opportunities to travel to work, school, healthcare facilities, stores, and other key destinations.

Tumwater has an established network of pedestrian and bicycle infrastructure, but significant gaps exist. Many streets lack pedestrian or bicycle facilities. Many roadways with bike lanes have high traffic volumes and high speeds.

Level of Traffic Stress 3 and 4 bicycle facilities likely deter users who could choose to use active transportation instead of driving a motorized vehicle. For those that have no other option, navigating Level of Traffic Stress 3 or 4 adds stress for the user and subjects them to uncomfortable conditions.

Tumwater's vision of expanding its active transportation network will help improve the connectivity of the existing active transportation network, increase the number of facilities with a Level of Traffic Stress of 1 or 2, and meet vehicle miles traveled targets. Active transportation could be an alternative to driving on congested roadways for many people, but the existing infrastructure between major areas of interest suffers from a disconnected network and low levels of comfort.

the comfort and convenience of active transportation facilities improve, people are more likely to choose to use active transportation rather than drive, thus reducing vehicle miles traveled. Active transportation infrastructure improvements will also help those who already use active transportation in Tumwater to feel more comfortable while traveling. More information about safety can be found in Chapter 2 of the Transportation Plan.

Locations with a significant focus for improved active transportation access include schools, libraries, state resource offices, and senior centers as these locations service a high proportion of people who do not drive. As Schools serve a high concentration of people who do not drive, making these priority locations for safety improvements.

The road networks surrounding schools can become congested before and after the school day, raising safety concerns due to the simultaneous use of various modes of transportation within a compressed timeframe. Schools that do not have accessible active transportation routes generally experience more intense vehicle traffic in the peak periods, leading to congestion on nearby roadways.

Air quality around schools is a growing concern, particularly due to vehicle idling during drop-off and pick-up times. This issue is closely linked to the prevalence and severity of childhood asthma, affecting students' health and academic performance. Tumwater will prioritize active transportation improvements near schools, so students and school employees have accessible and convenient options to use active transportation.

B. Public Outreach

Outreach was completed in coordination with the overall Comprehensive Plan update, and included asking the community about their transportation priorities, locations of concern, and their day-to-day modal choices. The March 2025 outreach event also included map-based activities where community members could identify locations where they use active transportation and identify areas of concern.

Attendees denoted popular bicycling areas like Custer Way SW, Capitol Blvd SE, Henderson Blvd SE, Kirsop Rd SW, 66th Ave SW, Black Lake Belmore Rd SW, Sapp Rd SW, and various local streets. Challenges for cyclists include inconsistent bike lanes, overgrown vegetation encroaching on bike paths, and dangerous intersections such as Henderson Blvd SE at Deschutes Bridge, where multiple bicycle collisions have occurred. Residents also expressed the need for wide bike lanes and improvements near the library.

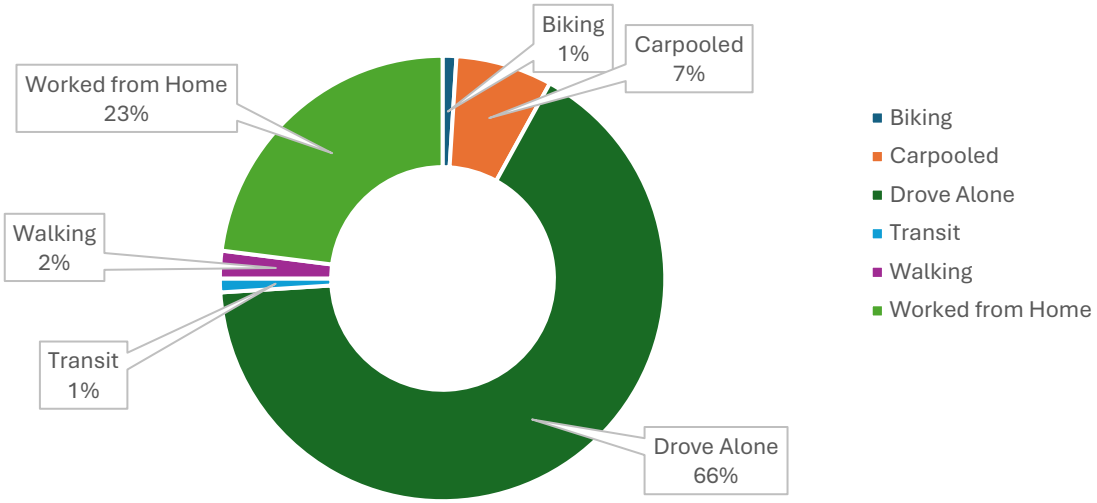
Attendees also marked common walking routes, including Cleveland Ave SE, 66th Ave SW, 70th Ave SW, Littlerock Rd SW, Israel Rd SW, Lindwood Ave SW, Kirsop Rd SW, and numerous local roads. Pedestrian concerns focus on the lack of continuous sidewalks, insufficient crosswalks, and overgrown vegetation obstructing pathways, particularly near the roundabout by the church on Mottman Blvd SW. There was also a call for more neighborhood connections, raised crosswalks, and pedestrian-level amenities like waste bins, streetlights, and benches.

C. Mode Shift

To achieve the Transportation Plan's safety, accessibility, and vehicle miles traveled reduction targets, some trips will need to shift from single occupancy vehicle trips to more efficient modes. These modes include carpooling, transit, and active transportation modes.

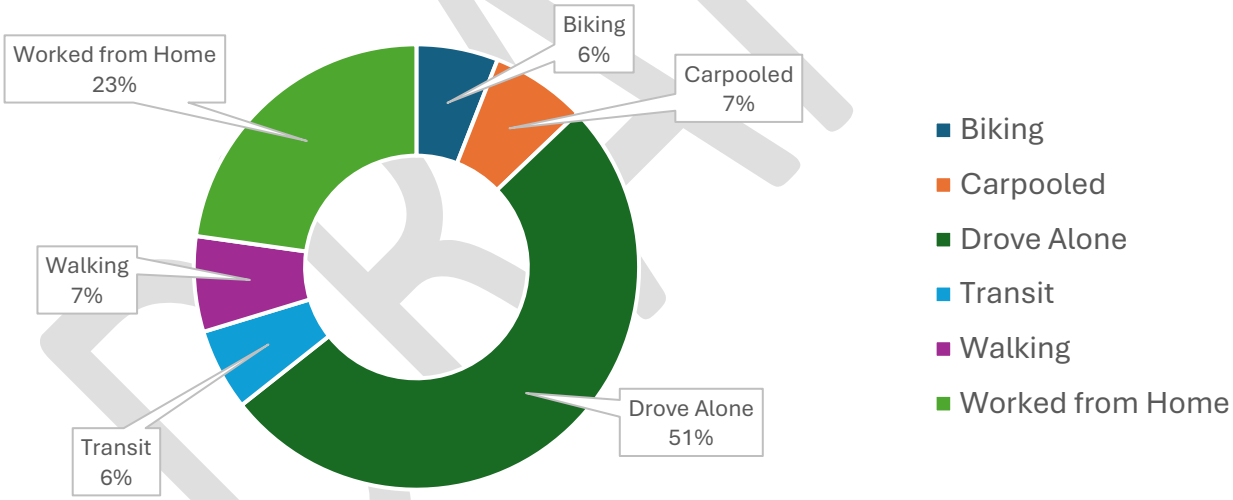
Current data in Figure BWR-8 shows that most trips in Tumwater are taken by car, with many being single occupancy vehicles. Tumwater is setting a goal to shift five percent of single occupancy vehicle trips to walking, five percent to bicycling, and five percent to transit as shown in Figure BWR-9.

Figure BWR-8. Share of Primary Travel Options for Commuting to Work.



Source: American Community Survey, 2023.

Figure BWR-9. Tumwater's 2045 Mode Shift Goals.



Effecting mode shift is difficult, but can be done through a combination of strategies:

- Creating more walkable and bikeable communities by building a connected low stress network.
- Reducing or eliminating parking minimums.
- Charging for parking in higher density areas with transit and active mode networks.
- Increasing job and residential density.
- Integrating affordable and below market rate housing.
- Providing ridesharing program.

- Providing end of trip bicycle facilities.
- Providing employer-sponsored van pool.
- Using paid workplace parking.
- Implementing housing and employment parking cash-out.
- Providing electric vehicle charging infrastructure.
- Implementing conventional carshare program.
- Implementing transit-supportive roadway improvements.

Multimodal infrastructure is necessary to support mode shift and travel outside of a personal vehicle. Individual bike and pedestrian projects do not substantially reduce vehicles miles traveled or lead to mode shifts on their own, but greater benefits are seen once a complete network is constructed.

The projects listed in Table BWR-4 combined with the current active transportation network contribute to a more complete multimodal network. These improvements will help Tumwater reach its mode shift targets.

D. Priority Networks & Near-Term Investments

Public input, gap analysis, previous plans and analysis, and key destinations were all considered in determining priority projects. Tumwater's priority networks identify areas of need to complete the layered multimodal network.

Multimodal priority networks promote the diverse needs of all users – pedestrians, cyclists, transit riders, and freight. By employing a layered network strategy, modal emphasis is assigned to different streets, ensuring that each mode of transportation is accommodated effectively. This method acknowledges that while all traveler types need to be accommodated within a community, no single road can serve all modes equally.

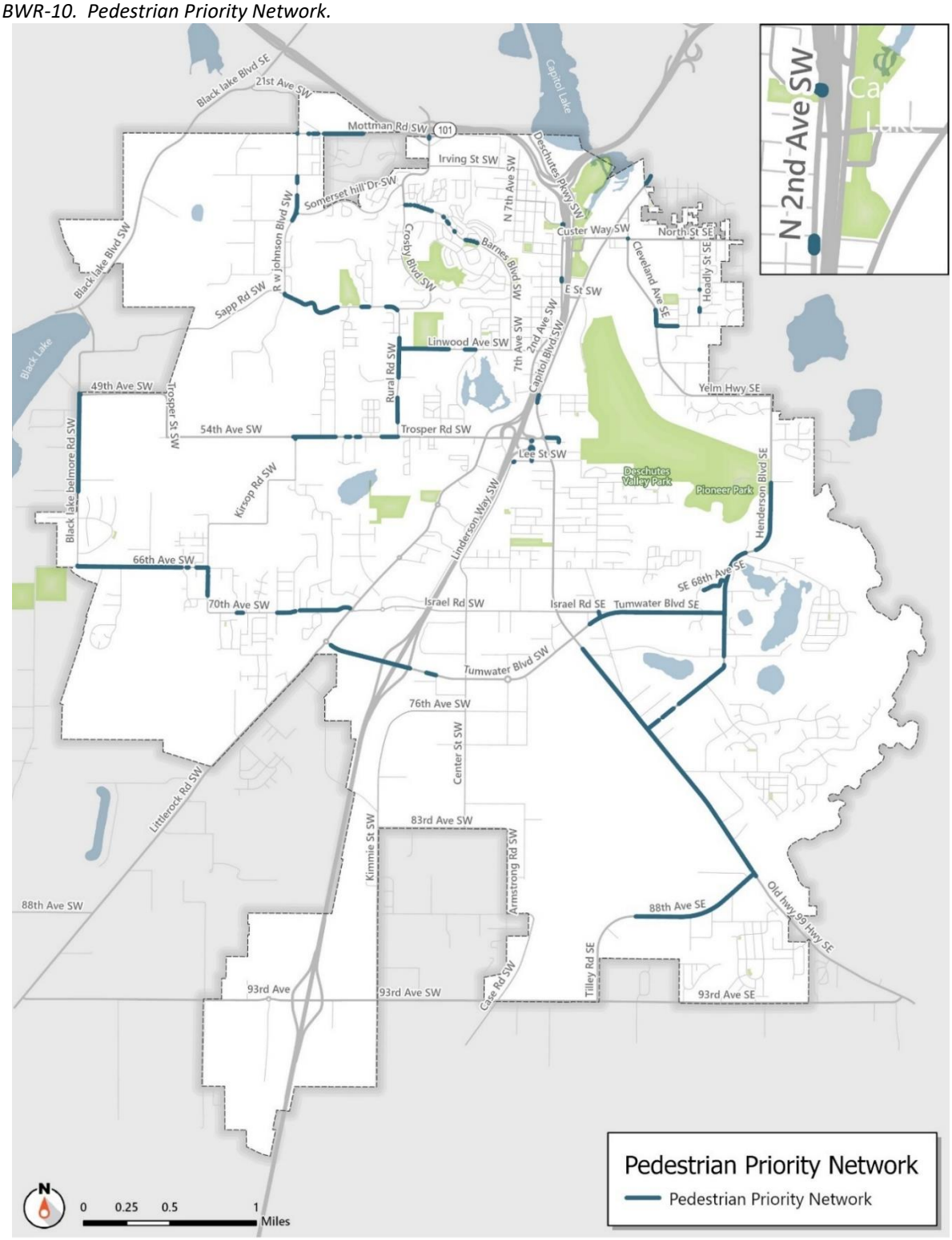
The priority network was developed using the following factors:

1. **Pedestrian and bicycle levels of traffic stress.** This data was analyzed for existing conditions to understand deficiencies. Streets with a Level of Traffic Stress of 3 or 4 will be further refined using locations with prominent network gaps and projected land use growth.
2. **Land use growth projected for 2045**. This data analyzed population, housing, and employment forecasts to determine opportunities to increase modal share.
3. **Network gaps and potential connectivity improvements.** This data demonstrates areas that prevent continuous travel to key locations such as those pointed out at public outreach events to improve connections between modes.

Building bicycle and pedestrian priority networks will provide Tumwater with a more accessible transportation system for all users. The priority networks concentrate investments in the densest areas and help fill in missing gaps

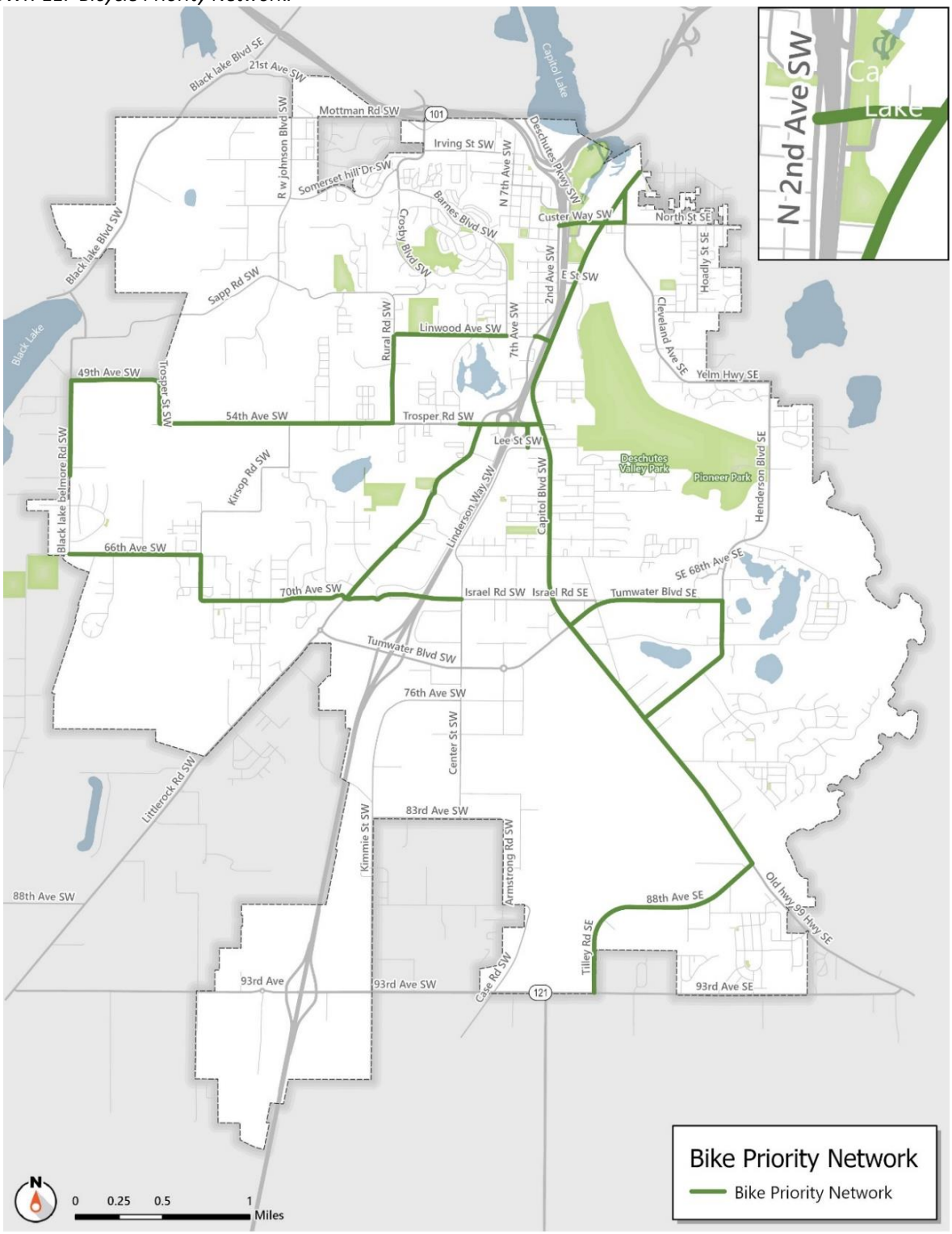
so that more people can safely travel outside of vehicles. The pedestrian priority network is shown in Figure BWR-10. The bicycle priority network is shown in Figure BWR-11.

Figure BWR-10. Pedestrian Priority Network.



Source: Fehr & Peers, 2025.

Figure BWR-11. Bicycle Priority Network.



Source: Fehr & Peers, 2025.

E. Active Transportation Projects

The list of long-term projects in Table BWR-4 was compiled from existing Tumwater plans and an analysis of gaps in the bike and pedestrian priority networks. Many of the projects listed below will achieve Tumwater's goal of Level of Traffic Stress 1 or 2 facilities. Some projects will only achieve a Level of Traffic Stress of 3 or 4.

These projects will need to be further refined before design work is completed to determine what type of facility can achieve the Level of Traffic Stress standard.

Table BWR-4. 20-Year Active Transportation Project List.

Project ID	Project Title	Project Description	Mode	Cost	Level of Traffic Stress
1	Mottman Rd SW Sidewalk and Bike Lane Improvements	Install sidewalk on the north side of Mottman Rd SW from the vicinity of Crosby Blvd SW to R.W. Johnson Blvd SW. Note that sidewalks and bike lanes will be added to both sides of Mottman Rd SW between Mottman Ct SW and R.W. Johnson Blvd SW during a pavement resurfacing project	Bike / Pedestrian	$1,900,000	Bike: 3 Ped: 2
2	76th Ave SW / Kimmie St Bike Facilities	From 83rd Ave SW to 93rd Ave SW	Bike	$500,000	Bike: 3
3	83rd Ave Bike SW Facilities	From Kimmie St SW to Center St SW	Bike	$700,000	Bike: 4
4	Bonniewood Dr SE Bike Facilities	From Dennis St SE to Old Highway 99 SE	Bike	$1,200,000	Bike: 2
5	Black Lake-Belmore Rd SW Bike Lanes	From 66th Ave SW to Black Lake Blvd SW (some partial programmatic potential)	Bike	$4,000,000	Bike: 3
6	Linwood Ave SW Bike Facilities	From Sapp Rd SW to G St SW	Bike	$2,400,000	Bike: 3
7	88th Ave SW Bike Facilities	From just west of Cabot Dr SE to 85th Ave SE	Bike	$400,000	Bike: 4

Project ID	Project Title	Project Description	Mode	Cost	Level of Traffic Stress
8	Trosper Rd SW Bike Facilities	From Lake Park Dr SW to Rural Rd SW	Bike	$50,000	Bike: 2
9	Center St SW Bike Facilities	From Tumwater Blvd SW to 83rd Ave SW	Bike	$50,000	Bike: 3
10	Lake Park Dr SW Bike Facilities	From Linwood Ave SW to Trosper Rd SW	Bike	$200,000	Bike: 2
11	Vista Loop SW Bike Facilities	From Crosby Blvd SW to Barnes Blvd SW	Bike	$200,000	Bike: 2
12	12th Ave SW / Vista Loop SW Bike Facilities	From Barnes Rd SW to Irving St SW	Bike	$500,000	Bike: 2
13	Somerset Hill Rd SW Bike Facilities	From R.W. Johnson Blvd SW to Crosby Blvd SW. Consider widening existing 8' path to 12' in lieu of on-street bike facilities	Bike	$800,000	Bike: 1
14	Lee St / SW Boston Ave SW / Hazelhurst SW Bike Facilities	From Capitol Blvd SE to Elm St SE	Bike	$30,000	Bike: 2
15	7th Ave SW / Bates St SW / 3rd Ave SW Bike Facilities	From 2nd Ave SW to Crosby Blvd SW	Bike	$150,000	Bike: 2
16	Desoto St SW / 4th Ave SW / Ferry St SW Bike Facilities	From 7th Ave SW to 2nd Ave SW	Bike	$100,000	Bike: 2
17	X St SW Shared Bike Streets	Upgrade as necessary and sign with 'sharrows' X St SW, from Elm St SW to 7th Ave SW. (Programmatic potential)	Bike	$30,000	Bike: 3

Project ID	Project Title	Project Description	Mode	Cost	Level of Traffic Stress
18	New Pedestrian Connection from Linderson Way SW to Elm St SW, in vicinity of T St SW	Pedestrian facilities offering a direct route between Linderson Way SW and Elm St SW with a crossing at Capitol Way. Preferred route roughly aligns with T St SW and Pinehurst Dr SW	Pedestrian	$500,000	Ped: 1
19	Elm St SW Sidewalks	Completion of sidewalk facilities on Elm St SW between Pinehurst Dr SW and W St SW	Pedestrian	$160,000	Ped: 1
20	North-South Pedestrian Connection between X St SW and Dennis St SW	Create a new pedestrian / non-motorized connection through the future shared-use pathway on the BPA alignment to connect X St SW and Dennis St SW in the vicinity of Tumwater High School	Pedestrian	$300,000	Ped: 1
24	Trosper Rd SW – Lake Park Dr SW to Rural Rd SW	Repurpose asphalt to provide 3 travel lanes and bike lanes	Motorized Vehicle / Bike	$225,000	Bike: 2
27	Old Highway 99 SE -- 73rd Ave SE to 88th Ave SE	Widen to 4 lanes with median, bike lanes and intersection improvements at Bonniewood Dr SE, Henderson Blvd SE, and 88th Ave SE	Motorized Vehicle / Bike	$22,000,000	Bike: 4
34	Capitol Blvd SE – Custer Way SE to Carlyon Ave SE	Reduce to 4 lanes, install bike lanes	Motorized Vehicle / Bike	$100,000	Bike: 3
35	Capitol Blvd SE – M St SW to Israel Rd SW	Reduce to 4 lanes, construct roundabouts at select intersections, install bike lanes, and construct median	Motorized Vehicle / Bike	$30,000,000	Bike: 3

Project ID	Project Title	Project Description	Mode	Cost	Level of Traffic Stress
50	2nd Ave SW Pedestrian and Bike Improvements	Identify gaps and add facilities to achieve Level of Traffic Stress 2	Bike / Pedestrian	$3,855,000	Bike: 2 Ped: 2
51	Rural Rd SW Shoulder Improvements	Widen shoulder and provide sidewalks to connect Sapp Rd SW to Trosper Rd SW.	Bike / Pedestrian	$500,000	Bike: 4 Ped: 4
55	66th Ave SW / 70th Ave SW Bike Lanes	From Black Lake-Belmore Rd SW to Littlerock Rd SW	Bike	$3,400,000	Bike: 3
58	Old Highway 99 SE Bike Connectivity Improvement	Bike lanes that connect the southern extents of Old Highway 99 SE until 88th Ave SE	Bike		Bike: 4
60	Trosper Rd SW Bike Gap Infill	Infilling Bike network gaps to ensure Trosper Rd SW meets Level of Traffic Stress 2 standard	Bike		Bike: 2
61	Linwood Ave SW East West Connector	Provides an east west bike connection that crosses Interstate 5 and connects eastern and western portions of Tumwater	Bike		Bike: 2
62	Capitol Blvd SE Bike Level of Traffic Stress Improvement	Provides a northern connection with a Level of Traffic Stress of 2 for the main Capitol Blvd SE improvement	Bike		Bike: 2
63	70th Ave SW Pedestrian Improvements	Infill pedestrian sidewalk gaps to improve Level of Traffic Stress and provide critical connections	Pedestrian		Ped: 2
63	66th Ave SW Sidewalk Improvements	Infill pedestrian sidewalk gaps to improve Level of Traffic Stress and provide critical connections	Pedestrian		Ped: 2

Project ID	Project Title	Project Description	Mode	Cost	Level of Traffic Stress
64	88th Ave SW Sidewalk Improvements	Infill pedestrian sidewalk gaps to improve Level of Traffic Stress and provide critical connections	Pedestrian		Ped: 2
65	Tumwater Blvd SW Sidewalk Extension	Infill pedestrian sidewalk gaps to improve Level of Traffic Stress and provide critical east west connection	Pedestrian		Ped: 2
66	Rural Rd SW Sidewalk Development	Infill pedestrian sidewalk gaps to improve Level of Traffic Stress and provide critical connections	Pedestrian		Ped: 2
67	Linwood Ave SW Sidewalk Infill	Infill pedestrian sidewalk gaps to improve Level of Traffic Stress and provide critical connections	Pedestrian		Ped: 2
68	Tumwater Blvd SW Bike Lane Development	This project will convert wide lanes on Tumwater Blvd SW to bike lanes to improve the associated Level of Traffic Stress of the facility	Bike		Bike: 3
B	Safe Routes to School Projects	Improve pedestrian and bicyclist safety near schools. Projects include sidewalks, lighting, flashing beacons, signage, markings, and other measures. Project details developed as a part of the six-year Transportation Improvement Plan process.	Programmatic	$2,000,000	-

F. Funding Opportunities

There are many sources to help Tumwater pay for active transportation improvements, and these programs can and do change over time.

The funding opportunities below are a selection of external funding sources that may be a good

match for Tumwater's active transportation improvements.

1) Transportation Improvement Board

The Transportation Improvement Board facilitates state investment in local transportation projects and distributes grant funding to cities and counties generated from the statewide gas tax. The Transportation Improvement Board offers several grant programs including the Active Transportation Program, which provides funding to improve pedestrian and cyclist safety, enhance pedestrian and cyclist mobility connectivity, or improve the condition of existing facilities.[7]

2) Pedestrian & Bicycle Program

The Washington State Department of Transportation Pedestrian and Bicycle program awards funding for projects that enhance safety and mobility for people who walk or bike. The goal of the program is to eliminate fatal and serious injury pedestrian and bicyclist crashes, build connected low stress walk and bike networks, and increase walking and bicycling.

Two types of projects are eligible for this funding: construction projects and design-only projects. Design-only projects allow agencies the opportunity to engage with the community to develop projects that appeal to a wide range of users. The Active Transportation Programs Design Guide provides details for treatments intended to provide safer conditions for users of the active transportation network.

3) Safe Routes to School

The goal of the Safe Routes to School program is to improve the safety and mobility of children by enabling and encouraging them to use active transportation to school. This program provides funding for infrastructure projects within two miles of a school serving children in kindergarten through 12th grade. Construction, design-only, and education projects are all eligible for funding under this program.

4) Sandy Williams Connecting Communities Program

This program was established to improve active transportation connectivity in overburdened communities[8] along state and legacy highways. The program name honors Sandy Williams, a community activist who worked to reconnect her African American neighborhood after the construction of Interstate 90 divided the Spokane.

The focus of this program is on communities most affected by barriers to opportunity and environmental health disparities. This grant can be used to fund projects that enhance safety, comfort, and connectivity, making it easier for community members to access essential services and community spaces. Funding from this program can be used for planning, design, or construction, and can be used as a match for a federal grant award.

[7] https://www.tib.wa.gov/grants/grants.cfm

[8] https://experience.arcgis.com/experience/03cb82fc4a524e8c9723192e72c80a0e

5) Transportation Alternatives Program

Transportation Alternatives projects encompass smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trail projects, and safe routes to school.

6) Active Transportation Infrastructure Investment Program.

This program is a competitive federal grant program for projects proving safe and connected active transportation facilities in active transportation networks or spines. The program awards both planning and design and construction grants. Projects seeking planning and design grants must have costs of at least $100,000, and projects seeking construction grants must have total costs of at least $15 million to be eligible.[9] The goal of this grant is to integrate active transportation infrastructure with transit service to improve access and connectivity.

7) Surface Transportation Block Grant

Bicycle, pedestrian, and trail projects are eligible for funding under this flexible grant program. The Washington State Department of Transportation allocates Surface Transportation Block Grant funds to Metropolitan Planning Organizations and County Lead Agencies to select projects that align with regional priorities.[10]

G. Programmatic Improvements

While constructing active transportation infrastructure upgrades is an effective way to improve Tumwater's active transportation network, construction is costly and time intensive. Tumwater will explore other options to improve active transportation access and convenience. Some of these non-capital alternatives are explored below.

1) E-Bike Rebate Program

Many cities in the region have adopted e-bike rebate programs to help residents offset the cost of an e-bike. Tumwater can choose to open the program to all residents or restrict applicants to meet income qualifications. E-bikes present a faster, more comfortable, and convenient alternative to standard bicycles, making bicycling a more appealing choice for some users of the transportation system.

2) Bike Share & Micromobility

Bike share programs involve renting bicycles from designated docking stations while e-scooter and dockless e-bike rentals are examples of shared micromobility options. These programs offer residents the option to bike and roll without the cost of purchasing, maintaining, and storing a bike or scooter. Bike shares and

[9] https://www.fhwa.dot.gov/environment/bicycle_pedestrian/atiip/.

[10] https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/surface-transportation-block-grant.

micromobility presents a convenient and affordable alternative to driving.

3) Bike Storage & Parking

Investing in bike racks, shelters, and lockers help make bicycling a more attractive and convenient option for cyclists. Offering bike storage and parking at key destinations like transit hubs, schools, and activity centers is an important aspect of bicycle infrastructure.

Guidelines could be created for bike parking, especially at key destinations and commercial areas. Bike storage with outlets would be especially beneficial to e-bike users who need to charge their bike before continuing their trip. Tumwater can also encourage employers and apartment buildings to offer secure bicycle parking for their employees.

4) Education

Education plays a crucial role in promoting safe and effective active transportation in cities. Educating users about road safety, traffic laws, and route selection can encourage participation.

Tumwater could establish a wayfinding plan for people who use active transportation and ensure proper distribution. Engagement with schools, community organizations, and businesses helps increase awareness, answer questions, and foster a culture that values active transportation as a transportation mode.

Tumwater can also take advantage of state and national initiatives like Bike Month or Walk, Bike, and Roll to School Day as educational opportunities.

5) Employer Partnerships

Tumwater could partner with employers to incentivize active transportation to work and encourage office buildings to provide showers and secure bicycle parking. Workplaces can also establish parking maximums, pricing strategies, and other policies that disincentivize driving alone to work or take an active role in the Commute Trip Reduction program, which affects worksites with at least 100 full-time employees who begin their shift between 6:00 – 9:00 am on weekdays.

6) Maintenance & Enforcement

Once bicycle and pedestrian facilities are built, Tumwater must ensure that they function as designed. There are several strategies Tumwater can employ to do this. Increase enforcement of parking restrictions in bike lanes. Properly maintain bike and pedestrian facilities by regularly cleaning up trash and debris, trimming vegetation, and removing obstacles. Tumwater can also develop speeding enforcement strategies on key bike connections.