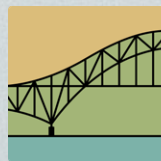


TRANSPORTATION 2050

**The Regional Transportation Plan
For Chelan and Douglas Counties**



Chelan-Douglas
TRANSPORTATION COUNCIL
CDTC

Prepared by

Chelan-Douglas Transportation Council

Additional copies of this document may be obtained by contacting:

Chelan-Douglas Transportation Council (CDTC)

37 South Wenatchee Avenue, Suite C

Wenatchee, Washington 98801

P: (509) 663-9059

This document is also available on our website at: www.chelan-douglas.org



Title VI and Americans with Disabilities Act (ADA) Notice to Public

The Chelan-Douglas Transportation Council (CDTC) hereby gives public notice that it is the policy of the agency to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987 and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which CDTC receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with CDTC. Any such complaint must be in writing and filed with CDTC's Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence.

This document can be made available in an alternate format by emailing Chelan-Douglas Transportation Council at comments@chelan-douglas.org or by calling 509-663-9059. Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Aviso al público del Título VI y la Ley para estadounidenses con discapacidades (ADA)

El Consejo de Transporte Chelan-Douglas (CDTC) por la presente notifica públicamente que es política de la agencia garantizar el pleno cumplimiento del Título VI de la Ley de Derechos Civiles de 1964, la Ley de Restauración de Derechos Civiles de 1987 y los estatutos y reglamentos relacionados en todos los programas y actividades. El Título VI exige que ninguna persona en los Estados Unidos de América, por motivos de raza, color u origen nacional, sea excluida de la participación, se le nieguen los beneficios o sea sometida a discriminación en virtud de cualquier programa o actividad para la cual CDTC reciba asistencia financiera federal. Cualquier persona que crea que ha sido agraviada por una práctica discriminatoria ilegal según el Título VI tiene derecho a presentar una queja formal ante el CDTC. Cualquier queja de este tipo debe realizarse por escrito y presentarse ante el Coordinador del Título VI del CDTC dentro de los ciento ochenta (180) días siguientes a la fecha del presunto suceso discriminatorio.

El material creado por CDTC puede estar disponible en un formato alternativo enviando un correo electrónico al Consejo de Transporte de Chelan-Douglas a comments@chelan-douglas.org o llamando al 509-663-9059. Las personas sordas o con problemas de audición pueden realizar una solicitud llamando al Servicio de Retransmisión del Estado de Washington al 711.



Chelan-Douglas
TRANSPORTATION COUNCIL
CDTC

RESOLUTION 4-2025
ADOPTING "TRANSPORTATION 2050,"
THE CDTC REGIONAL TRANSPORTATION PLAN

WHEREAS, Chelan-Douglas Transportation Council (CDTC) is the lead agency for the Metropolitan Planning Organization and the Regional Transportation Planning Organization with responsibility for transportation planning and programming in the Wenatchee Metropolitan Statistical Area encompassing Chelan County and Douglas County; and

WHEREAS, "Transportation 2050" addresses the federal metropolitan planning requirements in 23 U.S.C 134 and 49 U.S.C 5303; and

WHEREAS, "Transportation 2050" addresses the Washington state regional transportation planning requirements in 47.80 RCW; and

WHEREAS, the "Regional Transportation Plan" establishes a regional transportation policy framework for consistency with, and between city and county Comprehensive Plan Transportation Elements within Chelan and Douglas counties; and

WHEREAS, "Transportation 2050" addresses regionally-significant transportation deficiencies, opportunities and recommends transportation system improvements in urban, rural and small city areas throughout Chelan and Douglas counties.

NOW, THEREFORE, BE IT RESOLVED, that the CDTC Governing Board approves and adopts the CDTC Regional Transportation Plan, "Transportation 2050."

ADOPTED by the CDTC governing board at a regular meeting thereof held on the 11th day of September 2025.

DATED this 11th day of September 2025:

Chris Keifenheim, 2025 Board Chair

Attest:

Jeff Wilkens, Executive Director

Governing Board

Chris Keifenheim | 2025 Chair
Region Administrator, WSDOT-NCR

Marc Straub
Commissioner, Douglas County

Lloyd Smith
Mayor, Town of Waterville
Douglas County Small Towns/City Rep.

Richard DeRock
Commissioner, Regional Port Authority

Jerrilea Crawford
Mayor, City of East Wenatchee

Nick Covey
CEO, Link Transit

Erin McCardle
Mayor, City of Chelan
Chelan County Small Towns/City Rep.

Mike Poirier
Mayor, City of Wenatchee

Kevin Overbay
Commissioner, Chelan County

Richard Palmer, Sr
DOT Director, Colville Confederated Tribes

Staff

Jeff Wilkens
Executive Director

Chad Daggett
Clerk of the Board

Riley Shewak
Senior Transportation Planner

Ryan McGrew
GIS Analyst/Associate Transportation Planner

Technical Advisory Committee

City of Wenatchee
Jake Lewing, City Engineer
Emma Honeycutt, Assistant City Engineer

City of East Wenatchee
Garren Melton, Public Works Manager

Douglas County
Aaron Simmons, County Engineer
Justin Roozen, Transportation Programs Manager

Chelan County
Eric Pierson, Public Works Director
Lawrence Dillon, Senior Engineer

City of Cashmere
Steve Croci, Operations Director

City of Chelan
Jake Youngren, Public Works Director
Travis Denham, City Engineer

City of Entiat
Mark Botello, Community Development Director

City of Leavenworth
Andi Zontek-Backstrum, Public Works Director

Link Transit
Donald Billen, Planning Manager
Joshua Willey, Transit Analyst

WSDOT — North Central Region
Shaun Darveshi, Transportation Planning Manager
Brian Pearson, Local Programs Engineer
Kate Tollefson, Tribal and Regional Integrated Planner

Chelan-Douglas Regional Port Authority
[Vacant]

City of Rock Island
[Vacant]

Town of Waterville
[Vacant]

City of Bridgeport
[Vacant]

Town of Mansfield
[Vacant]

Federal Statutory Framework

The Chelan-Douglas Transportation Council (CDTC) is the federally mandated Metropolitan Planning Organization (MPO) for the Wenatchee/East Wenatchee Urbanized Area (UZA). Federal law requires the formation of an MPO for any urbanized area with a population greater than 50,000 and the development of a long-range transportation plan (23 USC § 134). The implementing regulations in 23 CFR § 450.306 define the scope of metropolitan planning, requiring a continuous, cooperative, and comprehensive process, that addresses the following factors:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
10. Enhance travel and tourism.

State Statutory Framework

State policy for regional transportation planning is shaped by RCW 47.80, and RCW 36.70A, also known as the Growth Management Act (GMA). RCW 47.80 contains provisions for a Regional Transportation Planning Organization (RTPO) program that extends regional planning out to rural areas that surround and are interconnected with metropolitan areas. CDTC is designated as the RTPO for Chelan and Douglas Counties. In 2014 the Council merged its federal and state functions into a unified boundary designated by Governor Jay Inslee that encompasses Chelan and Douglas counties as a unified region. The GMA contains provisions that define the requirements for coordinating local and regional planning to ensure consistency between local comprehensive plans and the long-range transportation plan.

Additionally, the State has articulated six transportation system policy goals (RCW.47.04.280) that are coordinated and consistent with the objectives found in the Growth Management Act.

1. **Economic vitality:** To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.
2. **Preservation:** To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services
3. **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system
4. **Mobility:** To improve the predictable movement of goods and people throughout Washington state
5. **Environment:** To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment
6. **Stewardship:** To continuously improve the quality, effectiveness, and efficiency of the transportation system.

The framework for achieving the six policy goals are provided in the Washington Transportation Plan. The plan is meticulously prepared with input from the public and steward agencies of transportation planning like CDTC and its member agencies.

Table of Contents

Chapter 1: Regional Context

Geography and Demographics	1
Growth, Development & Travel Patterns	2
Regional System	8

Chapter 2: Policy Framework & Preferred Outcomes

Regional Goals	13
Planning Contexts	14
Transportation System Policies	17
Relationship to Federal, State, & Local Planning	24
Relationship to other CDTC Plans	26
Public Engagement	28

Chapter 3: Investment Strategy

New Capacity	35
Improvements	38
Preservation	43
Unused Revenue	45
Demand Management	46
Transit	48

Appendix A: Policy Methods

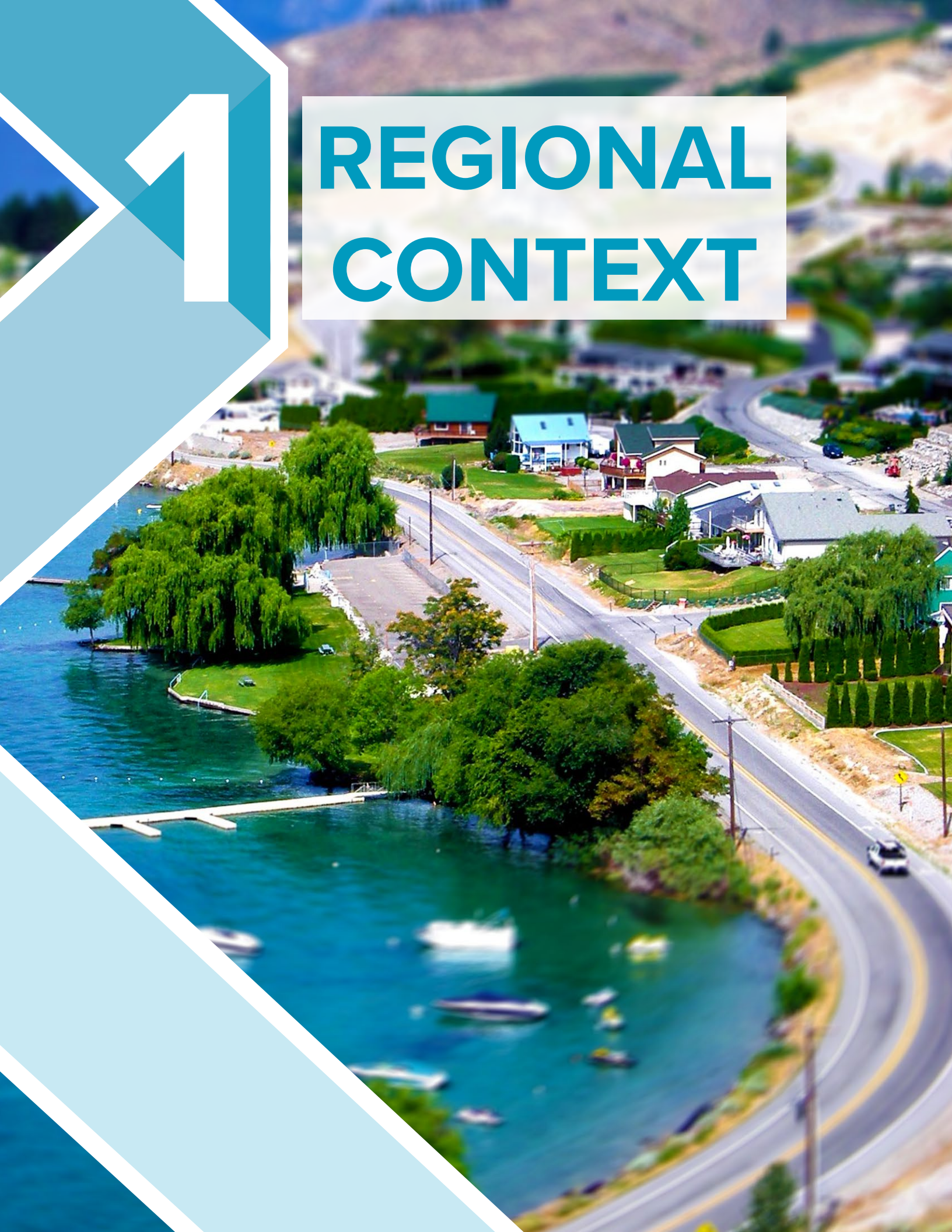
Appendix B: Project Needs & Financial Assumptions

Appendix C: Bikeway Element

Appendix D: Benefits & Impacts

Appendix E: Emerging Trends

Appendix E: System Performance Report

An aerial photograph of a scenic lake area. In the foreground, a paved road curves along the shoreline. To the left of the road, there's a grassy area with several large, leafy trees, including some weeping willows. A small wooden dock extends into the water. The lake is filled with several boats, including a large white motorboat and several smaller ones. In the background, there are residential houses with various roof colors (blue, grey, brown) and green lawns. The sky is clear and blue. The overall scene is peaceful and scenic.

1

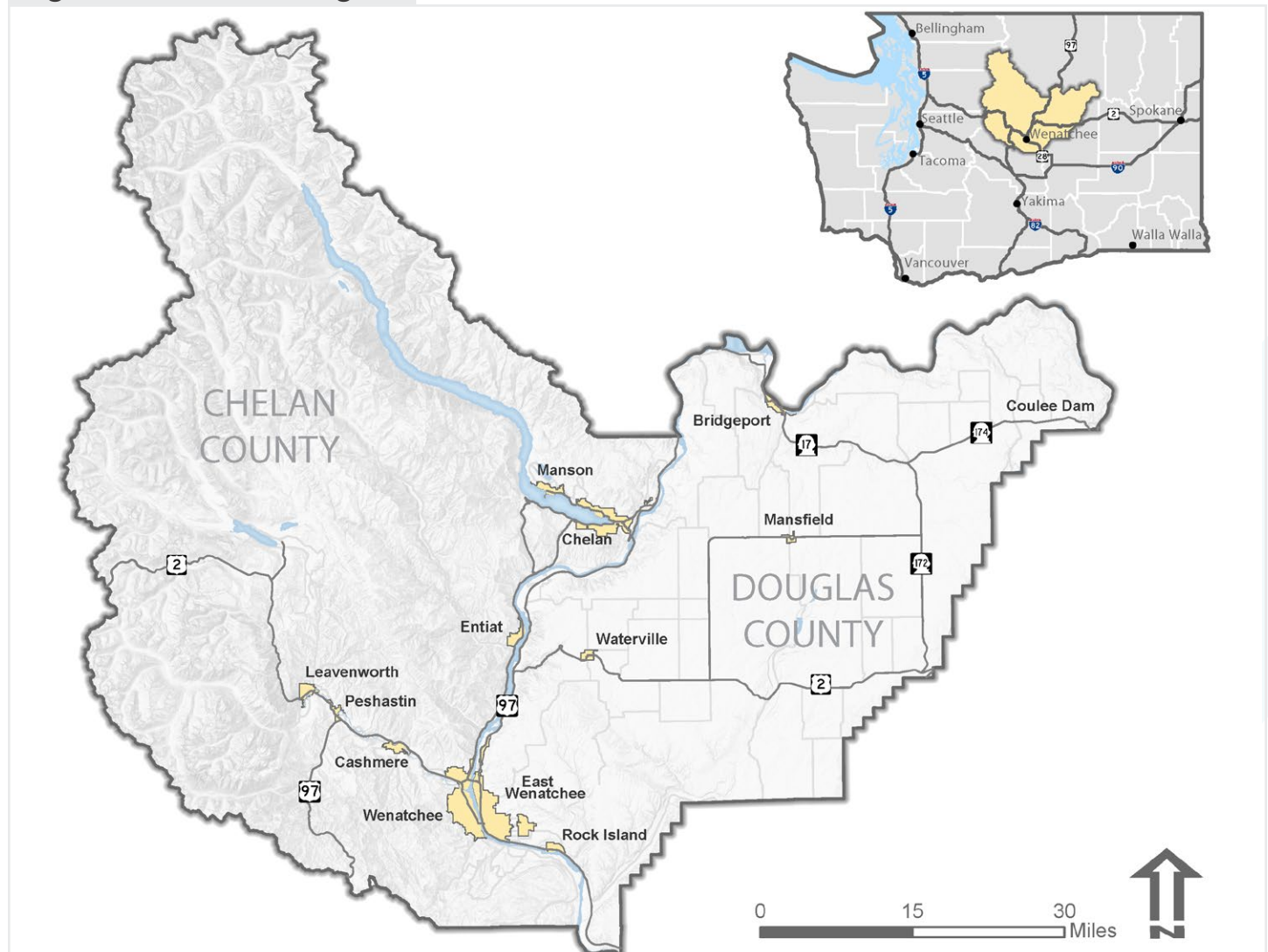
REGIONAL CONTEXT

The region is characterized by different contexts with different goals, policies, and approaches to meet the needs of the traveling public. The Wenatchee urban area is the region's economic, cultural, service, and transportation hub. It has the highest and most diverse concentration of land uses, requiring a multi-modal transportation system that balances complex needs of the traveling public. Rural, unincorporated communities with agriculture economies cover a large portion of the region, notably in Douglas County, but also to some degree in Chelan County. These communities have economies rooted in agriculture—predominately grain in Douglas County and tree fruit in Chelan County. Numerous small towns dot the region. Some provide supporting services to the rural, agriculture communities while others are largely focused on tourism and experience significant seasonal fluctuations in activity.

Geography and Demographics

The region has a total population of roughly 125,000 and an area of 4,850 square-miles (Figure 1-1). 78,142 people (64%) live within the 33 square miles (0.5%) of Wenatchee Valley Urban Area. It's situated in a narrow valley bound by steep terrain and bisected by the Columbia and Wenatchee Rivers. These geographic and topographic constraints create complexity and limit options for addressing regional transportation issues.

Figure 1-1: CDTC Region



29,985 people (25%) live in the rural, unincorporated areas of the region. The challenging topography isn't limited to the Wenatchee Valley Urban Area. Steep terrain with rivers, creeks, and lakes create physical barriers that restrict transportation and land development options throughout Chelan County, and in parts of Douglas County, though most of rural Douglas County is on the Waterville Plateau, a flat sprawling plain.

13,885 people (11%) live in the 9 small towns in the two counties. Chelan and Leavenworth have tourism-based economies with a high percentage of second homes that are vacant during low tourism seasons. Both communities also have state highways that function as activity centers traversing their downtowns. Other small towns are centers of commerce and services for the outlying rural areas and have transportation systems that are designed to support rural land use and economies even though they are classified as urban growth areas under the Growth Management Act.

Growth, Development & Travel Patterns

There is a fundamental connection between growth and development patterns and the demand for travel on the transportation system. New houses are built to accommodate population growth. The location and proximity of those homes to jobs, services, schools, shopping, entertainment, and recreation creates demand for trips. Currently, a household/jobs imbalance exists in the region (Table 1-1). Few residents of East Wenatchee and Douglas County work in the same city or county they live in. In contrast, many residents of Wenatchee and Chelan County work in the same city or county where they live. This creates a travel pattern with high demand on river crossings connecting residents from East Wenatchee and Douglas County to Jobs in Wenatchee and Chelan County.

Understanding population, household, and job growth trends and patterns helps CDTC develop assumptions on how many people will be in the region, where they'll live, and where they'll work. This in turn provides insights into where trip-making demand may increase and how travel patterns may change.

Table 1-1: Commute Flows

Jurisdiction	Live elsewhere; Work in	Live & Work in	Live in; Work Elsewhere
Wenatchee	16,434	10,398	12,712
East Wenatchee	4,646	1,921	10,748
Chelan County	18,494	20,882	17,057
Douglas County	7,076	3,976	15,471

Source: US Census Bureau LEHD

With each update to the RTP CDTC develops assumptions on the intensity and distribution of population, household, and job growth over the next 25 years to develop a projection of travel demand patterns in the future. Because growth in the small towns and rural areas is assumed to follow historic trends at just under 1% annually, the scope of detailed growth assumptions for the purpose of understanding significant increases in travel demand is limited to the Wenatchee Valley Urban Area. Understanding historic and recent growth trends is central to developing growth assumptions that serve as the basis for the travel demand projections.

Population & Households

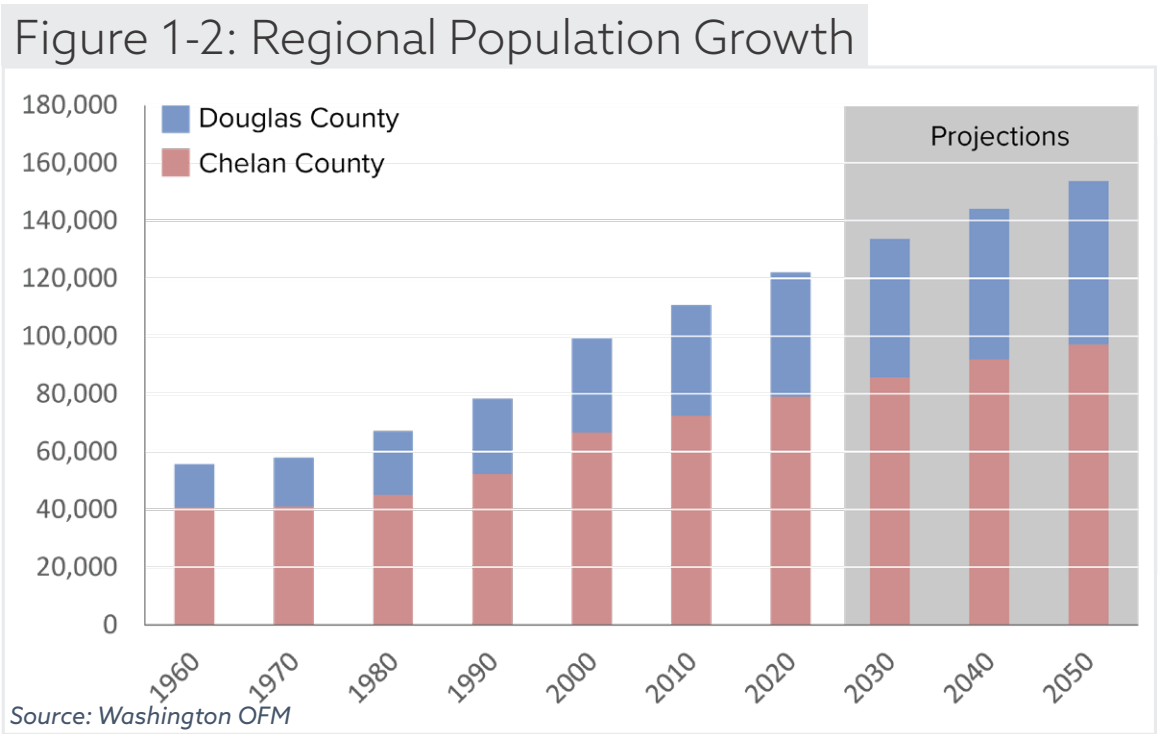
Historically, the regional population has grown at roughly 1% annually, with a slightly higher rate in the Wenatchee Valley Urban Area at 1.34% annually. Between now and 2050 The region's population is expected grow to nearly 154,000 people (Figure 1-2) with most of this growth (83%) occurring in the Wenatchee Valley Urban Area.

Housing units have increased at a slightly lower rate than population. Currently, there are roughly 32,000 households in the Wenatchee Valley urban area (Figure 1- 3). In 2022, CDTC began tracking permitting activity for major subdivisions and multi-family development projects as shown in Table 1-2 and Figure 1-4. Based on this data, approximately 4,600 new housing units were constructed in the urban area between 2016 and 2023. Outside the urban area, 3,400 housing units have been constructed in Chelan County and 468 units have been constructed in Douglas County.

These development trends indicate predominately higher density, multi-family infill within Chelan County, specifically city of Wenatchee, and single-family subdivisions in the East Wenatchee Urban Growth Area (UGA), but outside the East Wenatchee city limits. This contrasts the historic pattern of largely single-family residential growth on the edges of the existing UGAs. Housing unit growth outside the urban area

is characterized by a balance of multi-family and single family in the small towns in Chelan County and single family in the rural areas of Chelan and Douglas counties.

The population growth expected in the Wenatchee Valley Urban area equates to an additional 10,500 housing units and 2,600 units in the small towns and rural areas of the region.



New housing unit construction is expected to follow a pattern that resembles a balance between the historic and current pattern. This is characterized by moderate growth in single-family units at the edges of the urban growth area and moderate growth in high-density units within the City of Wenatchee (Figure 1-5). Assumptions regarding the type and pattern of housing unit construction in the small towns and rural areas weren't developed.

Figure 1-3: Households in the Wenatchee Valley

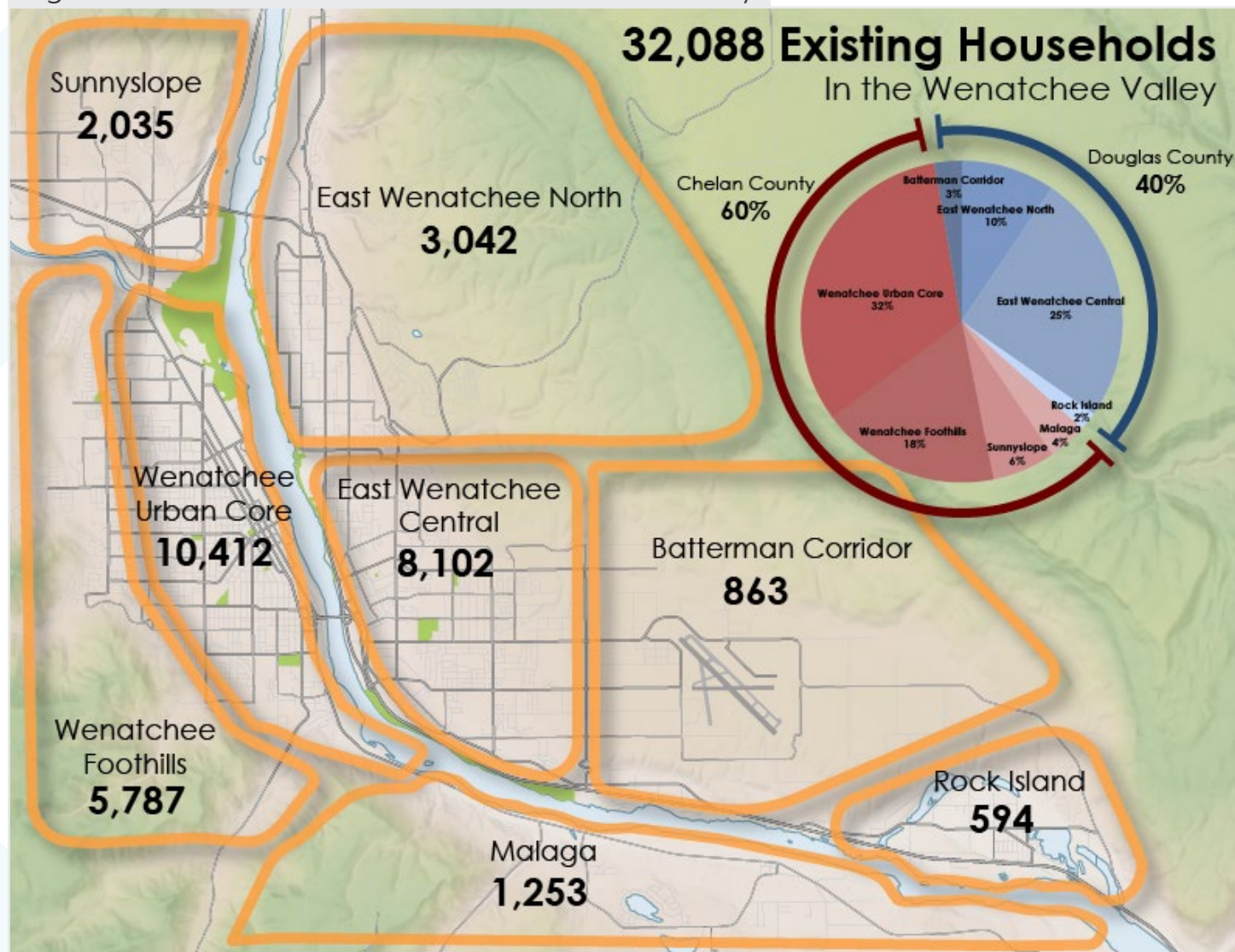


Table 1-2: Historic Household Growth in the Wenatchee Valley

	Single Family Households		Multi-Family Households		All Households
	Total	Percent	Total	Percent	Total
Chelan County	943	33%	1,845	67%	2,788
Douglas County	1,298	70%	533	30%	1,831
Both Counties	2,241	49%	2,378	51%	4,619

Source: CDTC

Figure 1-4: Wenatchee Valley Household Growth Trends

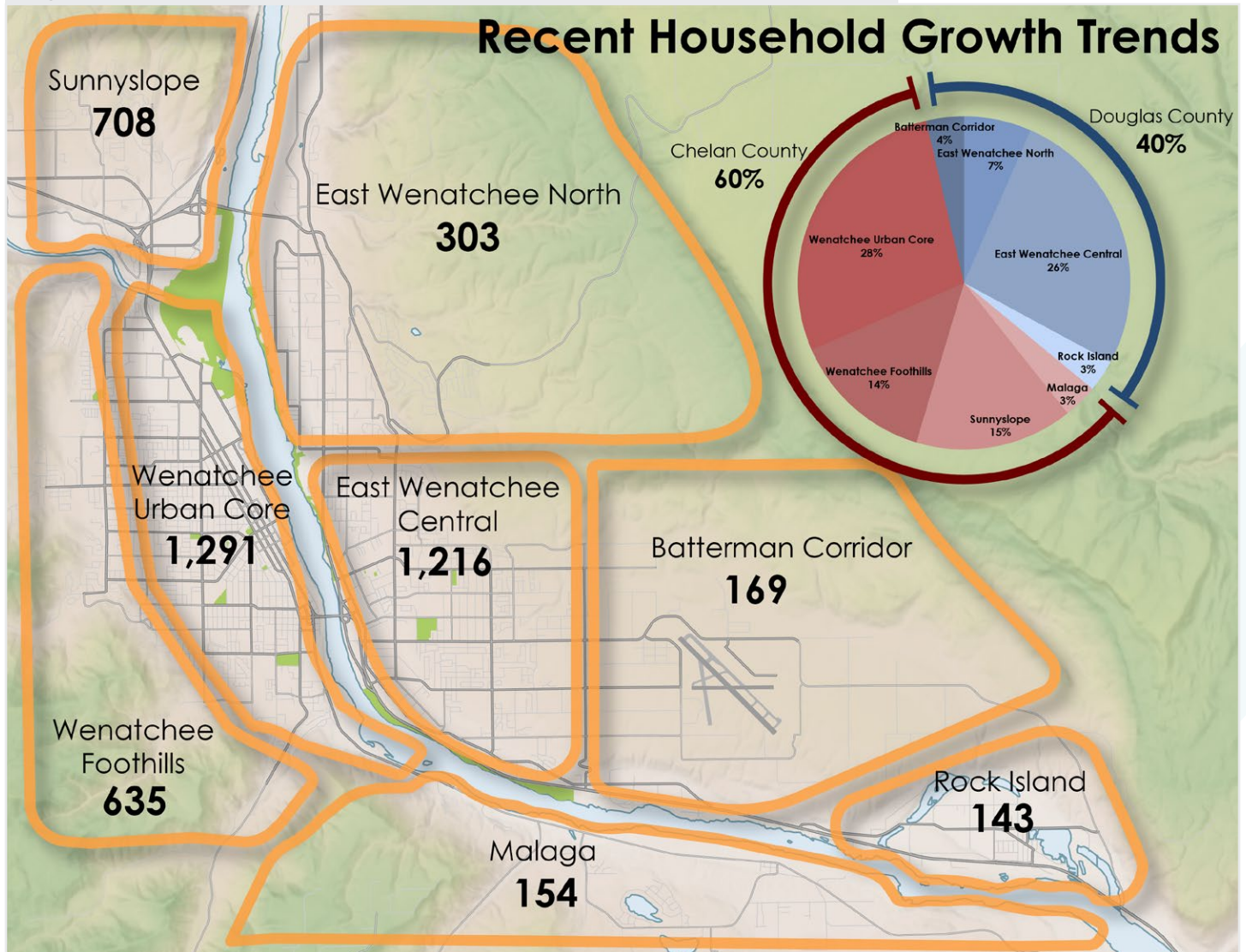
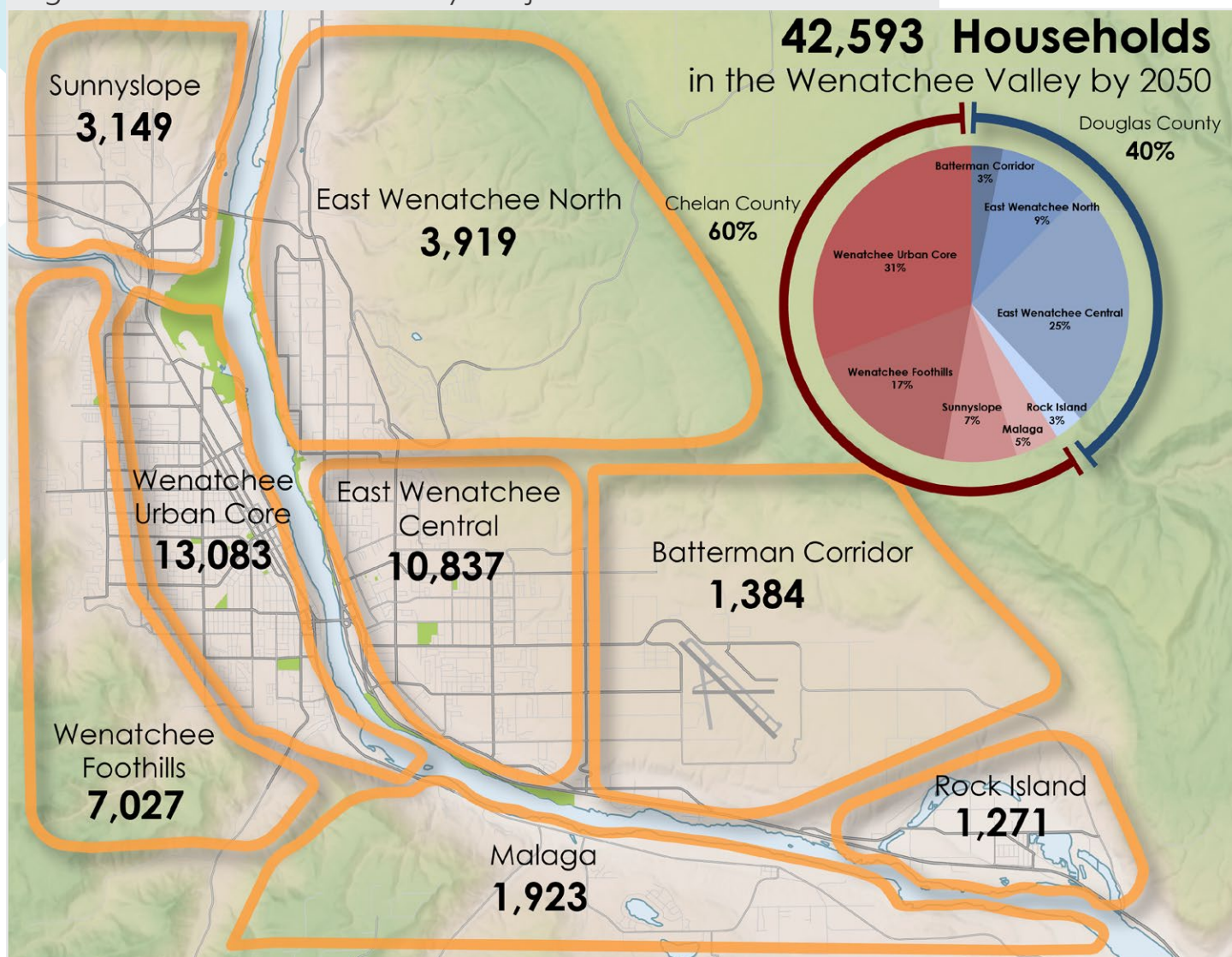


Figure 1-5: Wenatchee Valley Projected Household Growth

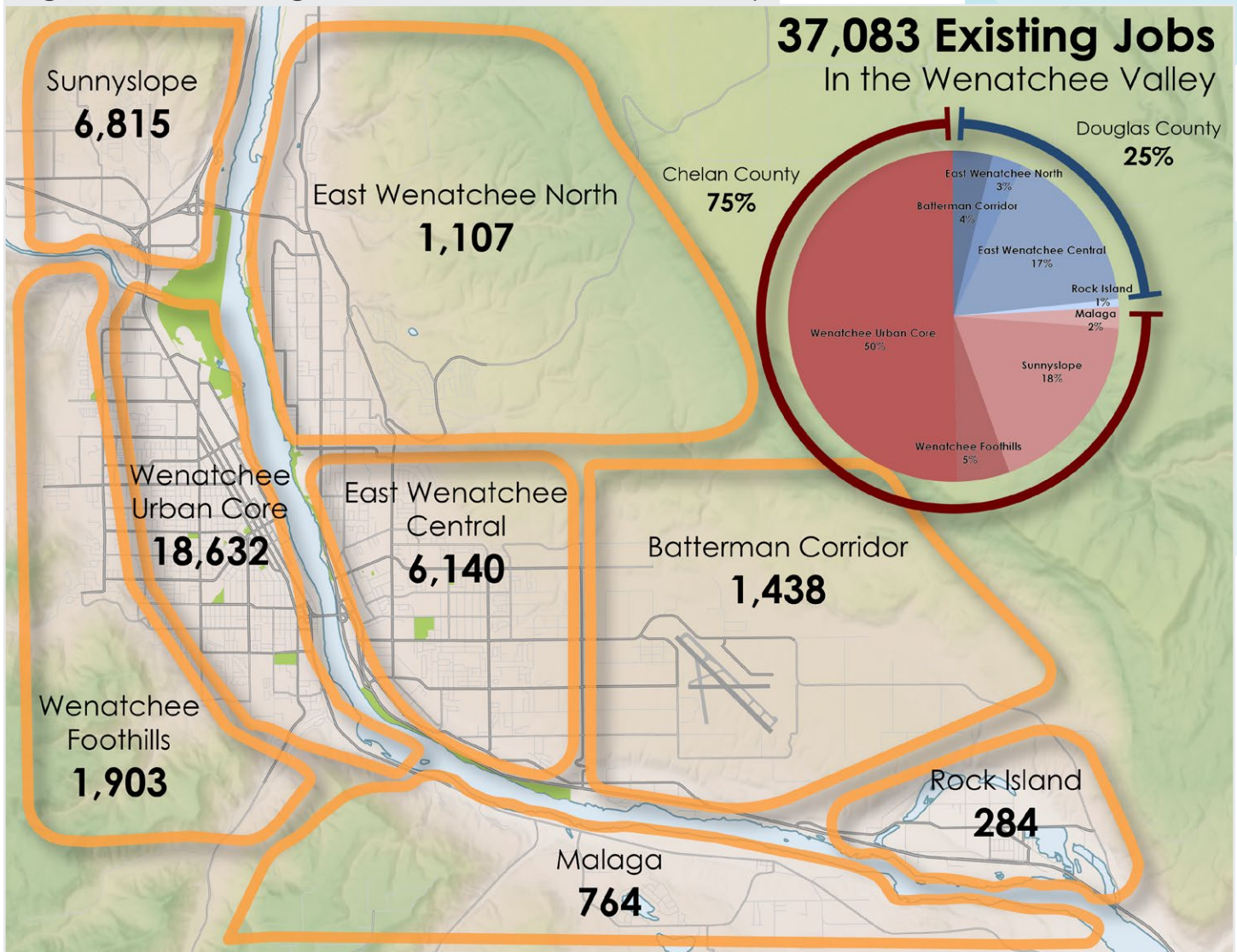


Jobs

The region's job market is growing and changing. Though job growth in the agriculture sector is stagnating, cheap power is attracting new industries and telework is allowing working professionals to live in the region and work elsewhere. These factors are contributing to job growth outpacing household growth. There are roughly 37,000 jobs within the Wenatchee Valley and 13,000 jobs in the small towns and rural areas (Figure 1-6).

In general, job growth occurs in two ways: growth in existing industries to support additional population, and new growth from emerging industries. Larger populations need more healthcare, government services, grocery stores, gyms, retail spaces, and other services. "New growth" is caused by growth in industries or job types that have yet to proliferate in the region. Data center construction and major regional/national companies relocating to the region are examples of new growth. CDTC assumes approximately 12,600 new jobs in the Wenatchee Valley for a total of nearly 49,700 jobs by 2050 (Figure 1-7). Roughly 2,000 new jobs, (15,200 total) are expected in the small towns and rural areas by 2050.

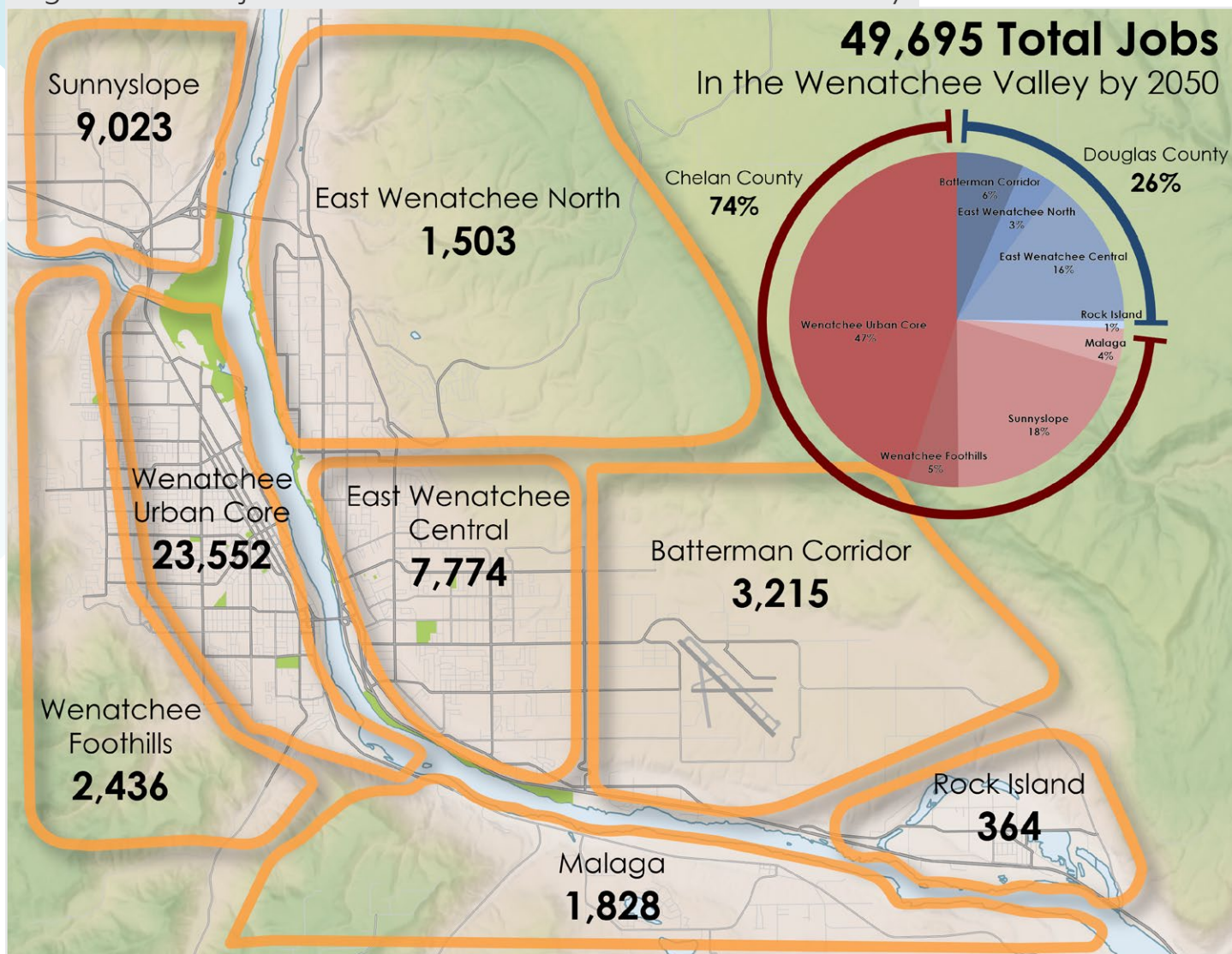
Figure 1-6: Existing Jobs in the Wenatchee Valley



Roughly 47% of job growth is assumed in the Wenatchee urban core where the most commerce, service, healthcare, retail, and industrial centers are located. Most new growth is assumed in Malaga and the Batterman Corridor where industrial development, primarily data centers, is currently occurring and expected to continue.

Although the housing market has experienced a recent trend of increased multi-family unit construction and new job markets are appearing in Malaga and the Batterman Corridor, the household/jobs imbalance in the region is expected to continue. As a result, projected trip making and travel demand is expected to resemble current conditions, but with more traffic overall. This points to increased travel demand on river crossings connecting residents from East Wenatchee and Douglas County to Jobs in Wenatchee and Chelan County. In fact, this increase is already occurring. Since 2017, the average commute time in the region increased from 17 minutes to nearly 21 minutes.

Figure 1-7: Projected Job Growth in the Wenatchee Valley

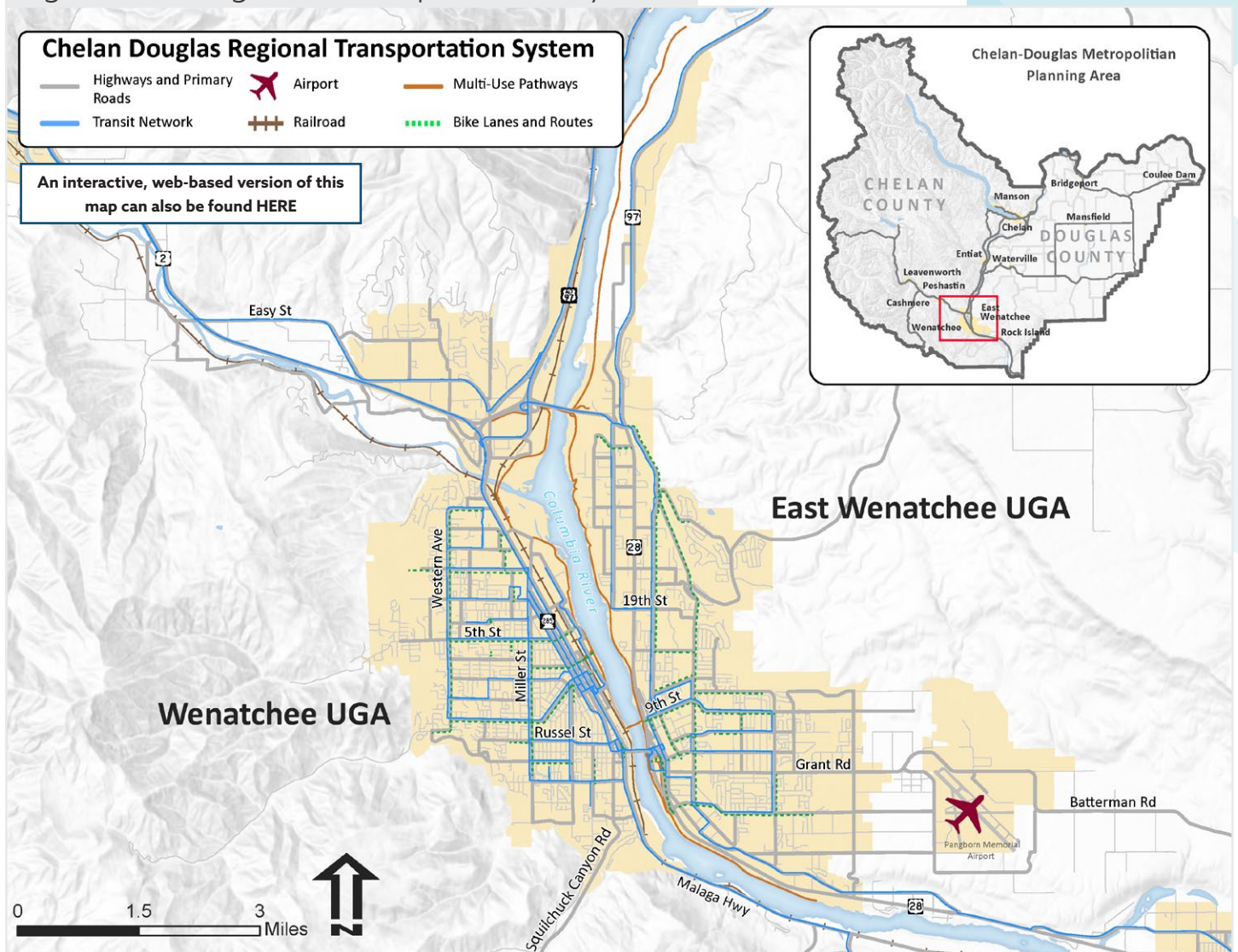


The Regional Transportation System

This plan focuses on the region's transportation goals, policies, and programs, and identifies investments on regionally significant transportation infrastructure, which includes infrastructure for all transportation modes on state highways, primary county roads, and city streets; multi-use paths; local routes that provide regional bicycle mobility; sidewalks, and any other transportation infrastructure associated with regional mobility. Specifically, the regional transportation system consists of the following components and is shown in figure 1-8 and in further detail in the RTP's web-based mapping suite.

- » Primary regional roads and sidewalks
- » Link Transit facilities and services, including roadways serving bus routes
- » Freight and passenger railroads
- » Public airports
- » Regional multi-use pathways
- » Regional on-street bikeways

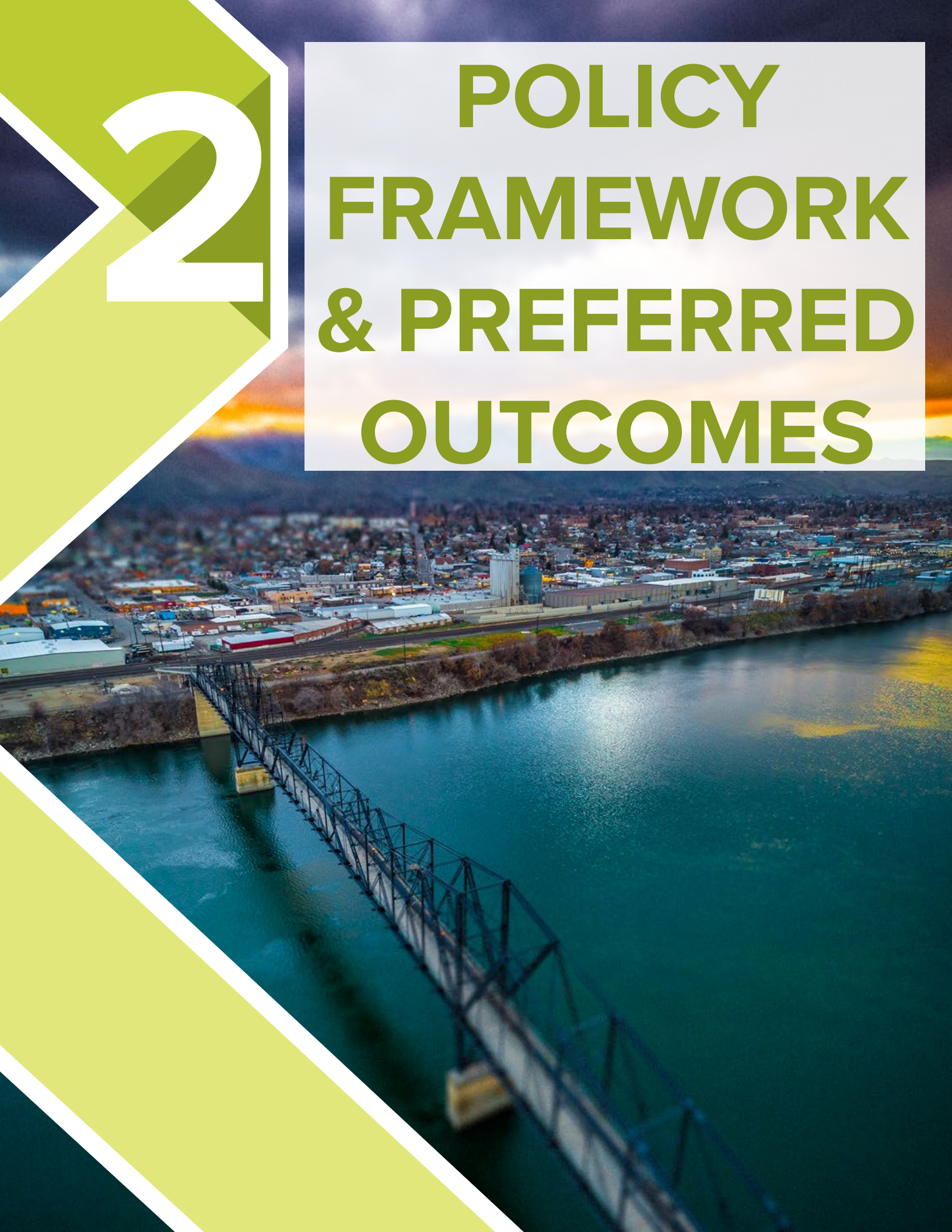
Figure 1-8: Regional Transportation System



Additional information on goals, policies, and plans covering the local transportation system can be found in each county and city's Comprehensive Plan and supporting plans and studies. Local and county-wide planning

2

POLICY FRAMEWORK & PREFERRED OUTCOMES



Federal and state statute spell out the requirements for the organizational structure, coordinating responsibilities, and planning scope of MPOs. However, the means used to carry out regional planning is the discretion of the MPO governing body, granting deference to local knowledge of growth and development, jobs and industries, transportation issues, and public preference. The goals and policies outlined below meet statutory requirements while being sensitive and responsive to conditions in the region and provide the framework for CDTC and its partner agencies to implement planned transportation investment concurrent with assumed long-term growth and development.

Regional Goals

The goals below guide the RTP policies and serve as the benchmark for determining the effectiveness of the plan.

The transportation system accommodates planned growth

The communities in Chelan and Douglas counties are growing, bringing an influx of opportunities and challenges. Accommodating the planned long-term growth will require close coordination between transportation and land development experts and a flexible approach for providing mobility to a growing traveling public.

The transportation system provides multimodal mobility, accessibility, and connectivity

Multimodal mobility, accessibility and connectivity balances the needs of vehicle, public transit, and active transportation users, resulting in tradeoffs to each user groups quality of accommodation. Multimodal priorities should be determined by the complexity and intensity of surrounding land use and planned growth.

The transportation system is safe for all users

In the last five years severe collisions have increased at an unprecedented rate across the region and state. Long held principles in transportation planning and design are being revised in an effort to reverse this trend. All transportation projects within CDTC's purview will be designed to provide the safest possible facility for the entire traveling public with the understanding that the final design will be based on evaluating the benefits and impacts of specific design treatments on all modes.

The transportation system supports community and economic development plans

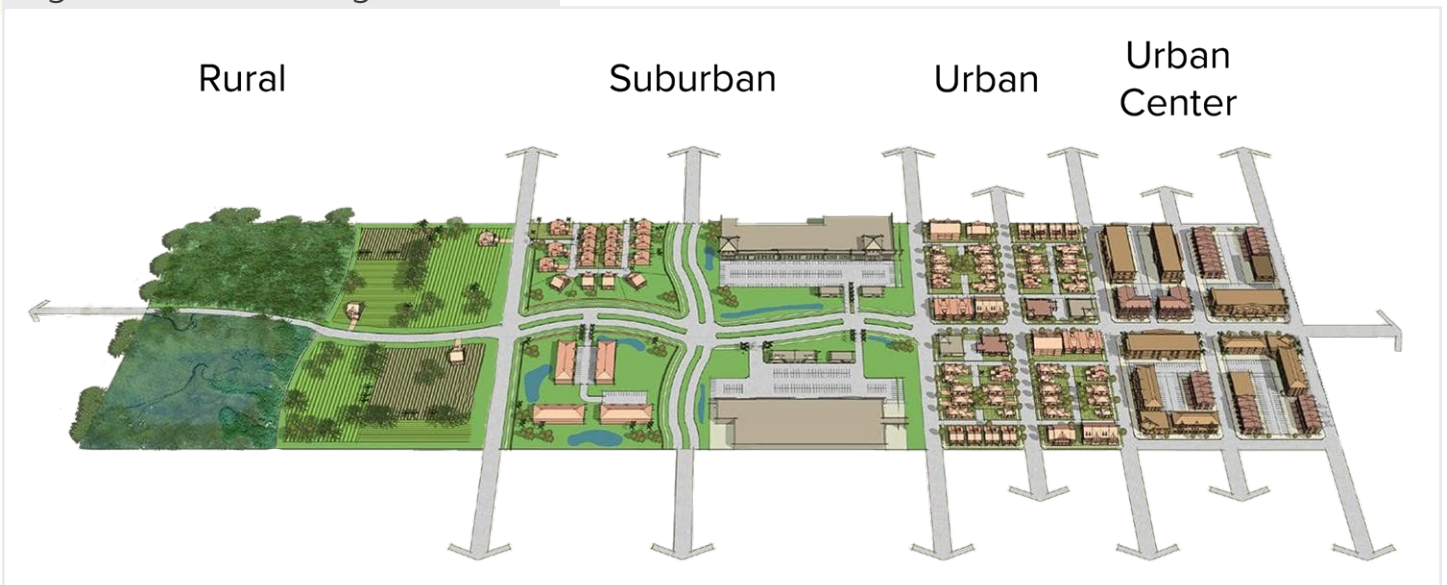
CDTC envisions transportation investment decisions as not only addressing transportation specific issues, but also as a mechanism to capture or leverage opportunities in community and economic development.

To achieve these goals CDTC has developed a planning framework that emphasizes the relationship between transportation and land use and balances the complex competing purposes of the transportation system. The transportation system should support the surrounding land use contexts' goals and enable planned growth and development through the implementation of realistic, fundable multimodal transportation improvements.

Planning Contexts

The purpose of the transportation system is determined by the complexity and intensity of surrounding land use. To illustrate, the land use adjacent to a rural road is simple, often agriculture, open space, or low density residential. In this context, the purpose of the road is to facilitate the transportation of agriculture goods to market or to provide long-distance mobility between communities. On the other end of the spectrum is the urban street where any number of complex uses and activities are taking place, such as long and short distance trips, parking, transit operations, walking, dining, advertising, bicycling, commerce, and freight delivery. The contrast of use requires a plan that is responsive to changing contexts. As a result, roads and streets fall into four different contexts: Rural, Suburban, Urban, and Urban Center based on the intensity and complexity of surrounding land uses with a sliding scale for the purpose and priorities of the transportation system. All areas of the two counties are classified as one of the four contexts and each context and the purpose of the transportation system is described in more detail below.

Figure 2-1: Planning Contexts



Rural

The rural context is characterized by large lot (5 acre minimum) residential, agriculture, or heavy industrial land uses supported by a transportation system that emphasizes fast, efficient mobility for long distance vehicle and freight trips. Travel using other modes of transportation is limited to commuter transit with low stop density, wide shoulders, and separated multi-use pathways that provide regional mobility.

Figure 2-2: Rural Road in Douglas County



Suburban

The suburban context is characterized by primarily single, separated, residential, commercial, or industrial uses supported by a transportation system that emphasizes fast, efficient mobility for vehicle and freight trips between neighborhoods. Pedestrian and bicycle travel is safely accommodated near high activity areas such as schools, bus stops, and residential neighborhoods through high visibility crossing treatments, sidewalks, and on-street bikeways with significant separation from vehicle travel or shared use paths, that are separated from the roadway with a curb and buffer.

Figure 2-3: Suburban Road in East Wenatchee



Urban

The urban context is characterized by mixed housing, commercial, retail, and other land uses at the highest densities in the region, supported by a transportation system that balances mobility of all transportation modes. Vehicle mobility is deemphasized for high quality transit, bicycling, and walking. The urban context has a gridded road network where trips have redundant options in comparison to suburban and rural contexts where vehicle mobility is limited to fewer roads. Pedestrian and bicycle travel is accommodated through a highly-visible, connected network with high accessibility to transit.

Figure 2-4: Urban Road in Wenatchee



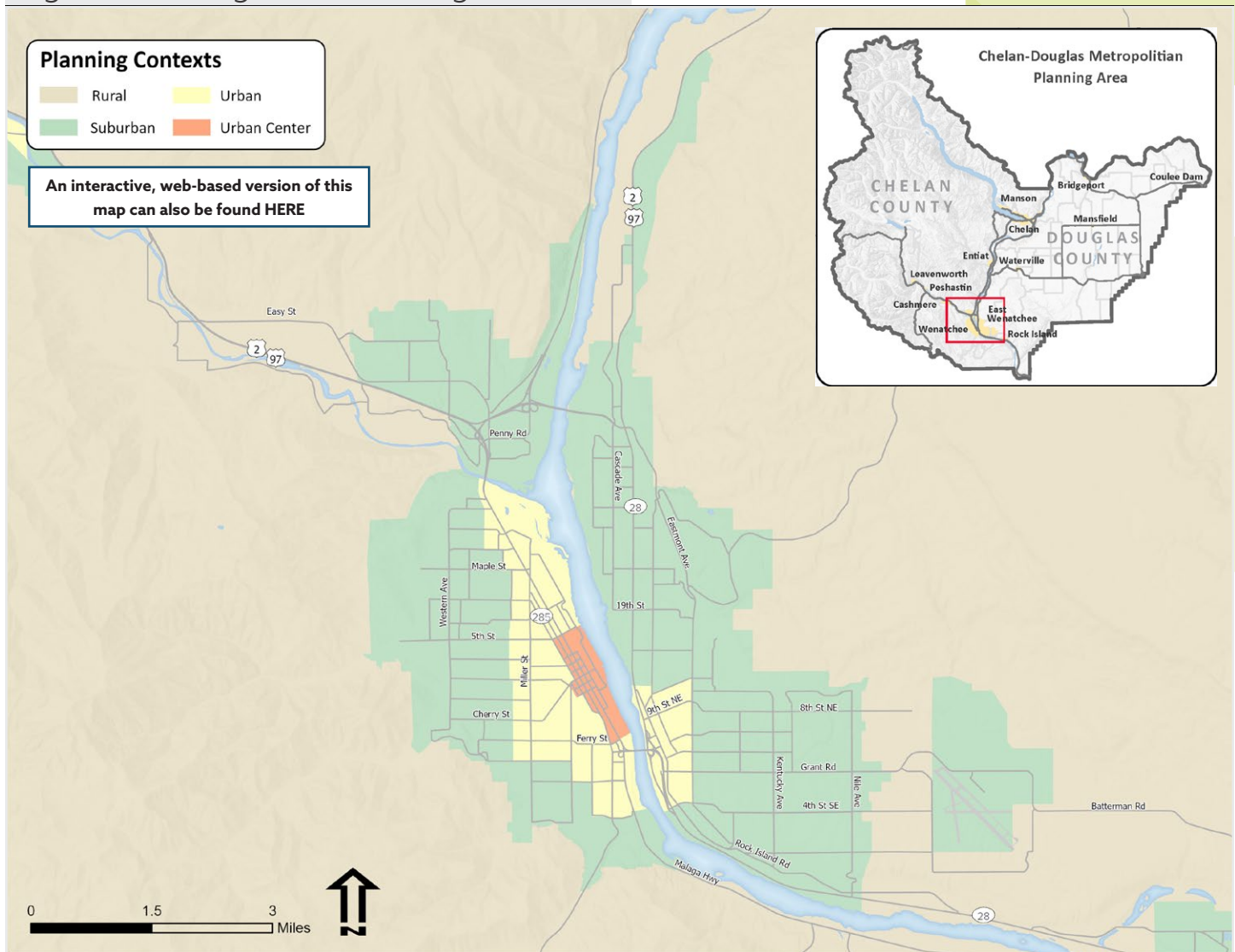
Urban Center

Urban centers are activity hubs with primarily retail land use, buildings oriented towards the street, and predominant pedestrian amenities. The purpose of the public right of way in the urban center context is to support commerce; vehicle mobility has very low importance as it has direct negative impacts on the pedestrian environment and the economic viability of retail land use.

Figure 2-5: Urban Center Street in Wenatchee



Figure 2-6: Regional Planning Contexts



Transportation System Policies

Because the purpose of the transportation system changes with context, so must the policies and methods used to identify where and how the system must be improved to accommodate planned growth. Each planning context in the RTP has corresponding measures and thresholds for establishing the desired operational performance and quality of accommodating different transportation modes to meet growth, development, and travel demand—commonly referred to as the level of service (LOS) standard. Infrastructure that inadequately accommodates demand (does not meet the LOS standard) is identified as being deficient and requires investment to resolve the deficiency.

The measures, thresholds, and deficiencies identified for each mode vary in application and detail as do the resulting transportation investments needed to fix each deficiency. For example, some vehicle mobility deficiencies are determined at specific intersections where vehicle delay is expected to exceed an acceptable level. The resulting transportation need could be an intersection improvement, such as widening or construction of a signal or roundabout. In contrast, bicycle infrastructure deficiencies are determined by the absence of bicycle infrastructure at the corridor level and do not point to spot specific deficiencies but rather identify the entire corridor as deficient. The resulting transportation need is to add on-street bicycle infrastructure.

This level of analysis is adequate for the development of the planning level descriptions and estimated costs for the planned transportation investments identified in Chapter 3. In most cases, further design and evaluation is needed to confirm these costs and the feasibility of correcting each deficiency.

The tables below provide the level of service policy measures and deficiency thresholds that identify locations of inadequate operational performance and quality of accommodation for each land use context and mode.

Table 2-1: Rural LOS Standards

Measure	Standard to be maintained
Vehicle Mobility	LOS E on state highways of regional significance LOS D or C on Highways of Statewide Significance (US 2, US 97, and SR 28)
Pedestrian Connectivity & Accessibility	100% completion of planned regional pathways
Bicycle Mobility	100% completion of planned regional pathways
Roadway Condition	100% of the roads and bridges are in good or fair functional or structural condition

Table 2-2: Suburban LOS Standards

Measure	Standard to be maintained
Vehicle Mobility	LOS D on federally classified roadway segments and intersections LOS D or C on Highways of Statewide Significance (US 2, US 97, and SR 28)
Pedestrian Connectivity & Accessibility	Continuous sidewalk on both sides of federally classified roads ¹ Enhanced crossings on all legs of intersecting federally classified roads ² Four enhanced crossings/mile on federally classified roads with transit and > 3000 ADT ² Absence of identified regional pathways
Bicycle Mobility	100% completion of planned regional on-street bikeways 100% completion of planned regional Pathways
Roadway Condition	100% of the roads and bridges are in good or fair functional or structural condition

1: Except in unique circumstances

2: Less than 8 enhanced crossings per mile in Wenatchee consistent with Pedestrian Master Plan

Table 2-3: Urban LOS Standards

Meausure	Standard to be maintained
Vehicle Mobility	LOS E on federally classified roadway segments and intersections LOS D or C on Highways of Statewide Significance (US 2, US 97, and SR 28)
Pedestrian Connectivity & Accessibility	Continuous sidewalk on both sides of federally classified roads ¹ Enhanced crossings on all legs of intersecting federally classified roads ² Eight enhanced crossings/mile on federally classified roads with transit and > 3000 ADT 100% completion of planned regional pathways
Bicycle Mobility	100% completion of planned regional on-street bikeways 100% completion of planned regional pathways
Roadway Condition	100% of the roads and bridges are in good or fair functional or structural condition

1: Except in unique circumstances

Table 2-4: Urban Center LOS Standards

Meausure	Standard
Vehicle Mobility	LOS E seconds averaged across all federally classified intersections
Pedestrian Connectivity & Accessibility	Continuous sidewalk on both sides of federally classified roads ¹ Enhanced crossings on all legs of intersecting federally classified roads ¹ Eight enhanced crossings/mile on federally classified roads with transit and > 3000 ADT 100% completion of planned regional pathways
Bicycle Mobility	100% completion of planned regional on-street bikeways 100% completion of planned regional pathways
Roadway Condition	100% of the roads and bridges are in good or fair functional or structural condition

1: Except in unique circumstances

Columbia River Crossings

There are three primary bottlenecks in the Wenatchee Valley Urban Area, the SR 285 Wenatchee River Bridge, the US 2/97 Odabashian Bridge, and the SR 285 Sellar Bridge. These bridges are critical for mobility, resiliency, and the health of the regional economy but are the weak point of the transportation system as there are no alternative parallel routes. The SR 285 Wenatchee River Bridge is at capacity now, but there is a plan with approved environmental documentation to construct a parkway bridge directly to the east to provide additional river crossing capacity. The US 2/97 Odabashian Bridge is forecast to have excess capacity in the future. The SR 285 Sellar Bridge is nearing its peak hour capacity now in both the west and eastbound directions with forecasted increased travel demand in both directions.

When travel demand exceeds peak-hour roadway capacity drivers change their behavior by taking trips slightly earlier or later than the peak hour, taking the trip during a time of day with low travel demand, or not taking the trip at all. Because most peak hour trips are non-discretionary, meaning they can't be taken at other times of day or forgone entirely, trips typically occurring in the peak hour now occur in the hours before and after the peak, known as peak spreading. Peak spreading is common in urban contexts and may not lead to full breakdown of traffic operations if there is available capacity in the hours before and after the peak. However, if travel demand has already filled the available capacity across multiple peak hours, significant delay, congestion, and operational breakdown are likely. Therefore, the measure used to identify deficiencies on Columbia River crossings is a 3-hour volume/capacity (V/C) ratio. This ensures that the identification of deficiencies on major river crossings is limited to the most severe cases that may significantly impact the region's mobility, resiliency and economy due to the scale and cost magnitude to address such a deficiency.

Economic Development

CDTC views transportation investments as more than solutions to transportation-specific issues, but also as mechanisms to achieve other outcomes. Unlike the transportation-focused multimodal measures and failure points described above, there aren't explicit, widely accepted methods for identifying the wide range of economic development opportunities and the degree of positive economic benefit leveraged by transportation investment. Economic development goals are inherently speculative, tied to emerging private market conditions, and highly context- and project-specific making transportation investments needed for economic growth purposes difficult to anticipate and plan for in advance.

Because CDTC is not a leading economic development agency the RTP doesn't have a policy with measurable thresholds for identifying transportation investments characterized for economic development. Therefore, transportation investments that leverage an economic development opportunity are included in the RTP in the following conditions:

1. The project is identified in a planning document formally adopted by a CDTC member entity;
2. The CDTC member entity with jurisdiction over the plan or the proposed project submits a request to the CDTC board chair that CDTC include the project as recognized transportation investment need in the Regional Transportation Plan; and
3. The request is considered at the discretion of the CDTC governing board with an affirmative supermajority vote, consistent with CDTC bylaws

Safety

Ensuring safe travel for all modes is foundational to stewardship of the transportation system. As opposed to the other measures, CDTC doesn't have a LOS standard for identifying specific safety deficiencies. Instead, CDTC's safety measure is a system-wide LOS threshold known as "Target Zero". Target Zero was developed by Washington State Traffic Safety Commission (WSTSC) in partnership with WSDOT and the state's MPOs and identifies a goal of zero fatal and serious injuries by 2030. Unfortunately, there has been an increase in fatal and serious injury collisions across the state and region since 2020, pushing Washington and CDTC further from the target zero goal.

WSTSC has been analyzing the factors causing this trend and has identified a policy framework known as the Safe Systems Approach to counteract them. The Safe Systems Approach focuses on coordination and collective effort across traditionally separated agencies, jurisdictions, disciplines, and groups of transportation professionals and road users and articulates the following goals related to education, enforcement, and engineering:

Safer Road Users

All road users engage in proactive safe behaviors, including paying attention, being visible, and following traffic laws. Road users also avoid high risk behaviors that lead to crashes and the potential for serious or fatal injury.

Safer Land Use Planning

Understanding where people will live, work, attend school, and shop, authorities plan for shorter vehicle travel distances and safe travel using all modes, including active transportation, transit, and private and shared vehicles.

Safer Speeds:

Recognizing that crash forces increase exponentially with speed, transportation officials reduce drivers' operating speeds through self-enforcing road designs that encourage speeds that are safe for the road context and for all anticipated road users. Motor vehicle drivers' speeds are also managed through safer vehicle design, driver education, and proactive enforcement.

Safer Roads

Transportation facilities are designed and built to separate users in time and space, manage speeds, and reduce crash impact angles at locations where road users are most likely to come into conflict. Facilities are designed and built to support safe travel using all modes: walking, rolling, biking, riding, driving, and transit.

Safer Vehicles

Vehicles are designed and built to keep all road users inside and outside of the vehicle safe. This includes reduced vehicle mass, speed control, shapes that reduce injury severity for road users outside of the vehicle, active collision avoidance, technology that supports sober and attentive driving, increased visibility, and effective occupant protection.

Effective Post-Crash Care and Response

First responders can arrive quickly at a crash scene and address the most imminent threats to life and health, limiting injury severity when a crash occurs. Investigations and data collection inform all system partners to reduce the recurrences of crashes resulting from lapses in any of the Safe System elements.

As a multijurisdictional governing body, CDTC is well positioned to implement the Safe Systems Approach and facilitate coordination on relevant safety factors in the region that enable the education, enforcement, and engineering policies that create measurable reductions in fatalities and serious injuries.

Regional Bikeways and Shared – Use Pathways

Prior to the adoption of Transportation 2050, CDTC used a standalone bikeway plan to identify the bikeway network vision and bicycle planning policies. It recommended nearly 226 miles of bikeway and shared-use pathway improvements on roads ranging from primary arterials to local neighborhood roads. The bikeway plan is now the bikeway element of the regional transportation plan and provides details on the bikeway network and bikeway policies and can be found in Appendix C.

Though all recommendations in the bikeway element are a part of the bikeway network blueprint, a refined list of priority regional bikeways have been identified to differentiate between bikeways that provide regional mobility and are identified as needs in the RTP and those that provide local bicycle mobility. This focuses the RTP and CDTC's bikeway planning work on critical regional routes while providing local agencies a clearer approach for implementing and prioritizing the planned bikeway network. CDTC has an active role in the implementation of the prioritized regional bikeways, while the non-regional system is wholly within the purview of the local agencies to implement. Some local neighborhood roads are identified as regional bikeways because they combine high connectivity with low volume and low speed and are more desirable than adjacent arterial streets. Regional bikeways are identified using the following factors:

Apple Capital Loop Trail Connectivity

Does the bikeway provide new or improved connectivity to the loop trail? Does the bikeway fill a gap on or extend an existing bikeway with connectivity to the loop trail?

Bikeway Spacing

Regional bikeways are spaced roughly $\frac{1}{4}$ - $\frac{1}{2}$ mile apart.

Bikeway Demand

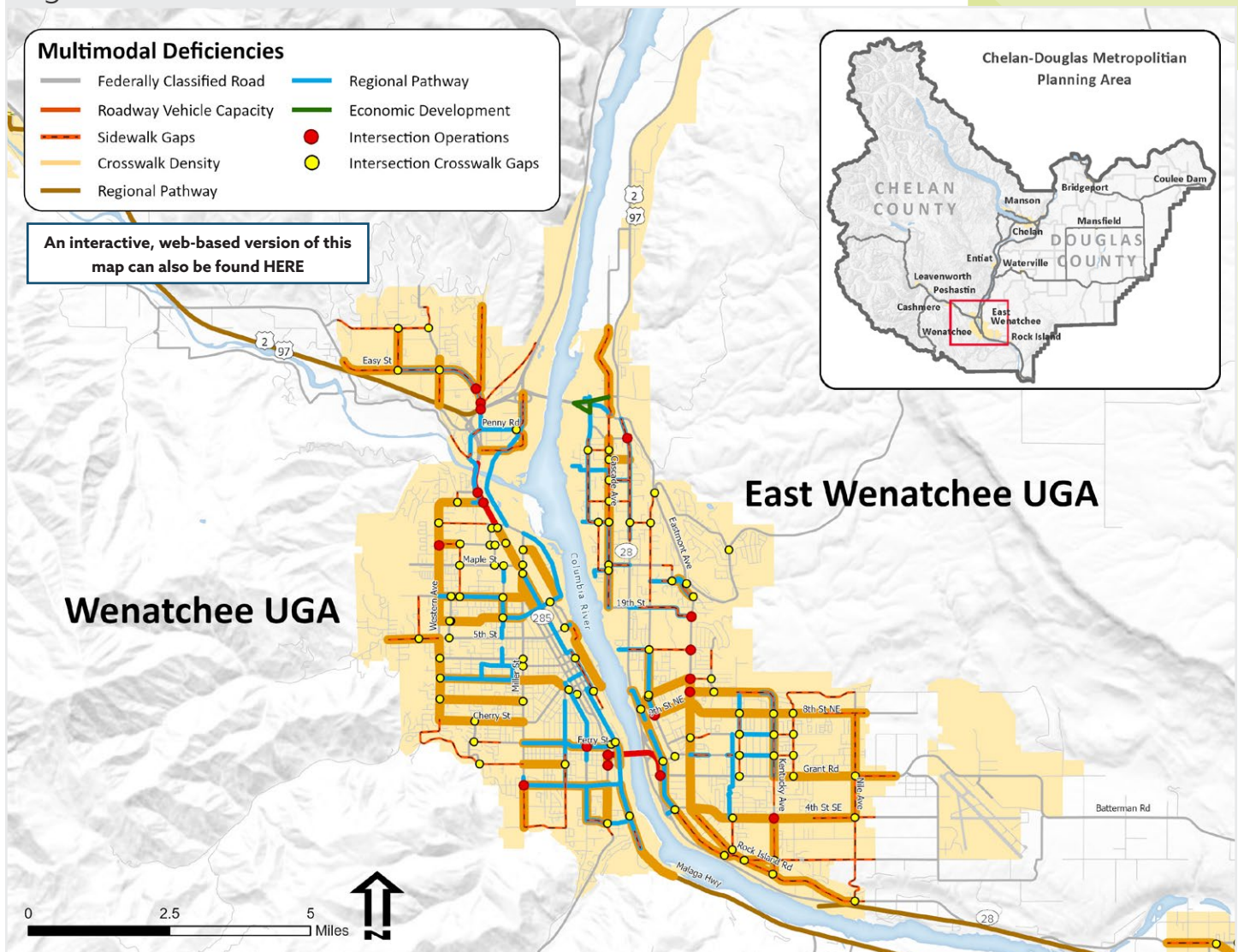
High surrounding population/job density, intersection density, destination density (schools, services), and transit presence.

Low Income/Minority Populations

Presence of low income/minority populations in census block groups higher than the regional average.

In total, there are 330 deficiencies across all contexts (Figure 2-7) that need to be addressed to accommodate planned growth. Appendix A describes the methods used to operationalize the LOS policy measures and thresholds to identify each deficiency.

Figure 2-7: Multitmodal Deficiencies



Relationship to Federal, State and Local Planning

There are multiple, overlapping federal, state, and local statutes and classification systems for transportation systems and land use, most notably the federal functional classification system, the AASHTO Green Book, Washington State's Growth Management Act, and local zoning & development regulations. Figure 2-8 depicts how the RTP's land use context classification system and LOS policies relate to these other frameworks. In most cases RTP's land use contexts align with these other systems with the exception of the federal functional classification system where urban roads in the RTP may have a rural functional classification.

Consistency

RCW 47.80.023 and RCW 36.70a require CDTC to certify that the transportation elements of comprehensive plans (including the LOS standard) adopted by counties, cities, and towns within the region are consistent with the adopted regional transportation plan.

Figure 2-8: RTP Policy Framework Relationship

RTP Contexts				
	Urban Center	Urban	Suburban	Rural
Functional Classification	Urban & Rural			
AASHTO Green Book, 7th Edition	Urban		Suburban	Rural
Washington State Growth Management	Urban			Rural
Local Zoning	Mixed Use Business District	Mixed Use Business District Neighborhood Commercial Mid - High Density Residential	Low - Mid Density Residential Commercial Industrial	Low Density Residential Agriculture Industrial

Consistency between the RTP and each TE is determined by LOS policy alignment for the regional transportation system. For the purpose of consistency, CDTC only evaluates TE policy alignment on the subset of federal-aid highways and locally owned roads covered by the RTP's LOS framework. The absence of an LOS policy for a component of the regional system does not preclude it from eligibility for CDTC's STBG program nor programming in the Regional TIP.

In general, it's the intent of the regional LOS framework to articulate a higher tolerance for vehicle congestion and delay in urban and urban center contexts where there is alternative capacity for travel demand and less tolerance for vehicle congestion in suburban and rural contexts where capacity for travel demand is largely limited to vehicles. However, if a Comprehensive Plan's vehicle mobility LOS standard articulates a higher tolerance for vehicle delay and congestion (more delay is allowed before a facility is deficient) than the RTP regardless of context, it is consistent. If a Comprehensive Plan's vehicle mobility LOS articulates a lower tolerance for delay and congestion than the RTP, it is inconsistent.

Lastly, there are multiple methods and metrics available to assess intersection and roadway segment vehicle mobility level of service, all of which correspond to their own unique classification. If the LOS classification for vehicle mobility in the TE of Comprehensive Plans matches the RTP it is considered consistent regardless of the chosen method or metric used, even if the resulting LOS has an incidental effect on a particular facility (WAC 365-196-840).

Development Mitigation

In addition to planning, the LOS standard is used to determine the impacts and mitigation required from land development. RCW 36.70A.070 states that local jurisdictions must adopt and enforce ordinances (commonly referred to as the concurrency or adequate facility ordinances) to prohibit development that causes the LOS to decline below adopted standards (as defined by the transportation element in the Comprehensive Plan), unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. This means that LOS standards used to identify

transportation deficiencies in long-range plans are the same standards applied to identify transportation impacts caused by near-term development. Because long-range plans don't determine exactly when an investment is needed this test is required to establish the connection between the needs identified in long-range plans and the exact point the need must be constructed to accommodate growth and development.

WSDOT LOS Coordination

CDTC must also coordinate with WSDOT on the LOS standard for state highways in two ways:

4. WSDOT develops and defines the level of service standard for highways of statewide significance (HSS) (RCW 47.06.140) which is adopted by reference in the RTP. HSS routes include US 2, US 97, and SR 28. WSDOT coordinates closely with MPOs and local agencies in the development of the LOS standard.
5. CDTC develops and defines the LOS standard for non HSS routes (RCW 47.80.030) jointly with WSDOT. In addition to its participation on the CDTC Technical Advisory Committee, WSDOT was consulted directly during the development of the LOS standard that applies to non HSS routes.

RTP Relationship to other CDTC Studies & Plans

Because the RTP's geographic scope covers two counties, all transportation modes, and numerous policies it does into a level of detail to adequately understand the complexities of all transportation topics. Additionally, five-year update cycles don't allow for immediate responsiveness to emerging trends and issues. As a result, CDTC produces other transportation plans and studies that are often more detailed in scope, focusing on a specific corridor, mode, or issue. The outcomes of these efforts are used in different ways in the RTP as described below.

Plans

CDTC has multiple plans that provide recommendations for complex topics that require a detailed level of analysis not approached in the RTP, examples include:

- » **The North Wenatchee Avenue Master Plan** – Identified the recommended approach for accommodating multi-travel demands on North Wenatchee Avenue and ultimately the now funded Confluence Parkway project.
- » **Metro Freight & Truck Routes Plan** – Defined freight routes in the greater Wenatchee urban area, improving signage to direct freight trucks to the desired routes, and identifying and prioritizing transportation system improvements to enhance freight travel.
- » **Coordinated Mobility Plan** - The Coordinated Mobility Plan is updated every four years and outlines how transit agencies, human service agencies, and other transportation providers can work together to improve regional mobility for individuals with mobility challenges throughout the Chelan-Douglas region.

The adoption of a plan by the CDTC board constitutes a call to action for continued development and implementation of the recommendations, which are automatically eligible for inclusion in the RTP.

Because the RTP is updated every five years the recommendations from another plan may be modified in the RTP as conditions change and concepts are better understood.

Studies

In general, studies are investigative efforts designed to provide CDTC with more information on a wide variety of topics, for example:

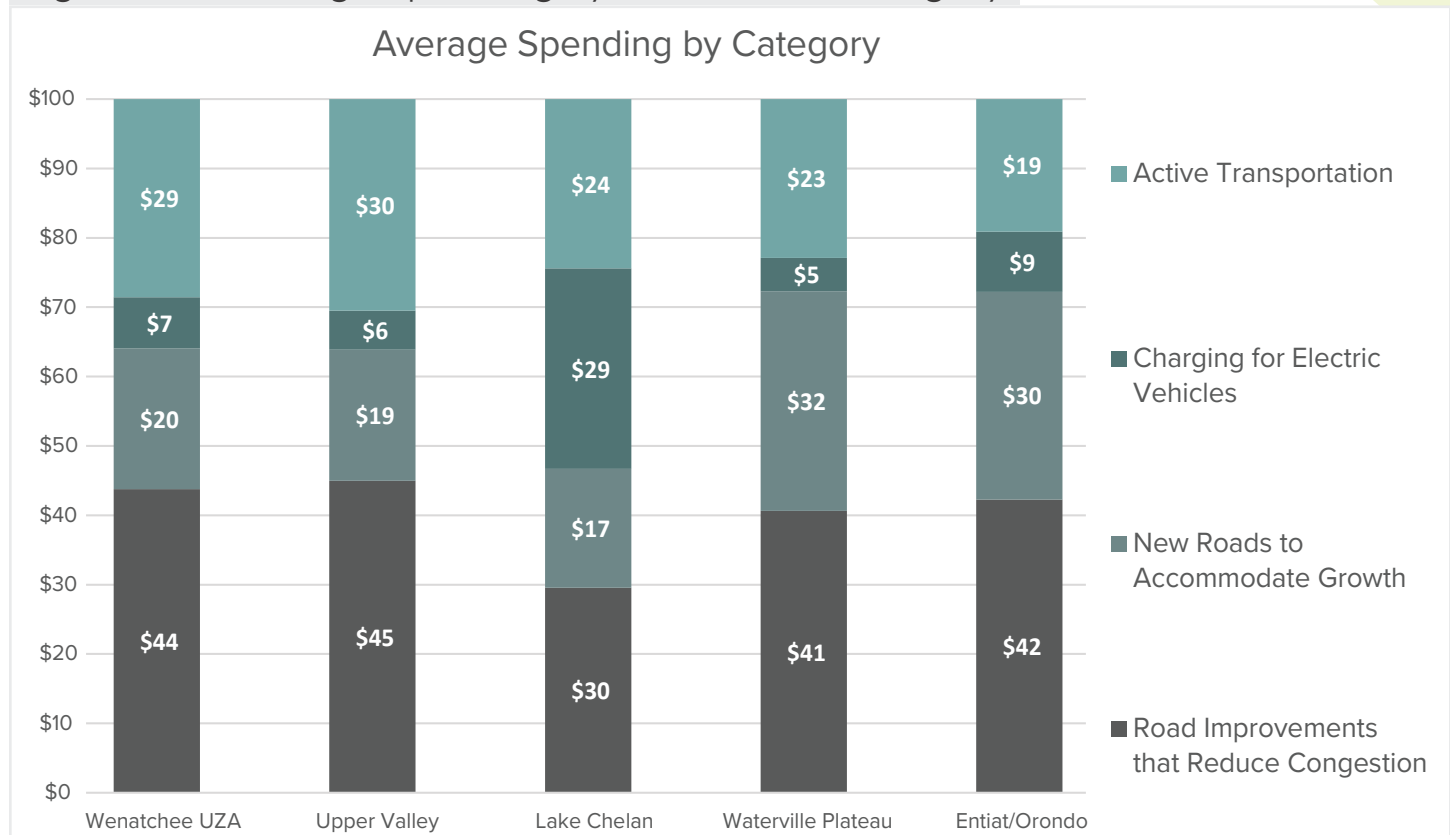
- » **The SR 28 Study** – Addressed multi-modal issues along a singular highway corridor.
- » **The South Wenatchee Bicycle Connectivity Study** – Identified improvement concepts to improve bicycling comfort and connectivity to the Apple Capital Loop Trail.
- » **Columbia River Crossing Study** – Assessed the benefits, costs, and detriments of a new bridge crossing the Columbia at locations from the Odabashian bridge to the Rock Island dam.

While similar to plans, the findings of a study do not include a call to action for CDTC; they are intended to provide detail on specific topics to better inform policy and planning and are not automatically included in the RTP. However, they may be included through the RTP's level of service evaluations in the case of project-specific study findings, or through the development of RTP policy.

Public Engagement

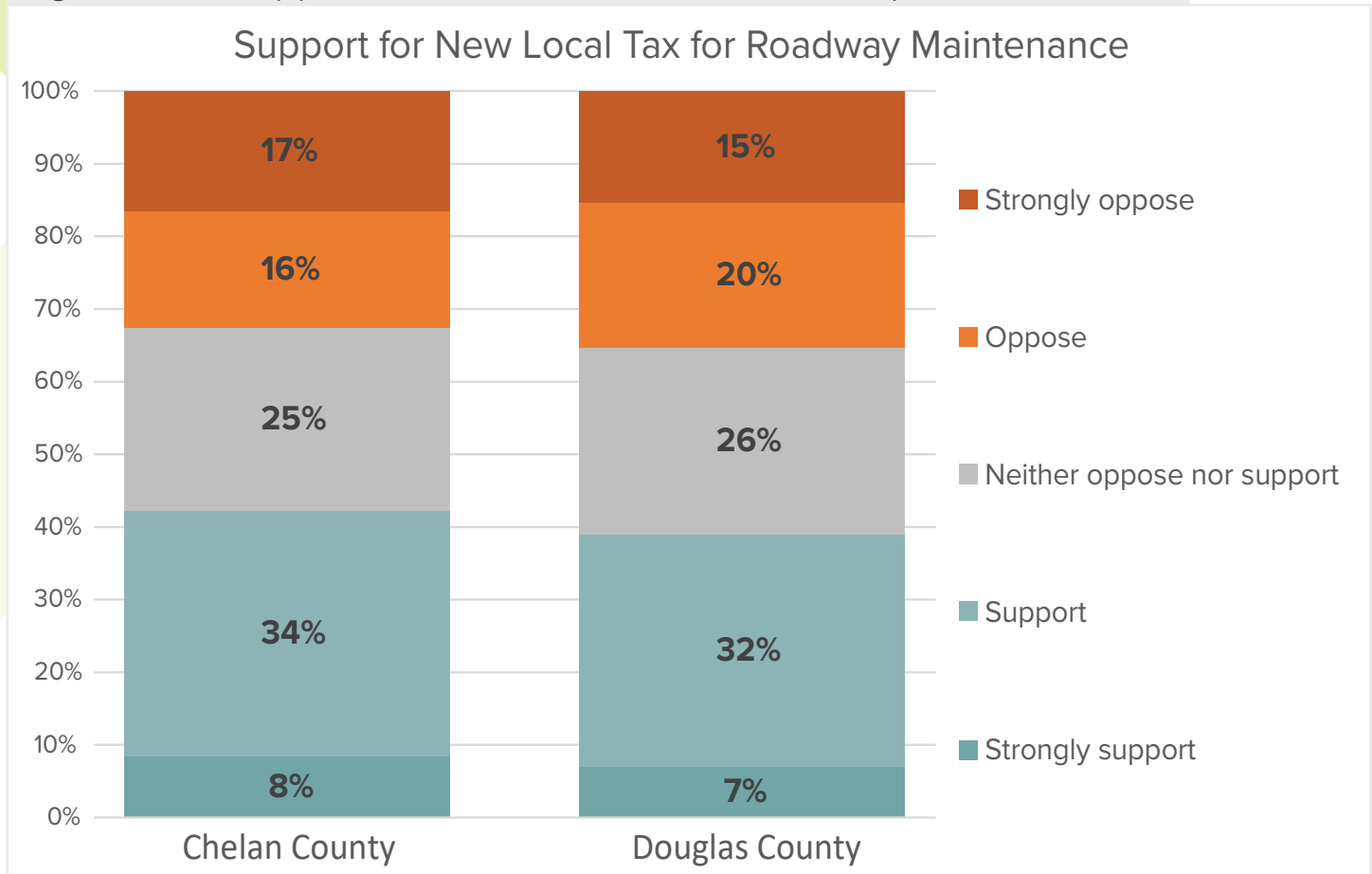
Engaging the public on transportation issues is one of the foundations of the RTP. In order to understand public preference and opinions on relevant regional transportation issues, CDTC conducted a survey of 1,074 randomly selected residents of Chelan and Douglas counties between September '22 and November '22 with the number of survey participants in each zip code being proportional to the zip code's share of the regional population. The survey questions were designed to gather data on the public's opinion of regional transportation policy choices relevant to the CDTC board such as active transportation use, transit use, vehicle ownership costs, teleworking, electric vehicles, investment priorities, and new taxes and fees to fund maintenance and preservation with responses to key questions summarized in figures 2-9 through 2-12. The full report can be provided upon request.

Figure 2-9: Average Spending by Investment Category



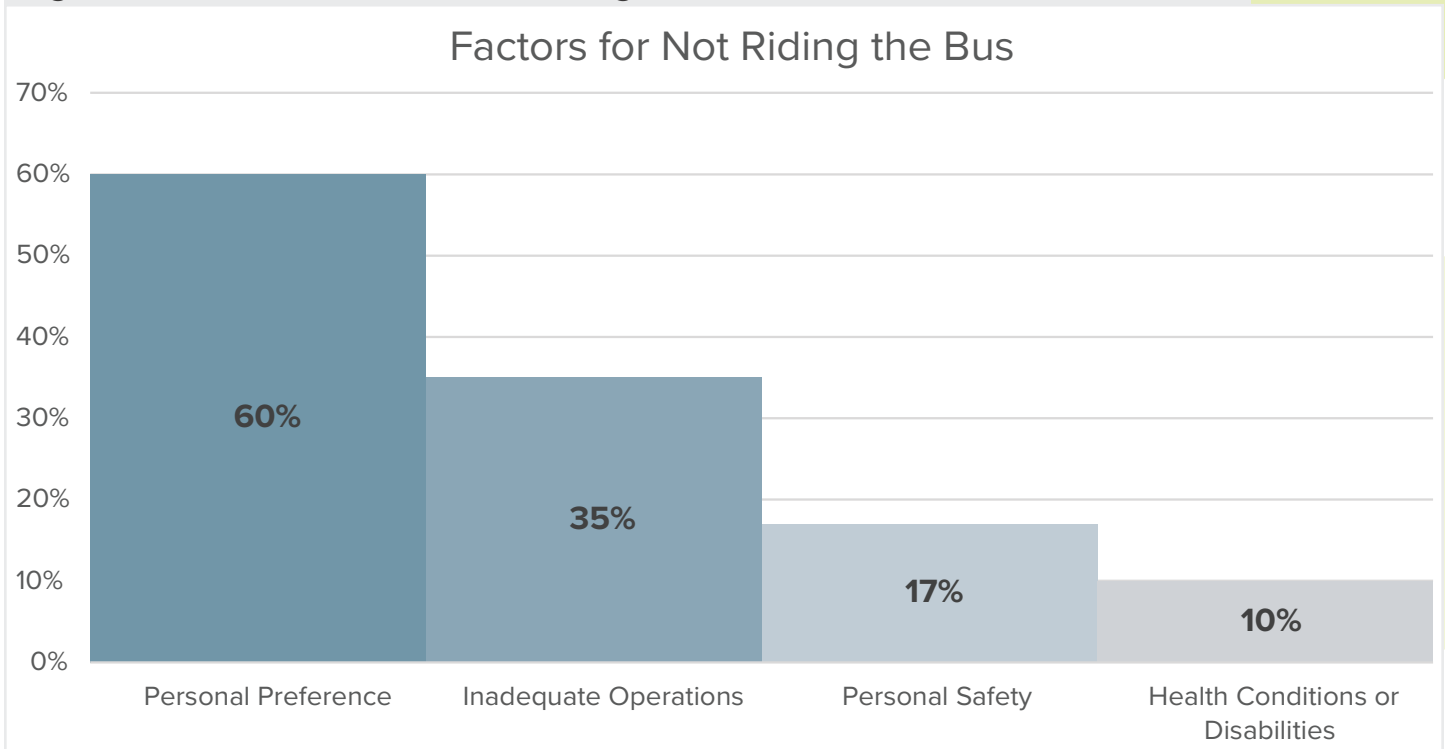
This question asked respondents to budget \$100 in four transportation investment categories. Maintenance and preservation of existing assets was not included as its not discretionary spending. CDTC staff grouped respondents by zip code. In almost all locations over half of the budget is dedicated to road improvements that reduce congestion or new roads to keep up with impacts from growth. In some areas active transportation improvements were nearly 30% of the budget.

Figure 2-10: Support for New Local Tax for Roadway Maintenance



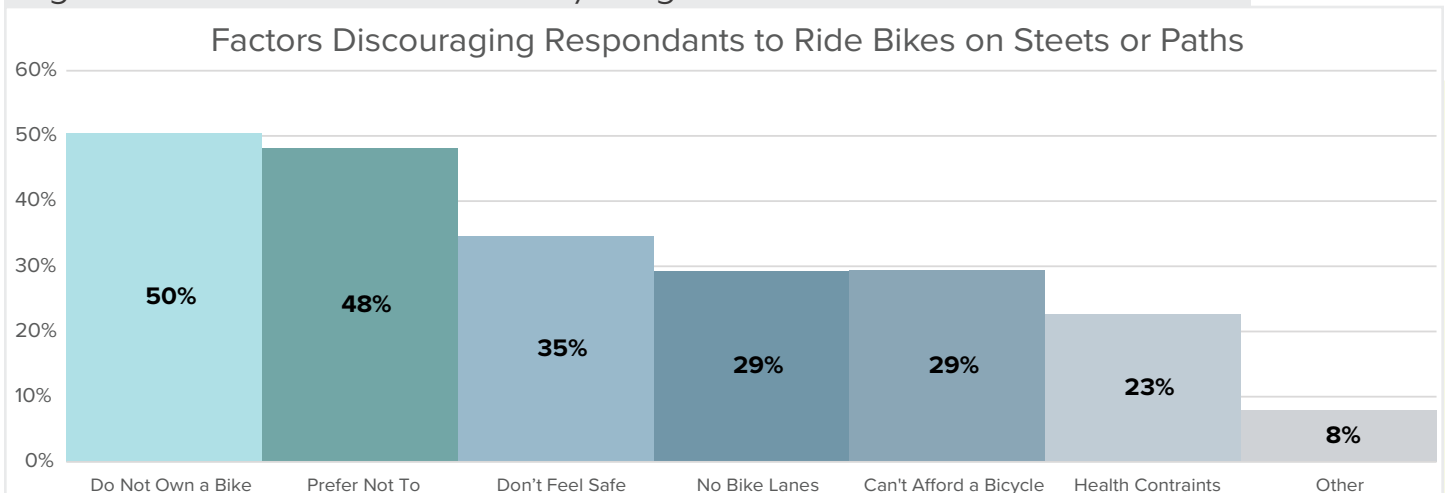
This question asked respondents' level of support for a new tax or fee to pay for ongoing roadway maintenance and preservation. In both Chelan and Douglas counties more people support a fee than oppose a fee.

Figure 2-11: Factors for Not Riding the Bus



This question asked respondents to choose factors that discourage them from using Link Transit (the public bus). Staff aggregated and categorized three response options related to service scheduling and design. 1 in 3 respondents are discouraged to ride the bus because of service scheduling and design inconveniences.

Figure 2-12: Factors for not Bicycling on Streets or Paths



This question asked respondents to choose reasons that discourage them from riding bicycles on paved streets or pathways. 1 in 3 respondents are discouraged from riding bicycles because they don't feel safe or because there aren't any bike lanes.

3

INVESTMENT STRATEGY



The transportation investments identified in this Plan represent the means to achieve desired regional goals, enable growth, and meet the needs of the traveling public within the diverse contexts of the region. Some investments are large, changing regional travel patterns and removing barriers to regional household, employment, and economic growth. Others reflect incremental steps towards a more safe, complete, comprehensive, and resilient transportation system that provides mobility and accessibility for all modes. In total, nearly 260 discrete projects with costs ranging from \$500 thousand to nearly \$180 million are needed, in addition to over \$2 billion to keep existing infrastructure in a state of good repair. Because the list of needs is so broad, the RTP categorizes investments in the following ways with discrete implementation strategies:

- » New capacity needed to accommodate growth and leverage transportation investment to accomplish economic development goals
- » Improvements to meet the diverse, changing needs of a growing traveling public
- » Ongoing financial obligations to preserve and maintain existing infrastructure at the lowest life-cycle cost

There are a small number of investments in the RTP that have a high impact on the regional system, cross geographic and/or administrative jurisdictional boundaries, and are implemented through regional collaboration and coalition building. These investments are also high in cost and not typically funded by revenues commonly available to or used within the region. Because of these factors, CDTC plays an active role in stewarding major investments by dedicating resources to move ideas through planning, concept development and implementation. These projects are categorized as New System Capacity.

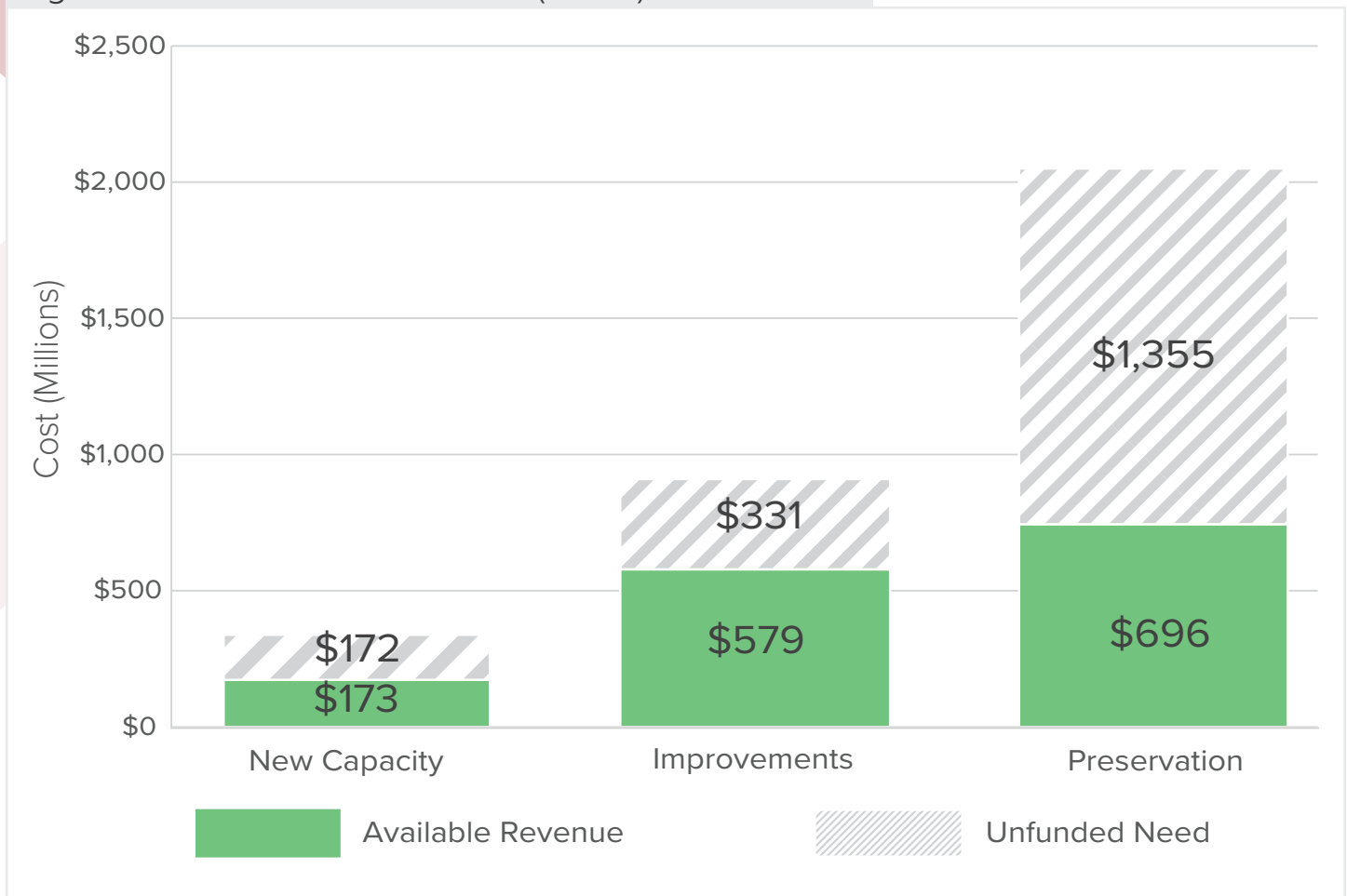
Most investments identified in the RTP are identified through the RTP's transportation system deficiency policies, local planning, or CDTC supporting studies and plans. These projects have localized impact, are implemented at the discretion of the local agency with jurisdiction over the project, and funded using revenue sources familiar to local agencies. Typically, CDTC does not have an active role in concept development and implementation of minor investments except for those that are funded through CDTC's STBG grant program. These projects are categorized as Improvements.

Keeping the transportation system in a state of good repair at the lowest life-cycle cost is a core function of public infrastructure stewardship. WSDOT and the local agencies in the region strive to manage their preservation programs to maximize infrastructure lifespan at the highest benefit to the public. Unlike new capacity and improvements, preservation needs are not identified at the project level.

Preservation need was estimated using a region-wide assessment of the cost to preserve the total center-line mileage of the regional road network over 25 years. Asphalt overlay was assumed for all arterials and state highways while chip-seal was assumed for all collectors and rural roads consistent with current local pavement management strategies.

Figure 3-1 summarizes the total investment needed in each of the three investment categories compared with the amount of revenue forecasted to be available over the 25-year plan horizon. The amount of revenue assigned to each of the three investment categories represents this plan's overall strategy for balancing the three competing need categories.

Figure 3-1: Revenue and Need (2044)



Ideally, all needs identified in the plan have an identified revenue source and strategy for securing funding. However, the costs to construct all planned transportation investments to accommodate growth and long-term preservation obligations exceed the assumed 25-year revenue from grants, taxes, and fees used by the jurisdictions in Chelan and Douglas counties. This creates a highly competitive funding environment that requires detailed prioritization and scrutiny of project costs and benefits with many projects being constructed long after they're needed or not at all. Because of this, CDTC uses the following principles to guide investment priorities and funding strategies:

- » Allocate existing and future financial resources to transportation improvements in a way that maximizes community benefit, distributes benefits equitably and balances the needs of the public who walk, bike, drive, and use public transit.
- » Assess the revenue capacity and public support of unused local taxes and fees and encourage their use to leverage additional state and federal dollars.
- » Encourage partnerships between jurisdictions to take advantage of economies of scale and to ensure consistent implementation of improvements across jurisdictional boundaries to prevent gaps in transportation infrastructure.

New Capacity

New capacity investments are large, expensive, require regional coordination, and address major critical deficiencies that jeopardize the region's ability to grow and develop. New capacity investments typically include roadway widening, new roads, or new bridges that address vehicle mobility bottlenecks, congestion, or inadequate roadway connectivity. However, some system capacity projects have other purposes, such as leveraging economic development, providing system resiliency and redundancy, or providing safe and comfortable bicycling and walking between communities. Although new capacity projects are high cost with significant regional impact, they represent the smallest portion of planned transportation need because of the region's limited resources for planning, designing, and constructing projects of significant magnitude.

Columbia and Wenatchee River Bridges

The bridges over the Columbia and Wenatchee rivers in the Wenatchee Valley are the regional transportation system's primary vehicle mobility constraints and causes of congestion. Projected growth both within and outside the Wenatchee Valley, exacerbated by the Wenatchee Valley's place as the region's economic and social hub, will lead to increased congestion, limiting the number of trips in and out of Wenatchee and significantly impacting local and regional travel behavior. Currently, the worst of the bridge bottlenecks exists on the SR 285 Wenatchee River Bridge and its approaches.

More than a decade of planning and engineering has been conducted to identify a solution to the SR 285 Wenatchee River Bridge issue, a new bridge and bypass route east of the existing SR 285 bridge called Confluence Parkway. Confluence Parkway creates additional parallel capacity to SR 285 and reduces congestion, improves transit operations, creates system redundancy for evacuations and emergencies, and allows increased trip making in and out of Wenatchee. The first phase of Confluence Parkway from the Miller St/SR 285 intersection to the intersection of Hawley St and the BNSF railroad is funded and under construction. However, a \$172 million funding gap remains to construct the bridge over the Wenatchee River, roadway connections to the north, and operational improvements at the Miller St/SR 285 intersection where Confluence Parkway ties into the existing roadway network. **Finishing Confluence Parkway is the priority system capacity project for improving vehicle mobility and reducing congestion.**

The RTP's transportation system deficiency policies are the starting point for identifying major investments, but due to the complexity and scale of major new capacity investments, additional analysis and evaluation is needed to identify the solution. Like the SR 285 Wenatchee River bridge, CDTC's deficiency policies indicate that the SR 285 Sellar Bridge does not have enough capacity to accommodate future travel demand. When analyzed narrowly, the solution to the Sellar Bridge deficiency is to add capacity, which can be accomplished by building a new bridge centrally located in the Wenatchee Urban Area. However, the magnitude of cost, complexity, and impact of a new bridge requires additional analysis to understand long-term benefits relative to cost and whether comparable alternatives exist.

Economic Development

The construction of new roads and bridges can accomplish more than congestion relief. The RTP's other priority capacity investment leverages land development in the last large, undeveloped area of the Wenatchee Valley by constructing the necessary road network to access the broader transportation system.

The Wenatchi Landing Interchange is the primary transportation investment needed to catalyze the land use vision in Douglas County's North End Master Site Plan and Planned Action EIS. The interchange includes an eastbound off ramp and westbound on ramp from US 2/97 just east of the Columbia River and an extension of Empire Avenue north to US 2/97 and the new on/off ramps. The interchange is projected to catalyze the construction of approximately 2.25 million square feet of building space containing 110 dwellings, 270 hotel units and create 3,700 permanent jobs. **The Wenatchi Landing Interchange is the priority system capacity project for leveraging economic development opportunities and has a 2025 estimated cost of \$60 million.**

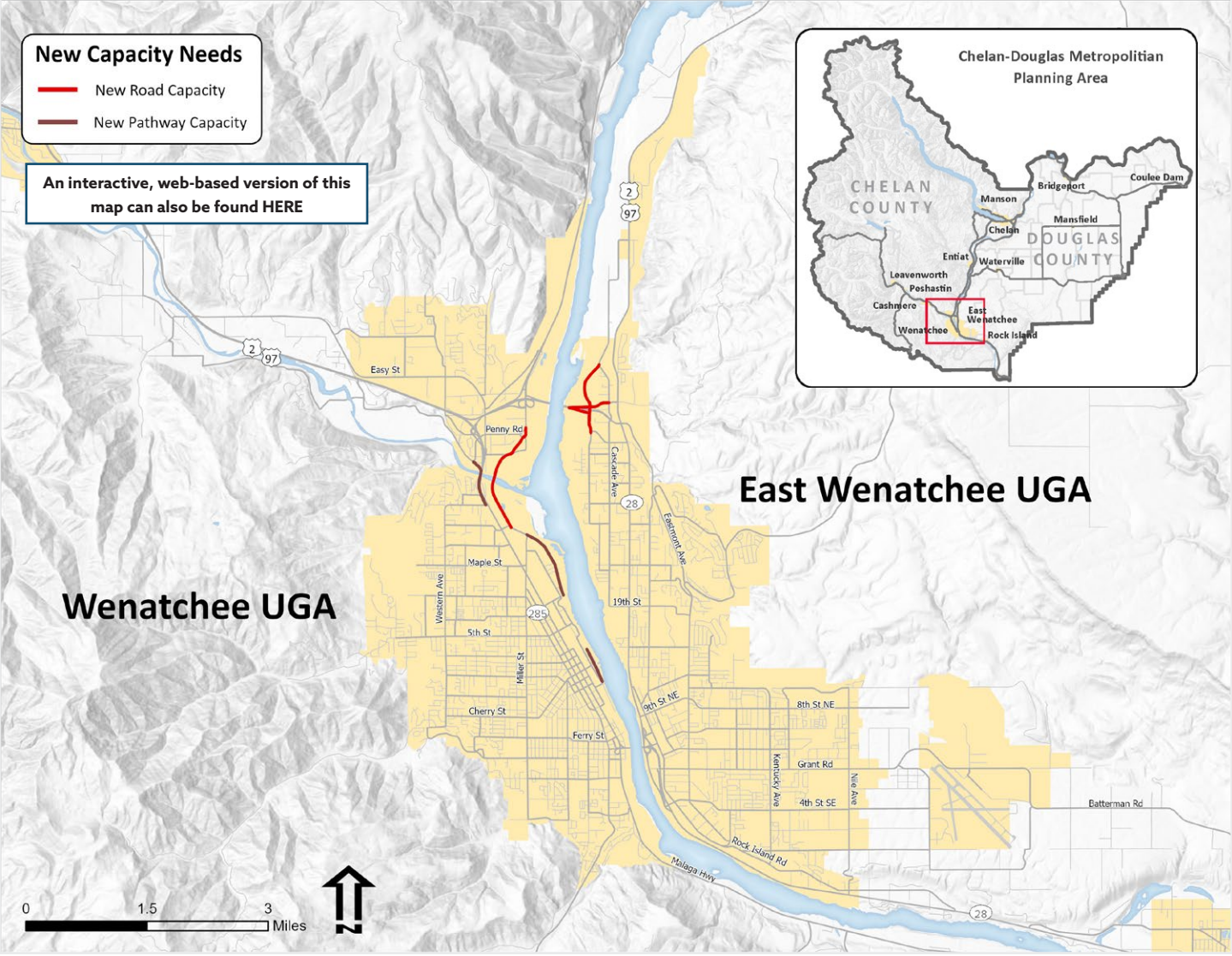
Pathways

In addition to the new roadway capacity projects described above, there are numerous planned pathway capacity projects. These include Loop Trail widening within the Wenatchee Riverfront Parks, and the Pioneer Canal pathway along N Wenatchee Ave from Maiden Ln to Chatham Hill Dr.

Table 3-1: New Capacity Needs

Jurisdiction	Projects	2025 Cumulative Cost	2031 Cumulative Cost (121%)	2044 Cumulative Cost (183%)
Chelan County	1	\$32,800,000	\$39,688,000	\$60,024,000
Douglas County	1	\$59,800,000	\$72,358,000	\$109,434,000
Wenatchee	3	\$177,900,000	\$215,259,000	\$325,557,000
Total	5	\$270,500,000	\$327,305,000	\$495,015,000

Figure 3-2: New Capacity Needs



Improvements

The Improvements investment category can be described as building better, not bigger. The character of the region's suburban, urban, and urban center contexts are changing. Orchards are being replaced by subdivisions and commercial centers, increasing travel demand on roads and intersections originally built and designed around agriculture traffic. Urban neighborhoods are growing vertically; 300 to 400-unit apartments are being constructed in the same amount of space previously occupied by 30 to 40 single family homes, exponentially increasing travel demand where the space to accommodate it is limited. This change in development pattern requires a change in the transportation system. The cost to accommodate increasing travel demand using only vehicle capacity far outpaces the financial ability to do so. The ultimate solution is to create capacity through other modes. Old roads need to be reconstructed to accommodate more multimodal traffic with additional multimodal improvements, while newer urban roads need to be retrofitted or reconstructed with multimodal improvements to meet the demand of higher intensity development.

In rural areas improvements are also driven by the need to safely accommodate all modes of the traveling public, but with less of an emphasis on creating capacity through using active modes, though demand exists. Rural state highways and county roads are responsible for providing long-distance regional mobility for commuters and freight while also providing accessibility to Link's rural service via bicycle and pedestrian infrastructure. As a result, rural improvement projects focus on ensuring safe vehicle movements at intersections of low speed and high speed county roads, linear geometric improvements, and amenities for bicyclists and pedestrians that adequately provide transit access relative to its use.

Tables 3-2 through 3-5 summarize the need to improve existing roads and intersections to accommodate growth through multiple implementation strategies, full road reconstructions with improvements, standalone multi-modal retrofits, programmatic improvements, and improvements with preservation.

The construction of bicycle and pedestrian infrastructure often occurs when the condition of a road deteriorates to a point where preservation is no longer effective and it needs to be reconstructed. In full reconstructions, the cost to construct improvements like sidewalks and bike lanes is less than standalone retrofits because the roadway is "open", allowing widening and installation of drainage where new curb lines are established. The share of road reconstruction costs associated with pedestrian infrastructure and bicycle infrastructure is roughly 30% and 0.5% respectively, of the overall reconstruction costs. Full reconstruction is identified for roads currently rated as "poor" and where the existing sub-grade and roadway prism are not up to standard. Therefore, standalone pedestrian and bicycle improvements are not identified for these road sections. In contrast, standalone retrofits are recommended for roads with adequate subgrade, right of way, and/or curb-curb width where improvements could be implemented without moving the curb line or reconstructing the road.

Costs are shown in both present-day and inflated year-of-expenditure (YOE) to demonstrate the increased costs of deferred improvements over time. In total, roadway reconstructions with improvements and standalone multimodal retrofits will implement 35 regional bikeways, fill 151 sidewalk gaps, construct 8 enhanced pedestrian crossings, reconstruct one structurally deficient road, and improve operational efficiency at 16 intersections.

Table 3-2: Improvements - Road Reconstruction

Jurisdiction	Projects	2025 Cumulative Cost	2031 Cumulative Cost (121%)	2044 Cumulative Cost (183%)
Bridgeport	1	\$2,400,000	\$2,904,000	\$4,392,000
Cashmere	2	\$5,300,000	\$6,413,000	\$9,699,000
Chelan	1	\$2,100,000	\$2,541,000	\$3,843,000
Chelan County	21	\$68,010,000	\$82,292,000	\$124,458,000
Douglas County	20	\$79,780,000	\$96,534,000	\$145,997,000
East Wenatchee	10	\$32,160,000	\$38,914,000	\$58,853,000
Leavenworth	1	\$5,000,000	\$6,050,000	\$9,150,000
Rock Island	3	\$8,250,000	\$9,983,000	\$15,098,000
Wenatchee	17	\$63,220,000	\$76,496,000	\$115,693,000
WSDOT	1	\$13,000,000	\$15,730,000	\$23,790,000
Total	77	\$279,220,000	\$337,857,000	\$510,973,000

Table 3-3: Improvements - Standalone Multimodal Retrofit

Jurisdiction	Projects	2025 Cumulative Cost	2031* Cumulative Cost (121%)	2044* Cumulative Cost (183%)
Bridgeport	6	\$7,863,000	\$9,514,230	\$14,389,000
Cashmere	3	\$1,920,000	\$2,323,200	\$3,514,000
Chelan	2	\$1,110,000	\$1,343,100	\$2,031,000
Chelan County	14	\$19,917,000	\$24,099,570	\$36,449,000
Douglas County	25	\$36,270,000	\$43,886,700	\$66,376,000
East Wenatchee	12	\$20,831,000	\$25,205,510	\$38,120,000
Entiat	1	\$2,200,000	\$2,662,000	\$4,026,000
Leavenworth	3	\$5,090,000	\$6,158,900	\$9,315,000
Mansfield	3	\$2,950,000	\$3,569,500	\$5,399,000
Waterville	8	\$4,680,000	\$5,662,800	\$8,564,000
Wenatchee	16	\$21,195,000	\$25,645,950	\$38,786,950
WSDOT	13	\$24,150,000	\$29,221,500	\$44,195,000
Total	106	\$148,176,000	\$179,292,960	\$271,164,950

Programmatic Improvements

In addition to road reconstructions and retrofits, there are numerous low-cost investments in each jurisdiction that fill small gaps in the multimodal network. These investments are grouped into “programmatic bundles” where a project scope may include the construction of infrastructure on different roads. There are funding programs that solely fund these types of projects such as the Complete Streets Program administered by the Transportation Improvement Board (TIB). Table 3-4 shows the programmatic bundles for each jurisdiction.

Table 3-4: Improvements - Programmatic Needs

Jurisdiction	Projects	2025 Cumulative Cost	2031 Cumulative Cost (121%)	2044 Cumulative Cost (183%)
Cashmere	4	\$774,000	\$937,000	\$1,416,000
Chelan Co	2	\$172,000	\$208,000	\$315,000
Douglas Co	2	\$263,000	\$318,000	\$481,000
Wenatchee	6	\$654,000	\$791,000	\$1,197,000
Total	14	\$1,863,000	\$2,254,000	\$3,409,000

Lastly, there are 22 regional bikeway improvements that could be implemented during preservation program activities as shown in Table 3-5 and Figure 3-3. The costs shown for these improvements include the cost to overlay the road and re-stripe with bikeways and bikeway markings. Some of these improvements require rededication of roadway space, most commonly parking lanes. The details of bikeway road prism impacts can be found in Appendix C.

Approximately \$1.5 billion (2044 YOE) is needed to fully fund New Capacity and Improvement projects. Roughly 62% of the needed funding is expected to be available through the revenue mechanisms currently used by local agencies and WSDOT, which is assumed to include state and federal gas tax allocations, competitive and formula-based grant programs, local-option taxes and fees, and periodic legislative appropriations and equals a total 25-year transportation budget for capital improvements of \$751.8 million (adjusted for inflation) as shown in Table 3-6.

Table 3-5: Bikeway Improvements with Preservation

Jurisdiction	Projects	2025 Cumulative Cost	2031 Cumulative Cost (121%)	2044 Cumulative Cost (183%)
Chelan Co	2	\$840,000	\$1,016,000	\$1,537,000
Douglas Co	4	\$2,635,000	\$3,188,000	\$4,822,000
Wenatchee	16	\$12,540,000	\$15,173,000	\$22,948,000
Total	22	\$16,015,000	\$19,377,000	\$29,307,000

Figure 3-3: Improvement Needs

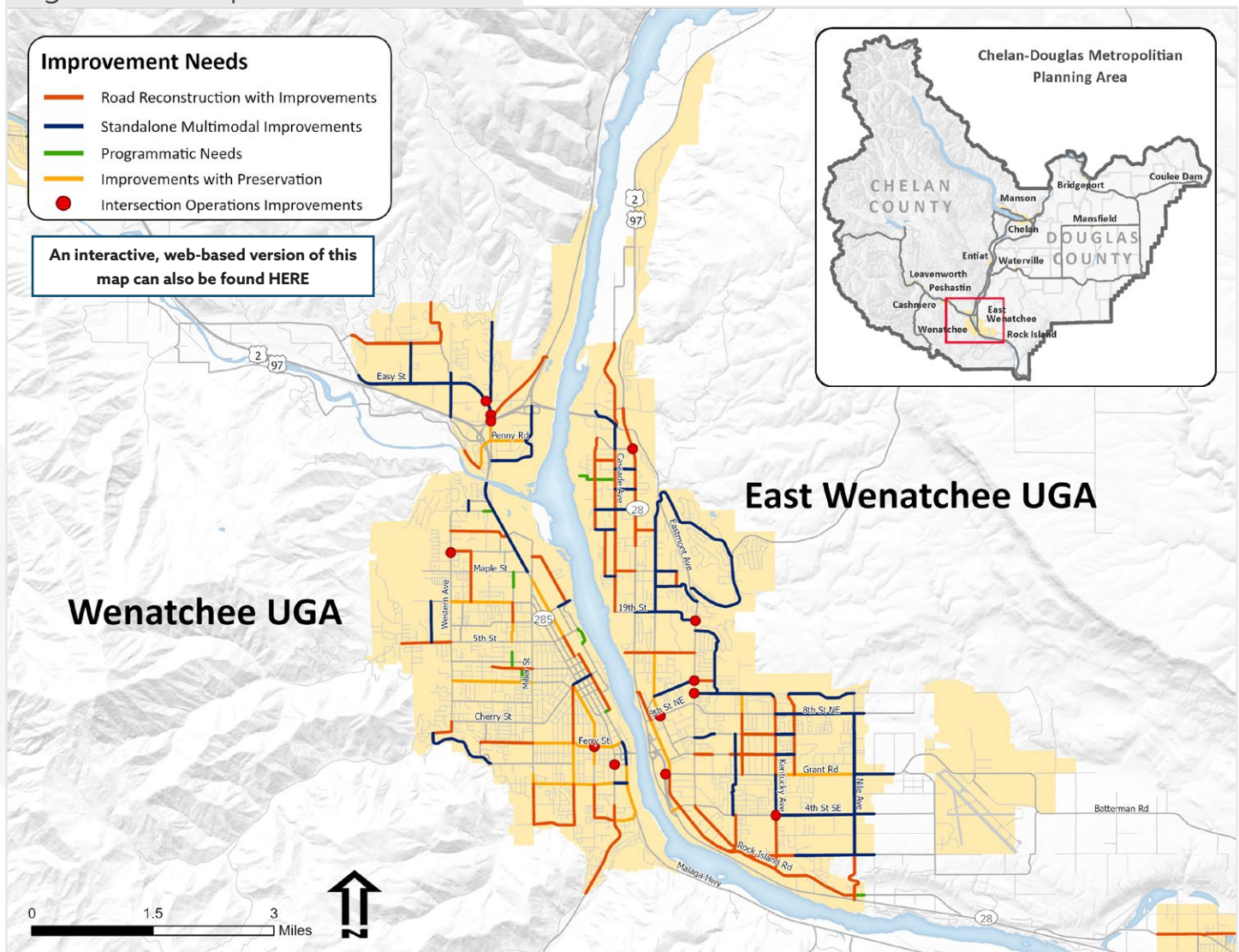


Table 3-6: Revenue for New Capacity & Improvements

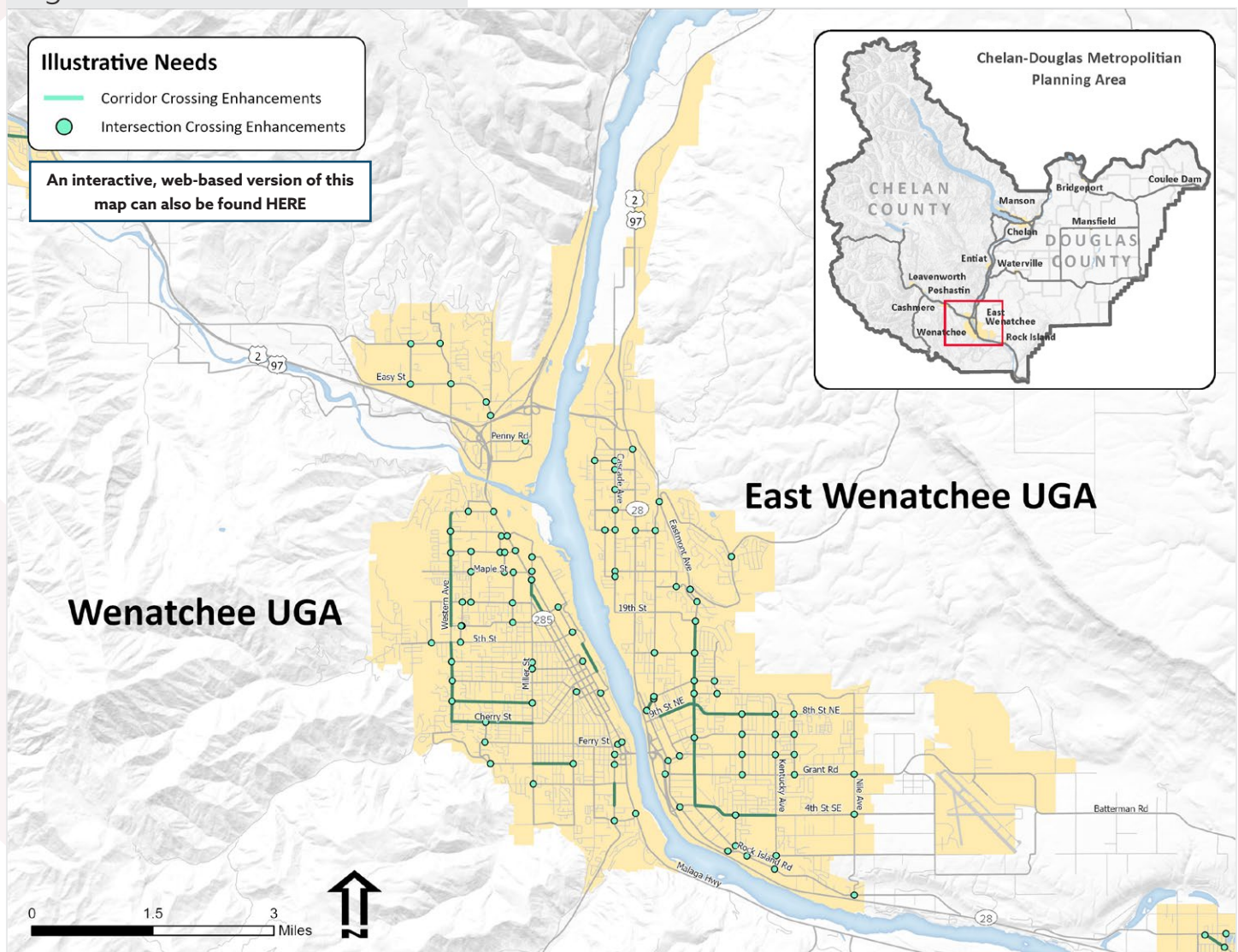
Revenue Source	Type	Revenue Administrator	Available Revenue
Complete Streets Program	Formula	Transportation Improvement Board	\$6,000,000
Urban Streets Program	Competitive Grant	Transportation Improvement Board	\$197,000,000
Small City Streets Program	Competitive Grant	Transportation Improvement Board	\$22,000,000
Surface Transportation Block Grant	Competitive Grant	CDTC	\$79,000,000
Bike Ped/Safe Routes to School Programs	Competitive Grant	WSDOT	\$60,000,000
Highway Safety Improvement Program	Competitive Grant	WSDOT	\$47,000,000
Local Bridge Program	Competitive Grant	WSDOT	\$38,000,000
Strategic Freight Investment Program	Competitive Grant	Freight Mobility Strategic Investment Board	\$7,500,000
Project - Based Federal Grants	Competitive Grant	USDOT	146,500,000
WSDOT Internal Programs	State Taxes and Fees	WSDOT	\$31,000,000
Local Funds	Local Taxes and Fees	Local Government	\$91,300,000
State Appropriations	Legislatively Directed Funds	Washington State Legislature	86,500,000
Total			\$811,800,000

Illustrative Needs

Multiple RTP policies point to the identification of deficiencies that require additional concept development and planning outside of the scope of the RTP to identify a feasible solution and project need.

The pedestrian connectivity and accessibility policy for suburban, urban, and urban center contexts identifies deficiencies on roads that have less than four (suburban) or eight (urban, urban center) enhanced crossings per mile and at intersections without enhanced crossings on all legs of intersecting federally classified roads. Because the appropriate crossing enhancement is dependent on roadway volume, speed, sight lines, etc. and the cost of crossing enhancements varies exponentially, specific treatments with cost estimates were not identified. Instead, 27 roads and 140 intersections are identified as needing further study to determine the appropriate crossing treatment(s). These could be implemented as standalone improvements or programatically where multiple improvements are needed along a corridor.

Figure 3-4: Illustrative needs

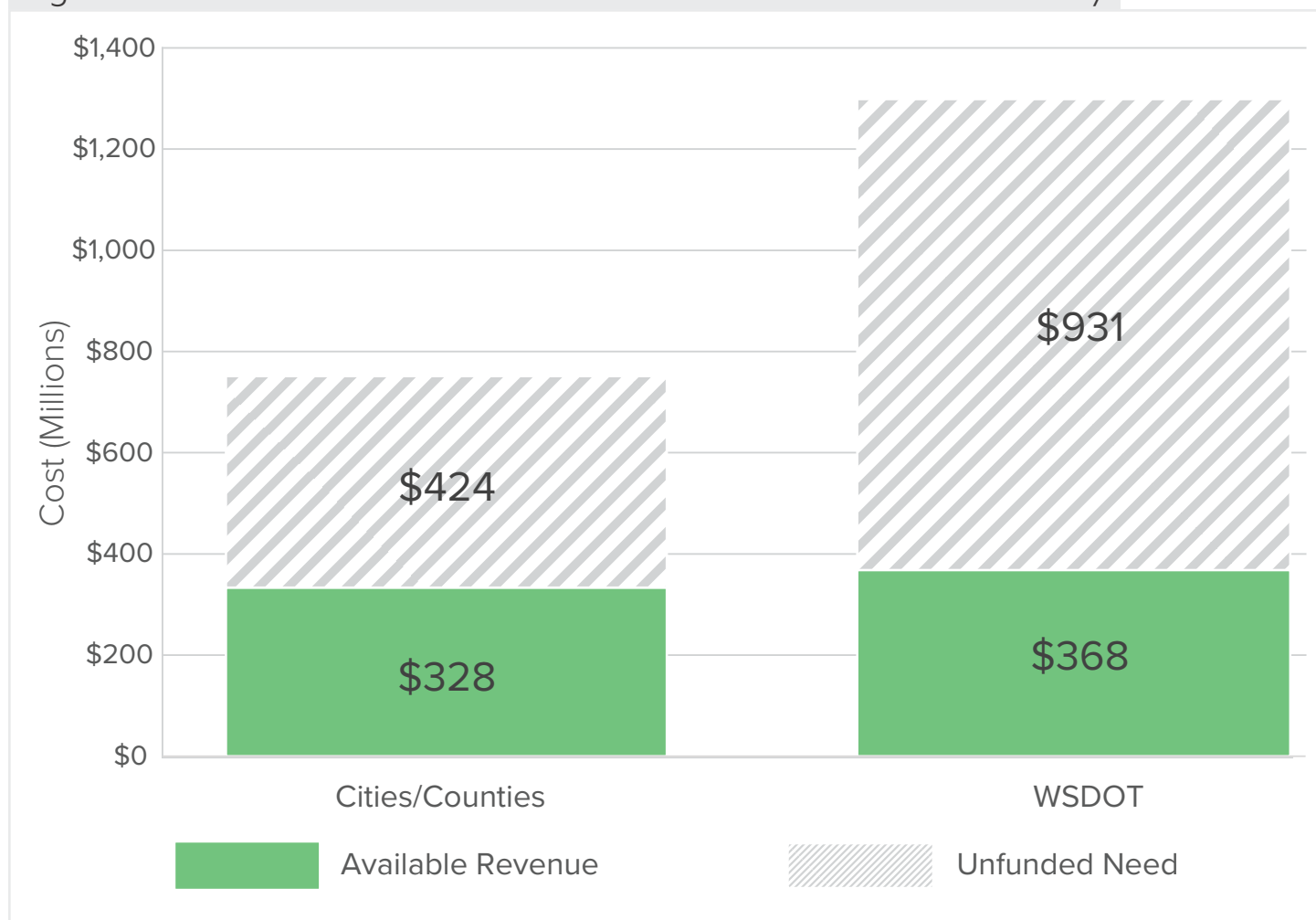


Pavement and Bridge Preservation

In addition to capital needs, the cities, counties, and WSDOT have the financial obligation to maintain and preserve existing transportation infrastructure in a state of good repair at the lowest lifecycle cost. This includes roads, bridges, sidewalks, bike lanes, shared use paths, signals, and signage.

Currently, 85% of the regional system is in Good or Fair condition. While this may suggest local jurisdictions have nearly adequate funding available for roadway and bridge preservation, they're facing a growing cost liability for preserving both the regional and local systems. The cost of full reconstruction compared to periodic preservation and cost of deferred treatment must be considered to fully understand the financial challenge of meeting CDTC's system preservation goal. For example, once a roadway or bridge degrades from Fair to Poor condition, full reconstruction costs up to ten times that of a preservation treatment, depending on the type of roadway surface and structure. Additionally, local budgets haven't been able to keep pace with preservation need; total road mileage and bridge deck area past due for treatment has been increasing year-to-year. Approximately \$5.5 million and \$16 million is spent on preservation annually by local agencies and WSDOT while over double that is needed, creating a growing long-term financial liability. The current relationship between preservation revenue and need for local agencies and WSDOT is shown in Figure 3-2. There are two policy options to address the preservation shortfall.

Figure 3-5: Preservation Revenue and Investment Need Summary



1. Increase revenue; or

2. Maintain the network at a functional but lower quality allowed by existing revenue

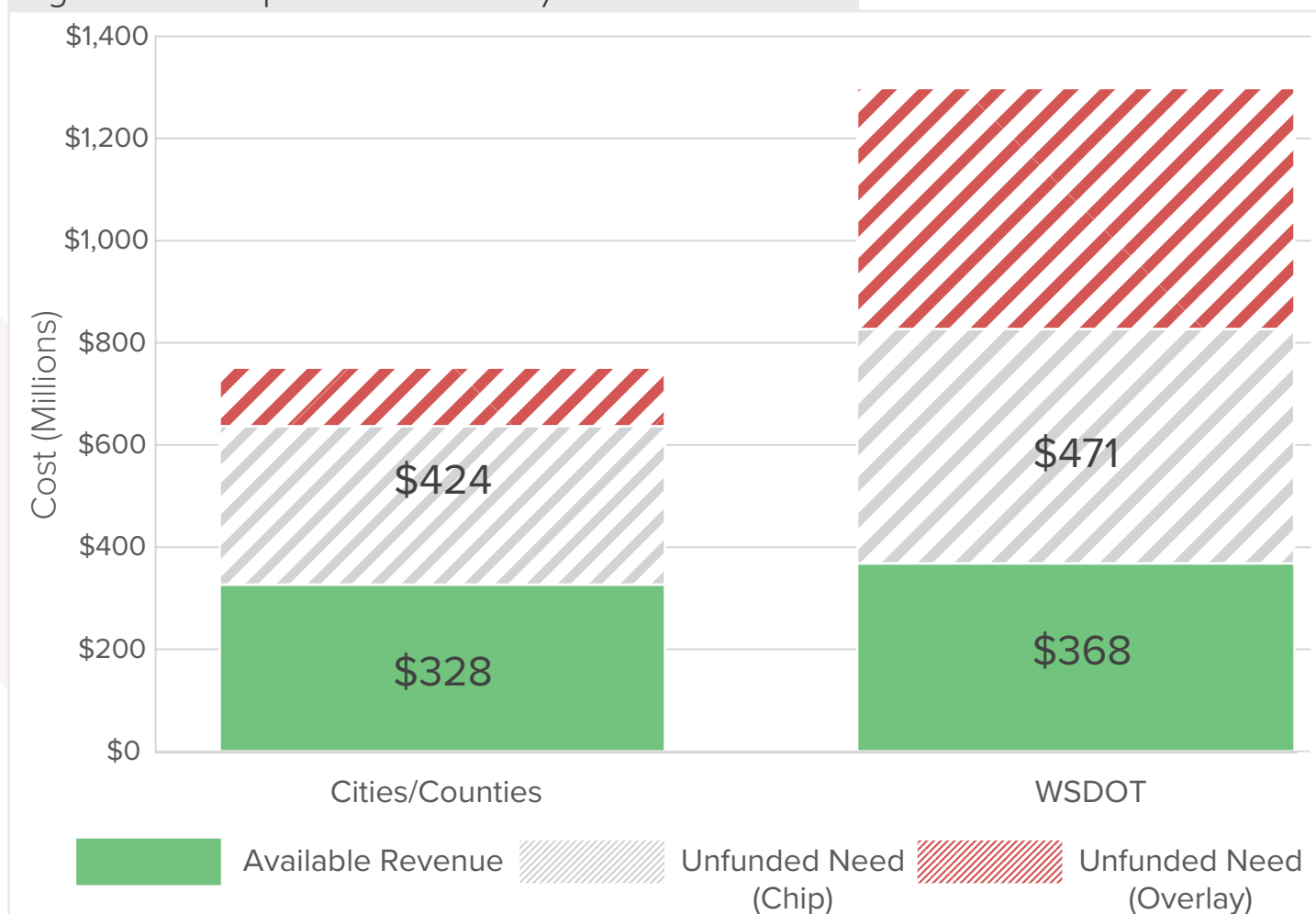
Local agencies can advocate for increased external state and federal dollars and also use local mechanisms to generate revenue from the community and visitors to fund the preservation shortfall. If a mechanism were available, the preservation shortfall could be covered if each household in the region paid roughly \$100 monthly for the next 25 years. Any new revenue collected at the state level is assumed to be spent on state highways with the state legislature continuing to encourage the use of local revenue generating options.

The inverse of funding the preservation shortfall is to preserve the network at a quality achievable with current revenue; Approaches for maintaining the network at a lower quality include:

- » Transition to chip-seal preservation treatment only on all federally classified roads
- » Limiting any preservation treatment to travel lanes only
- » Complete reclamation of local roads to gravel

The figure below shows the financial impact of transitioning to chip-seal treatment on federally classified roads for cities, counties, and WSDOT. The transition reduces the unfunded preservation need by nearly 30%, largely due to eliminating overlays on long segments of state highways. This does not address the local roadway system, which represents the majority of roadway centerline mileage in cities and counties, but also sees the least volume, requiring less frequent preservation treatments.

Figure 3-6: Chip Seal Vs. Overlay Revenue & Need



CDTC places a high priority assisting its member agencies in the development of viable, long-term strategies for roadway preservation. While not a comprehensive revenue source for the preservation shortfall, CDTC funds local preservation projects through its competitive Surface Transportation Block Grant Program (STBG). CDTC takes a long-term, regional view to assess ideas for generating additional local revenue in the face of insufficient funding, and if necessary, redefining the state of good repair.

Unused Revenue Options

Because capital investment needs exceed revenue, local agencies must prioritize projects to maximize the benefit of limited financial resources. Although most revenue sources have been tapped, the following local sources aren’t used by multiple jurisdictions in Chelan and Douglas Counties:

Impact fees

Impact fees are fees collected from new development that allow agencies to recover a proportional share of the costs to provide adequate facilities to accommodate planned growth. Impact fees often have a trip-based rate and incentives for certain development types or development in certain areas. Impact fee revenue can be spent anywhere within the impact fee collection area boundary – often city limits. In most cases impact fees are calculated by dividing the total cost of transportation investment to accommodate planned growth by the increase in trips over 25 years. Often times the final approved impact fee is a portion of this calculation to reflect the shared responsibility of local government and private development to provide adequate transportation to accommodate growth. On average, cities and counties in Washington collect \$5,700 per trip generated by new development with incentives provided for certain developments. Impact fees cannot be used to fund preservation activities.

Transportation Benefit District (TBD)

Cities or counties may form Transportation Benefit Districts (TBD) to fund improvements through either sales tax and/or vehicle license fees. TBDs generally share the same boundaries of a jurisdiction and are governed by the jurisdiction’s legislative body with the authority to levy up to a 0.3% sales tax or \$100 vehicle registration fee. A TBD may impose a 0.1% levy by majority vote of the governing body as long as the TBD includes all of the territory within the jurisdictions forming the TBD. The remaining .02% requires voter approval. TBDs may impose councilmanic fees up to \$50 but require voter approval to exceed that threshold.

The cities of Wenatchee, East Wenatchee, and Leavenworth have created TBDs and issued a 0.2% levy generating \$1.6 million, \$600 thousand, and \$650 thousand annually. In 2024, voters in the City of Chelan passed a 0.3% TBD sales tax estimated to generate \$1.2 million annually. TBD revenue can fund capital and preservation investments. 25-year revenue estimates for a 0.02% sales tax levy for the other eight jurisdictions not currently using TBDs are provided in table 3-6.

Table 3-7: TBD Revenue	
Jurisdiction	25-Year Estimated Revenue
Chelan County	\$59,447,164
Douglas County	\$73,883,105
Entiat	\$1,383,943
Cashmere	\$6,820,972
Bridgeport	\$1,166,903
Rock Island	\$1,882,133
Mansfield	\$330,633
Waterville	\$1,115,738

Local Option Motor Vehicle Fuel Tax

If passed by a majority of its voters, any county can levy an additional motor vehicle fuel tax of up to 10% of the state's per-gallon tax (\$55.4). Motor vehicle fuel taxes are typically used to supplement preservation program budgets.

Metropolitan Parks Districts

Metropolitan parks districts (MPD) may be created for the management, control, improvement, maintenance, and acquisition of parks, parkways, boulevards, and recreational facilities. An MPD may include territory located in portions or in all of one or more cities or counties. Though MPDs typically aren't established for transportation purposes, the overlap between recreational and transportation use of non-motorized shared use paths creates a connection between the establishment of an MPD and the construction and maintenance of a shared use path network. MPDs are authorized to levy up to \$0.75 per \$1,000 assessed value, though limitations apply based on the levies of other taxing districts and other statute regulating property tax levies.

Demand Management

Demand management focuses on policy actions and transportation investments that reduce peak capacity demand for cars on the transportation system by promoting incremental mode-shift away from automobiles to strike a balance amongst auto, bike, pedestrian, and transit capacity investments. Rather than simply identify capacity-based improvements for auto congestion, demand management considers ways other modes reduce the demand for lane-miles while providing the same trip making capacity. Demand management solutions in the proper land use context may include projects as simple as high-frequency bus service and comfortable and connected active transportation facilities.

Providing a comparable and competitive transportation alternative to cars, combined with implementing mixed-use development within the urbanized areas, has the potential to reduce the strain that development and growth will put on the region's road network. Moreover, prioritizing demand management today may postpone the need for expensive auto capacity expansion on the network.

Active Transportation

Bicycling and walking as a means of transportation is governed by the proximity of jobs, homes, schools, and commerce. Long trip distances, and lack of sidewalk and bikeway connectivity limit the demand for active transportation trips. As a result, the focus of active transportation planning has been on the Wenatchee and East Wenatchee Urbanized Areas (UZA) where trip distances are short and could be substituted with a form of active transportation.

Bikeway and sidewalk networks need to be comfortable and connected in order to tap into the latent demand for active transportation trip making. High comfort facilities encourage use by a broad cross section of the public. Bikeway and sidewalk planning and design should consider treatments that benefit high-risk, less mobile users in order to provide capacity for all—a principle known as planning for the 8 and 80-year-old. Connectivity works hand in hand with comfort. One small section of uncomfortable bicycle lane or sidewalk may be enough to deter users in perpetuity. A comfortable and connected active

transportation network may steer a shift away from automobiles for a relatively small number of trips, but a small reduction in peak-hour automobile demand on congested roads can have significant benefit. The shift may increase when drivers notice bicycles traveling as fast or faster than cars through congested corridors and begin to consider whether a mode shift is possible for them.

It is a CDTC policy goal to complete the bicycle network gaps identified in Chapter 2. Strong consideration should be given to the bicycle network recommendations that may shift auto trips to bikes on critical multimodal roads—benefiting mobility for all modes.

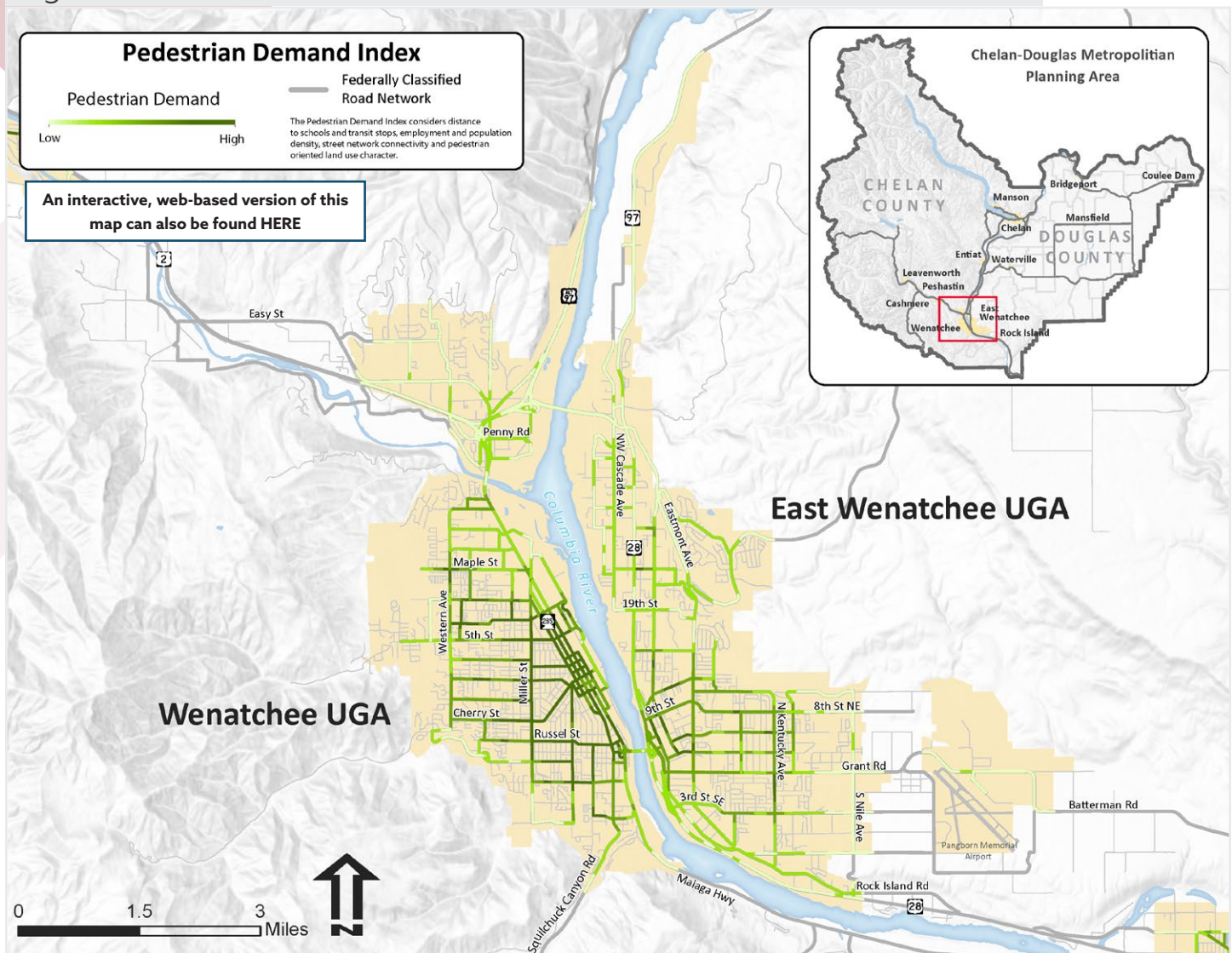
The sidewalk policy measure stated in Chapter 2 has identified sidewalk gaps for all local agencies in the region. All trips begin and end with walking. Safe, comfortable sidewalks and crosswalks should exist to complete trips at multiple scales—across the block or across a neighborhood. Consistent and comfortable sidewalks are particularly beneficial in areas with a high density of retail and commercial uses and limited parking. The portion of the trip (in distance) taken as a pedestrian may increase with high comfort facilities. Additionally, auto mobility may benefit from active transportation investment in high density retail areas by reducing congestion created by drivers looking for parking and removing drivers from vehicles for short trips entirely.

Multiple strategies exist for filling sidewalk gaps and have been used to varying levels of success. For example, local agencies have been regularly winning competitive grants to fix sidewalk gaps and have been incorporating sidewalks into larger projects, though a large portion of sidewalk gaps remain unfundable with current revenues. An opportunity to pay for sidewalk gaps exists in that many gaps in urban areas could be tied to the improvement of currently undeveloped parcels. While some local jurisdictions already require it in the development review process, it is estimated that nearly 40% of the existing sidewalk gap mileage and over 50% of the estimated costs can be implemented as a mitigation for development.

Additionally, tools have been developed that aid local agency prioritization of sidewalk projects such as the pedestrian demand index shown in Figure 3-7. This tool shows the latent pedestrian demand for roadway segments based on distance to schools and transit stops; employment and population density; street network connectivity; and pedestrian oriented land use character.

One regional option for generating revenue for active transportation projects is the formation of a Metropolitan Park District (MPD). MPDs levy a tax on property for the management, control, improvement, maintenance, and acquisition of parks, parkways, boulevards, and recreational facilities. Generally, a dollar has more impact when spent on active transportation than road capacity. Comparing active transportation demand management solutions to auto capacity solutions has the potential to be a low cost/high benefit policy for relieving congested roads.

Figure 3-7: Pedestrian Demand Index



Transit

Link Transit is the public transit service provider for the Chelan-Douglas region. Link provides fixed-route service on 11 local routes serving Wenatchee, East Wenatchee, Leavenworth, and Chelan; 10 intercity routes connecting Wenatchee, East Wenatchee, Rock Island, Cashmere, Leavenworth, Entiat, Chelan, and Waterville; and dial-a-ride transit (DART) service. More information on Link's routes and schedules can be found at linktransit.com. In addition, two inter-city bus routes, the Apple Line and Northwest Stage Lines provide service to Ellensburg, Seattle, Spokane, and Okanogan county.

Using transit as a demand management strategy relies heavily on surrounding land uses and the number of potential transit riders that can be conveniently connected to trip origin and destinations. Transit works best in areas of higher density housing, employment, services, and recreation. A fast and reliable transit system between these complementary land uses may shift trips away from and delay the need for high-cost lane capacity projects. As trips shift from cars to transit, more lane mileage becomes available, improving mobility for both cars and transit. Moreover, investment in transit and active transportation share a mutual benefit as all transit trips start and end as pedestrian trips.

Land use alone cannot cause demand shifts from cars to transit. Transit must be able to operate at speeds comparable to cars to be a viable demand management strategy. This may be done by increasing frequency of buses; implementing on-road transit priority infrastructure; or supplying express bus routes designed to connect high ridership land uses. Demand is tied to land use and service improvements should be implemented and prioritized in areas where demand may be highest.

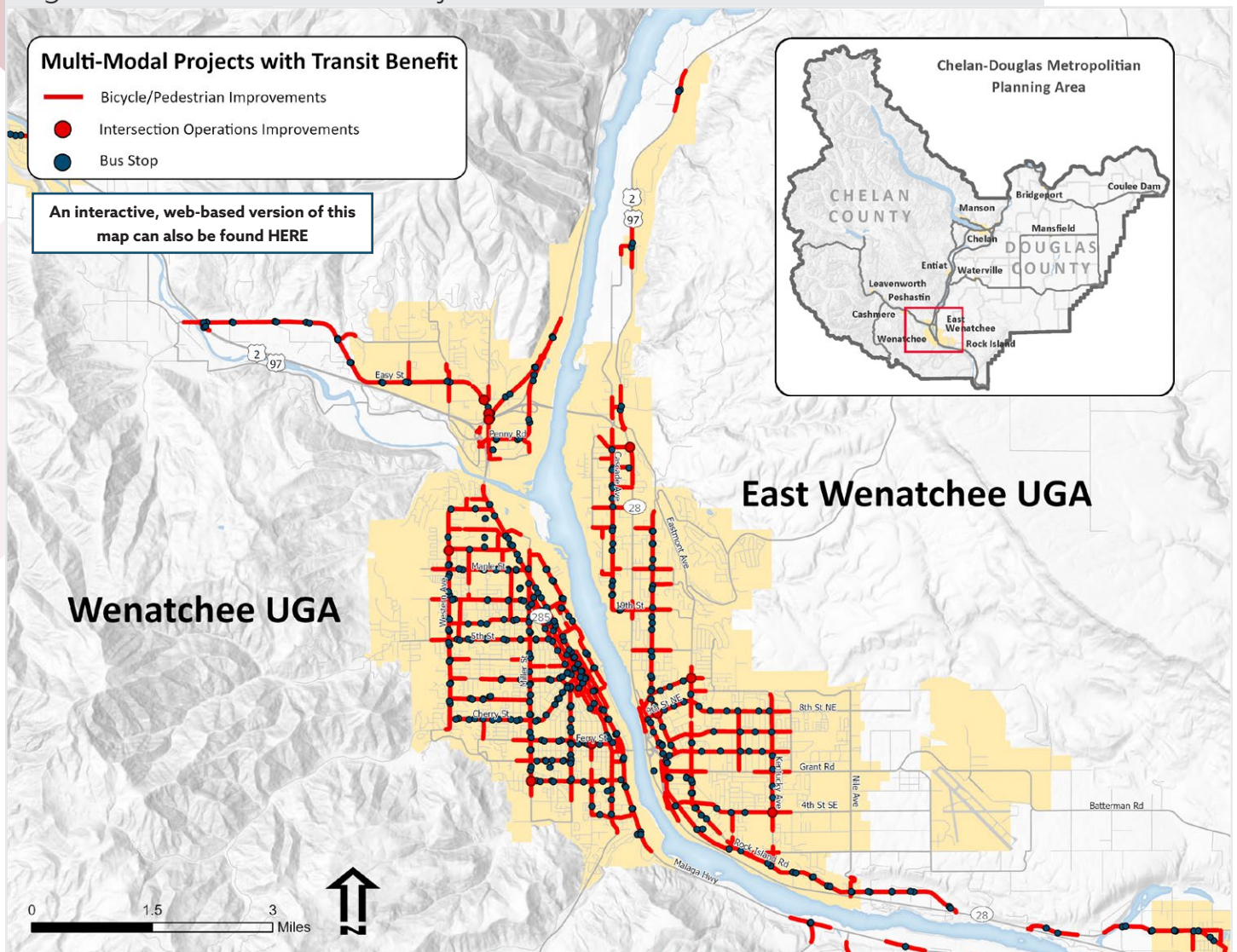
Steps are being taken to improve transit service in the region. In August of 2019 the people of Chelan and Douglas counties voted in approval of Proposition 1, granting Link Transit the authority to levy a .06% sales tax equating to roughly \$5.5 million additional revenue per year. This additional revenue is committed to capital expenses and ongoing operating expenses from projects identified in Link's expansion plan, Vision 2020, that will improve service in the following ways:

- » Longer operating hours
- » Increased frequency
- » Increase weekend service
- » Route extensions
- » Stop and station upgrades

Most of the planned capital service improvements in Vision 2020 have been implemented with the remainder estimated to be completed by mid 2026.

Link is working on a strategic plan to continue to plan for expanding service to low density areas, providing transit access, operational infrastructure improvements, and park & rides as revenue permits. There are multiple connections between Link's capital improvement needs and projects identified in the RTP. First, because all transit trips start and as a pedestrian or bicyclists, project needs that implement bikeways or fill sidewalk gaps within proximity to bus stops are transit access improvements. Additionally, roadway infrastructure improvements such as intersection controls that provide safer, reliable left-turns and transit signal priority can benefit transit operations. Link seeks to coordinate access and operational infrastructure with other multi-modal projects identified in the RTP. In total, There are 134 capital improvements that would improve transit access and operations that could be fully or partially funded by Link Transit, offsetting the unfunded need for local agencies and WSDOT. Figure 3-8 shows the projects that improve transit access within a quarter mile of bus stops and projects that would improve transit operations.

Figure 3-8: Multi-Modal Projects with Transit Benefit



Unmet Mobility Needs and Gaps

CDTC's coordinated mobility plan assists the region in identifying local public and nonprofit transit needs and recommending programs and improvements to benefit people with disabilities, seniors, young people, individuals with lower incomes and those who rely on transportation services. The plan recommends focusing on the following four goals:

Improve options for rural transportation

The rural areas of our region continue to have a number of transportation challenges and limited options for mobility. Not having access to transportation due to financial costs or factors that limit their ability to drive, needing to coordinate public transportation or services with medical appointments, and living in an area without services have been identified as major concerns in the region's rural areas. A related need has been identified for extending the benefits of clean, zero emissions transportation services to rural areas as a part of services.

Improve connectivity between the four counties:

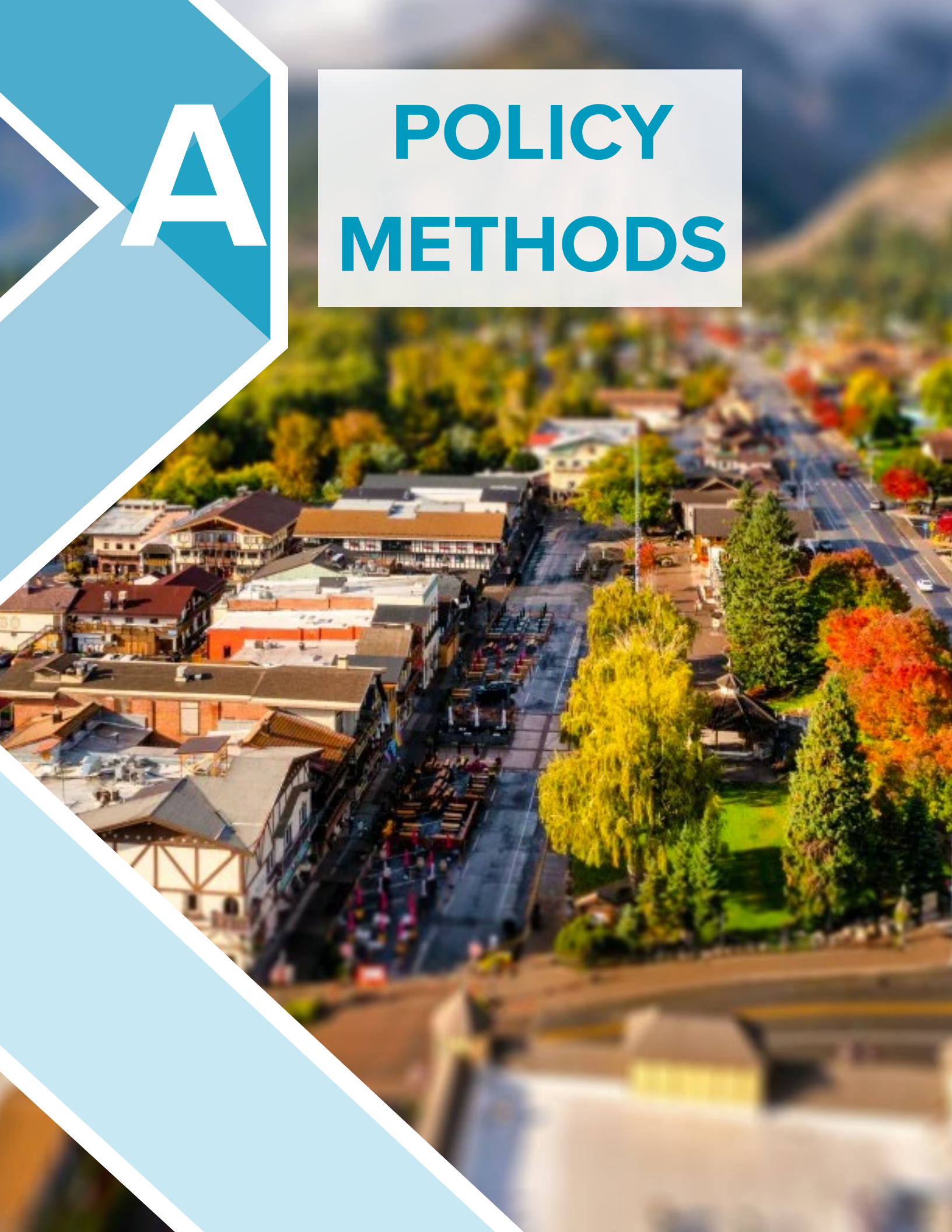
Chelan/Douglas/Okanogan/Grant Counties Getting people in and out of Wenatchee, which serves as a regional hub, especially for medical appointments, has been identified as a need. Additionally, there are limited services providing connectivity between rural cities in our counties. Grant Transit Authority and People for People currently provide transit services in and out of Wenatchee, but the rest of the region currently has limited transportation services crossing local PTBA boundaries.

Improve safety and access to bus stops and essential services in our communities (biking, walking, and ADA accessibility)

Invest in, first/last mile active transportation gaps that improve transit access connecting rural and urban areas. To safely allow the elderly and disabled populations to get themselves to and from bus stops to access the services they need Identify, and

Improve education for transportation options (new and existing programs)

Continue to maximize transit users general public education on mobility issues and transportation solutions. Work with the NCW Transportation Collaborative and Link Transit to enhance current education materials such as the transportation services brochure in the Coordinated Mobility Plan as well as increased awareness of the TRIP Link volunteer driver program.

An aerial photograph of a town street, likely in a mountainous region. The street is lined with buildings, some of which are multi-story and have a rustic or historic appearance. The trees along the street are in various stages of autumn, with some showing bright yellow and orange foliage. The background shows a hilly landscape with more trees and a clear sky. The overall scene is vibrant and scenic.

A

POLICY METHODS

Policy Measures, Thresholds & Deficiencies

The methods and assumptions described in this appendix explain how CDTC's policies are applied to identify the transportation deficiencies used to define the investment needs in the RTP. CDTC coordinated closely with the Technical Advisory Committee with direction from the governing board to develop methods and assumptions that are defensible, based on best practices, and sensitive to local contexts and conditions.

Sidewalks

The RTP sidewalk policy defines a sidewalk deficiency as any federal aid eligible road within the Urban Center, Urban, or Suburban land use context without sidewalk on both sides, except for unique circumstances.

Sidewalk gaps were digitized in ESRI ArcGIS Pro software and confirmed using Google Maps, Google Earth, NAIP aerial imagery, and staff knowledge. There is an inherent variable margin of error when using imagery and street view applications to confirm infrastructure. The imagery and street view data used were dated between September 2022 and October 2023.

Enhanced Crossings

The RTP enhanced crossing policy defines enhanced crossing deficiencies in two ways.

1. Any federally classified road with transit service or more than 3000 ADT having fewer than four or eight crossings per mile, depending on the land use context; and
2. The absence of enhanced crossings on all legs of intersecting federally classified roads.

Existing enhanced crossings were identified using Google Maps, Google Earth, and staff knowledge. Imagery and street view data used were dated between September 2022 and October 2023.

Enhanced crossings are defined as crossings where paint is used to delineate pedestrian space, at a minimum, but may also include signage, rapid flashing beacons, signals, raised crossings, protection islands, and curb extensions. Corridor segment length was defined by the distance between arterial intersections with density calculations performed in ESRI ArcGIS Pro. Enhanced crossings on both legs of an intersection between corridor termini were counted as one crossing because the short distance between the crossings doesn't provide significant corridor permeability. Staff reviewed corridors with crossing densities of exactly four and eight per mile to ensure corridors with 1/8 or 1/4 mile between crossings were identified as deficient.

Regional Bikeways

Bikeway deficiencies are based on the regional bikeway network identified in the Bikeway Element of the RTP. All regional bikeway facilities that have not been programmed or constructed or are considered deficient gaps. The data used to differentiate between regional bikeways prioritized in the RTP and local bikeways were developed in ESRI ArcGIS Pro. Three of the four criteria used to inform the identification of the regional bikeways (Loop Trail Connectivity, Bikeway Spacing, and Bikeway Demand) were developed

using data provided by Washington State, the local agencies, and created manually by CDTC staff. The low income and minority population data was provided by the US Census Bureau. For more information regarding the bikeway network identification process see the Bikeway Element in Appendix C.

Regional Pathways

Regional pathway alignments were identified by reference from the CDTC Regional Pathways Plan in four corridors:

- 1. Manson to Chelan
- 2. Leavenworth to Wenatchee
- 3. Rock Island to East Wenatchee
- 4. Malaga to Wenatchee

Planned pathway alignments generally follow the public rights of way of SR 150, US 2, SR 28, and Malaga-Alcoa Highway and were identified through a rigorous alternatives analysis that considered numer criteria relating to access, comfort, cost, and feasibility. The details of the alternatives analysis and each planned alignment can be found in the Regional Pathways Plan.

Vehicle Mobility

Vehicle mobility is measured on roadway segments and intersections. Roadway segment LOS is measured using a pm-peak hour volume to capacity (V/C) ratio. Roadway volumes are provided directly by CDTC’s travel demand model. The model includes the directional demand for trips along a roadway segment for transit and vehicles. The theoretical roadway capacities are based on best practices from the Institute of Traffic Engineers (ITE). Roadway capacities on roads with four or more buses per hour in the pm peak hour were increased using the unseated transit capacity on those corridors to account for existing transit service’s ability to increase roadway capacity. Unseated transit capacity was provided directly by Link Transit (Table A-2). The roadway segment V/C ratio LOS letter grade classifications are shown in Table A-1.

Table A-1: Vehicle Mobility LOS

Measure	LOS C	LOS D	LOS E
Signalized Interesctions	20-35 seconds	35-55 Seconds	55-80 Seconds
Unsignalized Intersections	15-25 seconds	25-35 Seconds	35-50 Seconds
Segment Volume/ Capacity Ratio	0.7 - 0.8	0.8 - 0.9	0.9 - 1.0

Table A-2: High Frequency Transit Corridors

Road	Start	End	Routes	Busses/Hr
Wenatchee Ave	Maple St	Horse Lake Rd	122, 22, 21, 8, 28	4-5
Wenatchee Ave	Maple St	Kititas St	1,2	4
Wenatchee Ave	Thurston	Ferry St	1, 2, 9, 23, 25	8
Mission St	Miller St	Kititas St	21, 22, 28, 122	3-5
Chelan Ave	Miller St	Kititas St	21, 22, 28, 122	3-5
Mission St/Chelan Ave	Kittitas	Stevens St	11, 12	4
Orondo Ave	Wenatchee Ave	Miller St	5, 8, 24	5
Miller St	Cherry St	9th St	8, 18	4
Maple St	Wenatchee Ave	Western Ave	1, 2	4
Ferry St	Wenatchee Ave	Okanogan Ave	9, 18	4

Vehicle delay is identified at specific intersections using traffic operations analysis software Synchro and Sidra in combination with the CDTC travel demand model. The following tests were developed using CDTC's 2050 traffic forecast to identify intersections with potential vehicle delay deficiencies in the Wenatchee Valley Urban Area, Leavenworth, and the Lake Chelan Valley:

Traffic Signals

Intersection capacity (sum of all turn capacities) was reduced by a factor based on the number of active approaches at the intersection, and the general cross-section of that approach. Factors for each intersection layout are as follows:

- » 3-leg/Interchange, $3\text{ln} \times 3\text{ln} = 0.50$ factor
- » 3-leg/Interchange, $5\text{ln} \times 3/5\text{ln} = 0.55$ factor
- » 4-leg, $3\text{ln} \times 3\text{ln} = 0.35$ factor
- » 4-leg, $5\text{ln} \times 3\text{ln} = 0.60$ factor
- » 4-leg, $5\text{ln} \times 5\text{ln} = 0.40$ factor

Intersections where the total turn movement volumes exceed the factored capacity were flagged and evaluated in further detail.

Roundabouts & All-Way Stop Control

Roundabout capacity (sum of all turn capacities) was reduced by a factor based on the number of active approaches at the intersection as follows:

- » 3-leg/Interchange = 0.40 factor
- » 4-leg/Interchange = 0.25 factor

Roundabouts where the total turn movement exceeds the factored capacity were flagged and evaluated in further detail.

Two-Way Stop Control

The two-way stop control test is similar to signal warrant tests used by local agencies. Two-way stop control intersections are flagged and evaluated in further detail if the following two conditions are met:

- » The total volume of both major street approaches is > 950 ; and
- » The through and left turn volume of the higher minor street is > 95

Following the travel demand model traffic operations analysis, detailed traffic operations analyses using Synchro (signals/all-way stop control/two-way stop control) and Sidra (roundabouts) were performed to confirm vehicle delay deficiencies based on the threshold identified in each land use context.

As described in Chapter 2, WSDOT sets the level of service standards for Highways of Statewide Significance (HSS): US 2, US 97, and SR 28. LOS E is deficient for HSS routes classified as urban; LOS D is deficient for HSS routes and county roads classified as rural. Urban and rural federal classification is based on highway urban area census boundaries which do not coincide with local urban growth areas or CDTC's land use contexts

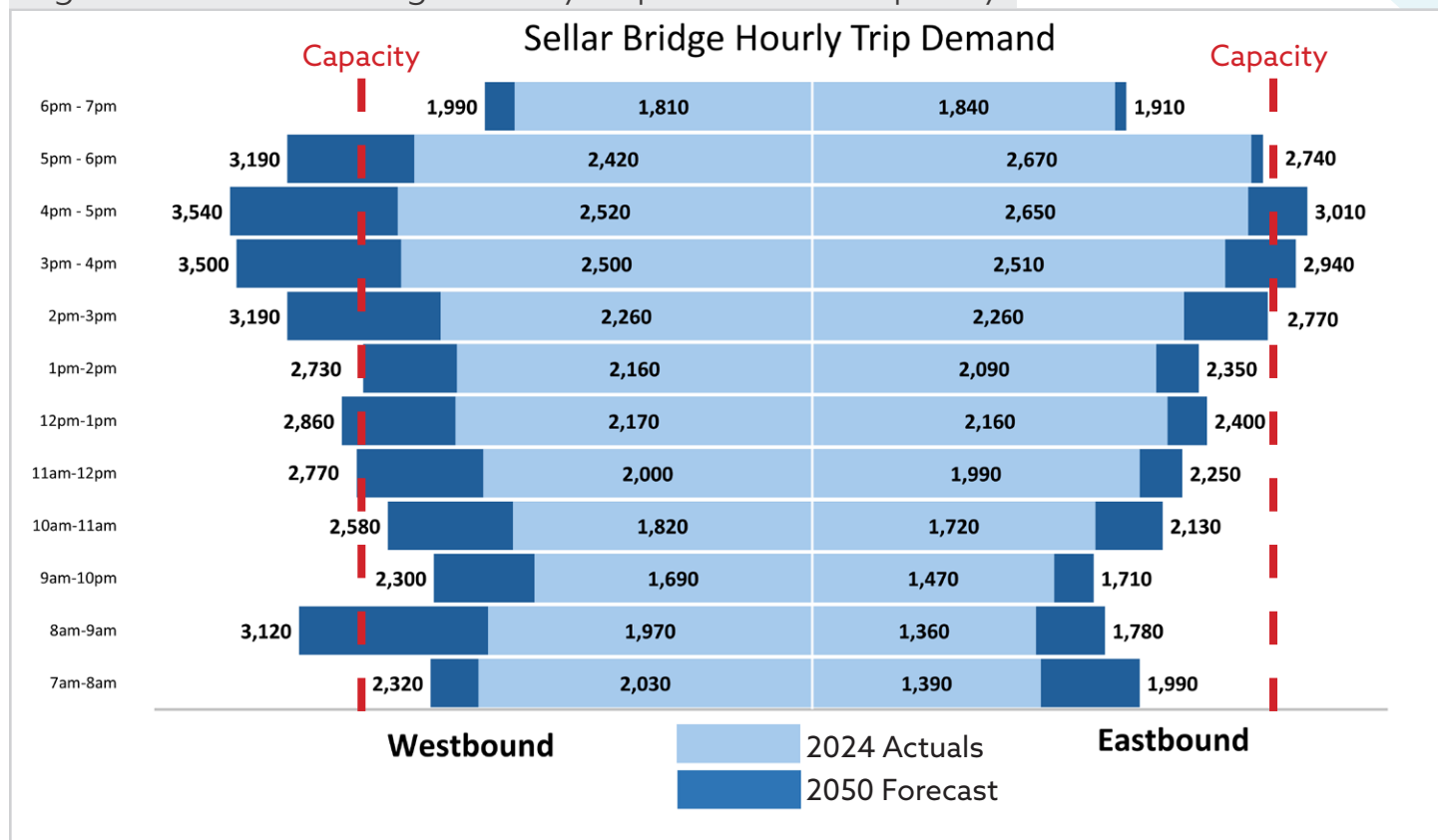
Columbia River Crossing Volume/Capacity (V/C) Ratio

A three-hour period of analysis is used to assess whether adequate capacity exists for 2050 projected volumes on Columbia River Crossings. 2050 volume projections for the US 2/97 Odabashian Bridge and SR 285 Sellar Bridge are developed using traffic counts from permanent traffic recorders installed by WSDOT on both bridges. A growth rate for each hour of the day was calculated using annual average hourly traffic volumes from 2014 and 2024. Each growth rate was then applied to 2024 average hourly traffic volumes and projected 25 years to create the 2050 forecast.

Bridge capacity is based on ITE hourly lane capacity estimates and assumed to be 2800 in both directions on the Sellar Bridge and 3000 in both directions on the Odabashian Bridge.

In 2050, traffic volume on the Sellar Bridge is expected to exceed its capacity during five hours of the day westbound and two hours of the day eastbound, with two additional eastbound hours near capacity (Figure A-1)

Figure A-1: Sellar Bridge Hourly Trip Demand/Capacity



Pavement Condition

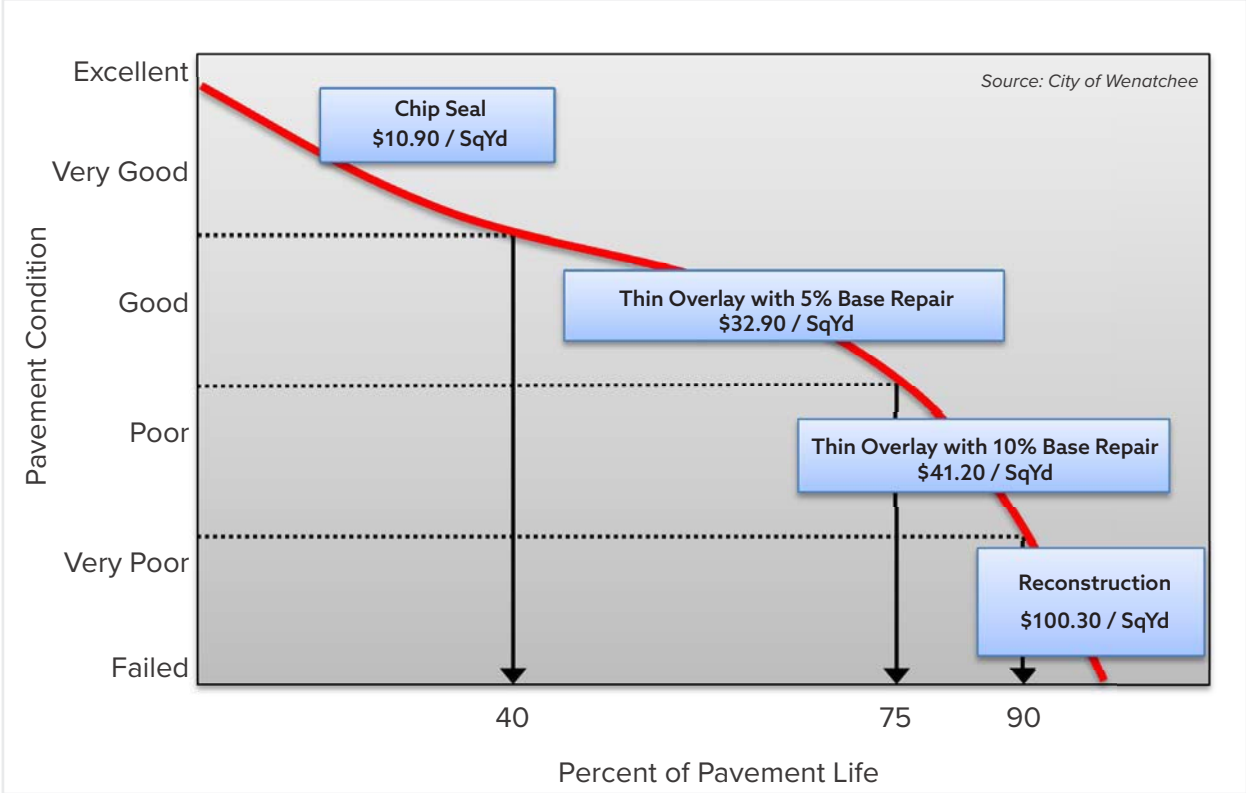
Pavement condition data is routinely collected and provided directly by CDTC's member agencies. WSDOT, Wenatchee, East Wenatchee, Chelan County, and Douglas County maintain and update a pavement management system to track pavement condition. The cities and counties use either the pavement surface condition rating system or the pavement condition index rating system. Both rating systems assess pavement condition using several measurable factors such as cracking, rutting, and bleeding. WSDOT uses a combination of the pavement surface condition, international roughness index, and a detailed rutting assessment to determine pavement condition. The condition factors are indexed and scaled from 0-100 with ascribed categorical descriptions of good, fair, and poor. Table A-4 describes the rating systems used by each jurisdiction.

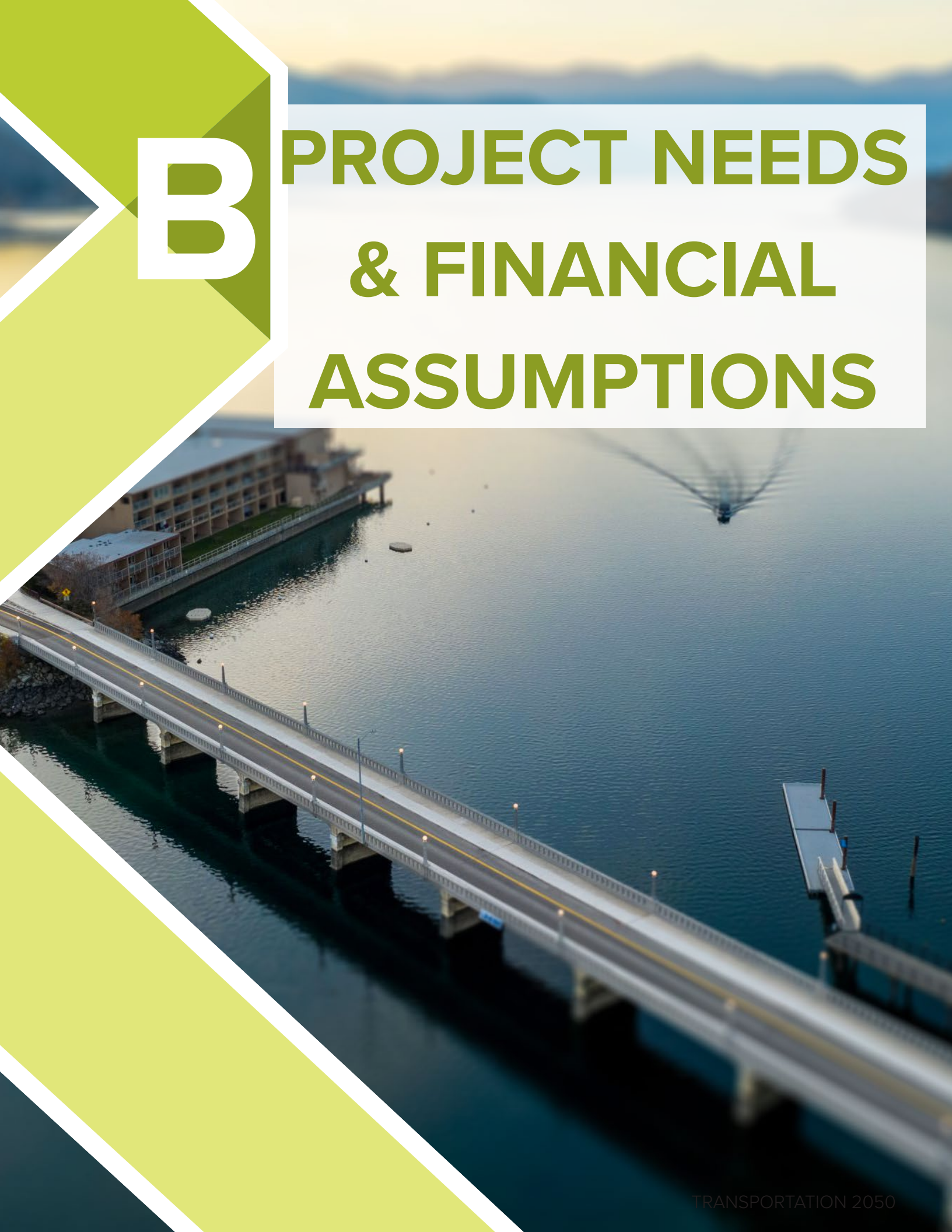
Pavement rated in good condition is smooth with few bumps, depressions, or defects. Pavement in fair condition has intermittent bumps, depressions, or defects. Pavement in poor condition is uncomfortable with frequent or constant bumps, depressions, or defects caused by cracking, patching, and rutting. Additionally, pavement in poor condition can be a safety hazard for bicyclists. Any pavement rated as poor is defined as deficient. In general, pavement in good condition can be treated using low-cost options to preserve its condition. Once a pavement falls below good condition more capital-intensive treatments are required (Figure A-2).

Table A-3: Pavement Condition Ratings

Jurisdiction	Rating System	Scale	Categories
Wenatchee	Pavement Condition Index	0-100	Good = 50 - 100 Poor = 0 - 50
East Wenatchee	Pavement Condition Index	0-100	Good = 50 - 100 Poor = 0 - 50
Chelan County	Pavement Surface Condition	0-100	Good = 60 - 100 Fair = 40 - 60 Poor = 0 - 40
Douglas County	Pavement Surface Condition	0-100	Good = 70 - 100 Fair = 50 - 70 Poor = 0 - 50
WSDOT	Pavement Surface Condition, International Roughness Index, and Rutting	Multiple	Good = 0 - 40, <= 170, <=.41 Fair = 40 - 60, 171 - 220, .42 - .58 Poor = 60 - 100, > 220

Figure A-2: Pavement Treatment Lifecycle Cost



An aerial photograph of a long, multi-lane bridge spanning a body of water. A boat is visible in the distance, leaving a wake. The bridge has a concrete structure with multiple piers. On the left side of the bridge, there is a building with a flat roof and a ramp leading down to the water. The water is a deep blue-green color. The sky is a pale yellow, suggesting a sunrise or sunset. The overall scene is a mix of natural and man-made elements.

B

PROJECT NEEDS & FINANCIAL ASSUMPTIONS

Project Identification Methods & Assumptions

Using ESRI ArcGIS Pro, CDTC analyzed the deficiencies identified for each mode and translated them into defined project needs. In many cases projects address multiple deficiencies, for example a road reconstruction that adds sidewalks, bike lanes, and enhanced crossings, while some projects may only address one deficiency.

The first step for defining projects is to establish project termini. Project termini generally start and end at intersections of federally classified roads. For example, the termini for the Walnut St project are SR 285 and Western Ave. Some project extents have been adjusted where there is a single deficiency or multiple coinciding deficiencies on a segment of a road. For example, Princeton Ave has sidewalk and bikeway deficiencies only from Central Ave to Maple St. Some projects span an entire segment of a road, with multiple deficiencies present on different segments of that road.

Unit costs assumptions were developed for the infrastructure that fixes each deficiency, other supporting infrastructure, contingency factors, local administration, and professional engineering factors as detailed in Table B-1. Implementation categories with different cost components were developed based on the likely strategy for implementation using the criteria identified in Table B-2. All projects needs are identified by jurisdiction in Tables B-3 through B-16.

Table B-1: Unit Costs & Assumptions

Item	Unit Cost	Assumptions
Hot Mix Asphalt	\$200 / Ton	Depth = 4" Source: Local standards
Base	\$80 / Ton	Depth = 12" Source: Local standards
Remove Paving	\$20 / Square yard	Source: Previously plans
Sidewalk + Drainage	Sidewalk : \$130 / Square yard Drainage: \$65 / Linear Foot of Sidewalk	Source: Previous plans
Bike Lanes	Striping: \$2 / Linear foot Stencil: \$165 / each	20 Stencils / mile
Construction Administration	30% of Total infrastructure	Source: Previous Plans
Contingency	30% of Total infrastructure	Source: Previous Plans
Professional Engineering	30% of Total Infrastructure	Source: Previous Plans
Preservation (Overlay)	\$739,088 / Mile	Source: Joint Transportation Committee Local Funding Report

Table B-2: Implementation Categories

Implementation Category	Criteria	Unit Cost Included
New Construction	Construction of new infrastructure in green/brownfield.	All infrastructure depending on infrastructure type (new road vs new path), engineering, contingency, construction administration
Road Reconstruction with Improvements	» PSC/PCI less than 50; or » Road not to standard based on aerial imagery and street view; and » Inadequate/complex ROW	Asphalt removal, road base, new asphalt, new infrastructure (sidewalk, bike lane, etc), engineering, contingency, construction administration
Standalone Multimodal Retrofit	» Total cost > \$300k; and » Road to standard based on aerial imagery and street view; and » Adequate curb-curb and ROW width	New infrastructure, engineering, contingency, construction administration
Low Cost Programmatic Bundle	» Total cost < \$300k for large jurisdictions (Wenatchee, East Wenatchee, Chelan Co, Douglas Co) » Total cost < \$250k for small jurisdictions	New infrastructure, engineering, contingency, construction administration
Preservation	» Bikeway and small sidewalk segment deficiencies; » Adequate curb-curb and ROW width	Per-mile preservation costs, new infrastructure, engineering, contingency, local administration of project
Illustrative (Enhanced Crossings)	The specific treatment for each enhanced crossing is highly variable and should be determined by relevant criteria including but not limited to: road volume, speed, pedestrian demand, school walk routes, sight lines, etc. This analysis has not been performed and costs are not provided.	None

Local TIPs

Projects identified in local TIPs that are consistent with CDTC's transportation policy performance measures are included with project descriptions and costs by reference.

Revenue Assumptions

The 2050 revenue forecast uses planning-level estimates to determine the reasonably available revenues used to constrain the estimated investment need. The forecast is based on the following core assumptions:

- » All existing revenue sources will continue to be available for the next 25 years
- » All existing revenue sources will remain constant, increasing only with inflation
- » The region will continue to win competitive grant dollars at the current rate
- » No new revenue sources will be enacted at the local or federal levels
- » A state revenue package will be enacted within the next five years with dedicated transportation funding

Each revenue source listed below was inflated by 3.29%, compounding with each revenue source's distribution cycle, with all 25 years of revenue being added together. The forecasted total revenue from each source was allocated to the relevant investment category by reviewing the percentage of dollars awarded to past projects characterized under each investment category; or, by using the revenue source's documented allocation practices. Each source of funding is outlined below.

Competitive Grant Programs

Many transportation revenue sources are competitive grant programs. Local agencies in the region have excelled at securing these funding awards. Revenues from competitive grant programs were forecasted by calculating the average program size per grant cycle statewide and the average percentage of the statewide program won by the region over the last five to ten years, depending on available data and grant program age. The following competitive grant programs were forecasted using this methodology with total revenue identified as follows:

- WSDOT Bicycle and Pedestrian and Safe Routes to School Grants – \$60 Million
- Transportation Improvement Board (TIB) Complete Streets – \$40 Million
- TIB Urban Streets – \$197 Million
- TIB Small City Streets – \$40 Million
- WSDOT Local Bridge Program – \$64 Million
- County Road Administration Board (CRAB) Rural Arterial Program (RAP) – \$83 Million
- CDTC Regional STP Program – \$107 Million
- WSDOT Highway Safety Improvement Program (HSIP) – \$47 Million

Other Revenue Sources

Cities, counties, and WSDOT also receive revenue generated from statutorily authorized taxes and fees imposed at the local, state, and federal levels. These funds can be used flexibly but are typically budgeted for preservation or as match funds to leverage competitive grants.

State Gas Tax Direct Allocation - \$58 Million

A portion of all state gas tax revenues are allocated directly back to cities and counties. Direct gas tax allocations were assessed at \$20.6 per capita annually, based on guidance from the Washington Municipal Research and Services Center (MRSC). Based on existing practice, it was assumed that 80% of gas tax revenues to the cities and counties would continue to be spent on local neighborhood roads with only 20% available for the regional fed-aid roadway system. All revenues were allocated to preservation.

County Arterial Preservation Program (CAPP) - \$30 Million

The County Arterial Preservation Program (CAPP) is a separate, formula-based, direct allocation of state gas tax revenue to counties based on population, annual maintenance costs, and the assessed preservation need in each county. All revenues were allocated to preservation.

Freight Mobility Strategic Improvement Board (FMSIB) - \$15 Million

In the last 10 years the region has secured \$6 million for two projects, the West Cashmere Bridge project and the McKittrick St BNSF railroad grade separation. It's assumed that the region will secure \$6 million every ten years over the 25 years of the plan.

WSDOT Internal Programs - \$399 Million

Transportation revenue allocated to WSDOT by the state legislature is generally budgeted in one of two ways— programmatic allocations like pavement preservation, and discreet construction projects. This estimate identifies WSDOT's programmatic allocations. This estimate assumes 95% of WSDOT's regional budget is available for preservation while the remaining 5% is available for smaller, spot improvement projects.

Local Transportation Benefit District (TBD) - \$77 Million

Three cities have passed a sales tax that generates revenue for transportation purposes. Wenatchee and East Wenatchee use a .01% sales tax while Leavenworth use a .02% sales tax with revenue dedicated to roadway preservation and as match funds for state and federal grants. The tax is estimated to annually generate \$1.7 million in Wenatchee, \$750 thousand in East Wenatchee, and \$750 thousand in Leavenworth, increasing with inflation. Half of the revenue generated is assumed for regional roads. In 2024 the City of Chelan passed a .03% sales tax but has not yet determined how to use the projected revenue and is therefore not included in the revenue estimate.

State Appropriations and Competitive Federal Grants - \$233 Million

The state legislature periodically increases and/or creates new transportation fee and tax programs tied to specific programs and projects. Three funding packages have been passed in the last 20 years to fund a prescribed list of projects state-wide, including \$172 million for four projects in the region. This Plan assumes the legislature will pass another revenue package providing funding for select capital projects. In addition to state funding, the Plan assumes the region will secure two grant awards through competitive programs administered by the USDOT, providing funding for the priority projects in Chapter 3.

Transit Revenue - \$1,700 Million

Link Transit has three primary revenue pipelines. 1) Sales tax collected within Link's service area; 2) State and federal formula grants; 3) Competitive grants administered by WSDOT and USDOT. Most of Link's is committed to operating expenses or operational infrastructure improvements such as, first/last mile bicycle and pedestrian connections, park-and-rides, and highway improvements with transit mobility benefits.

Table B-3: Project Needs - Bridgeport

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
10th St	Columbia Ave	Fairview Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Columbia Ave and Fairview Ave	\$180,000	\$329,000
16th St	Douglas Ave	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Douglas Ave and UGA Boundary	\$1,800,000	\$3,294,000
18th St	Douglas Ave	SR 173	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Douglas Ave and SR 173	\$83,000	\$152,000
Columbia Ave	UGA Boundary	10th St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Maple St and UGA Boundary	\$1,500,000	\$2,745,000
Douglas Ave	Maple St	18th St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Maple St and 18th St	\$1,300,000	\$2,379,000
Fairview Ave	10th St	Conklin St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 10th St and Conklin St	\$3,000,000	\$5,490,000
Pearl Hill Rd	SR 17	UGA Boundary	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between SR 17 and UGA Boundary	\$2,400,000	\$4,392,000

Table B-4: Cashmere Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Cotlets Way	US 2	Riverfront Dr	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist between US 2 and Riverfront Dr	\$54,000	\$99,000
Cottage Ave	Riverfront Dr	Aplets Wy	N/A	Construct 1 enhanced crossings between Riverfront Dr and Aplets Wy	N/A	N/A
Evergreen Dr	Pioneer Ave	Sunset Hwy	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Pioneer Ave and Sunset Hwy	\$3,600,000	\$6,588,000

Table B-4: Cashmere Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Maple St	Cottage Ave	Railroad Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Cottage Ave and Railroad Ave	\$490,000	\$897,000
Mission Creek Rd	Binder Rd	Pioneer Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Binder Rd and Pioneer Ave	\$1,100,000	\$2,013,000
Olive St	Rank Rd	Railroad Ave	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist between Rank Rd and Railroad Ave	\$440,000	\$805,000
Pioneer Ave	Division St	Evergreen Dr	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist between Division St and Evergreen Dr	\$180,000	\$329,000
Railroad Ave	Division St	Maple St	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist between Division St and Maple St	\$100,000	\$183,000
Sullivan St	Airport Rd	Pioneer Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Airport Rd and Pioneer Ave	\$1,700,000	\$3,111,000
Tigner Rd	Pioneer Ave	Binder Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Pioneer Ave and Binder Rd	\$330,000	\$604,000

Table B-5: Chelan Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Bradley St	Gibson Ave	City Limits	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Gibson Ave and City Limits	\$2,100,000	\$3,843,000
Gibson Ave	SR 150	Bradley St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between SR 150 and Bradley St	\$730,000	\$1,336,000
Woodin Ave	Webster Ave	Chelan River	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Webster Ave and Chelan River	\$380,000	\$695,000

Table B-6: Chelan County Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
American Fruit Rd	Knowles Rd	UGA Boundary	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Knowles Rd and UGA Boundary	\$6,500,000	\$11,895,000
Binder Rd	Mission Creek Rd	Mission Creek Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Mission Creek Rd and Mission Creek Rd	\$740,000	\$1,354,000
Binder Rd	Mission Creek Rd	Yaksum Canyon Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Mission Creek Rd and Yaksum Canyon Rd	\$720,000	\$1,318,000
Binder Rd	Mission Creek Rd	Tigner Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Mission Creek Rd and Tigner Rd	\$1,300,000	\$2,379,000
Burch Mountain Rd	Peters St	Rolling Hills Ln	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 7 enhanced crossings from Peters St to Rolling Hills Ln	\$1,700,000	\$3,111,000
Chatham Hill Rd	Cordell Ave	UGA Boundary	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Cordell Ave and UGA Boundary	\$2,000,000	\$3,660,000
Chumstick/ North Rd	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$1,407,000	\$2,575,000

Table B-6: Chelan County Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Circle St	Miller St	Okanogan Ave	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 3 enhanced crossings from Miller St to Okanogan Ave	\$3,900,000	\$7,137,000
Cordell St	Penny Rd	Lemaister Ave	Preservation	Construct bike lanes, sidewalk, curb, and gutter between Penny Rd and Chatham Hill Rd	\$1,500,000	\$2,745,000
Cordell St	Lemaister aVe	Chatham Hill Rd	Low Cost Programmatic Bundle	Construct bike lanes, sidewalk, curb, and gutter between Penny Rd and Chatham Hill Rd	\$94,000	\$172,000
Crestview Rd	Easy St	American Fruit Rd	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 4 enhanced crossings from Easy St to American Fruit Rd	\$690,000	\$1,263,000
E Leavenworth Rd	US 2	UGA Boundary	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between US 2 and UGA Boundary	\$2,900,000	\$5,307,000
Easy St/ Peters St	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
Easy St	US 2/97	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist, bike lanes, and 13 enhanced crossings between US 2/97 and UGA Boundary	\$6,400,000	\$11,712,000
Green Ave	Wapato Way	Lloyd Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Wapato Way and Lloyd Rd	\$5,200,000	\$9,516,000
Hill St	Green Rd	Totem Pole Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Green Rd and Totem Pole Rd	\$360,000	\$659,000
Knowles Rd	American Fruit Rd	Knowles Heights Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between American Fruit Rd and Knowles Heights Rd	\$1,800,000	\$3,294,000

Table B-6: Chelan County Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Main St	Wenatchee River Bridge	North Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Wenatchee River Bridge and North Rd	\$530,000	\$970,000
Main St	US 2	End of Bridge	Bridge Reconstruction	Replace functionally obsolete bridge	\$32,800,000	\$60,024,000
Manson Blvd	Pedoi St	UGA Boundary	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 11 enhanced crossings from Pedoi St to UGA Boundary	\$9,400,000	\$17,202,000
Miller St	Circle St	Crawford Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist, bike lanes, and 3 enhanced crossings between Circle St and Crawford Ave	\$4,700,000	\$8,601,000
Mission St/ Squilchuck Rd	Simmons St	UGA Boundary	Road Reconstruction with Improvements	Construct sidewalk where gaps exists from Antles Ave to UGA Boundary	\$3,200,000	\$5,856,000
Mission St/ Squilchuck Rd	Antles Ave	Simmons St	Road Reconstruction with Improvements	Construct sidewalk where gaps exists from Antles Ave to UGA Boundary	\$650,000	\$1,190,000
North Rd	Chumstick Hwy	Amtrak Train Station	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Chumstick Hwy and BNSF Railroad	\$800,000	\$1,464,000
North Rd	Main St	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Main St and UGA Boundary	\$700,000	\$1,281,000
Olive St	Rank Rd	Yaksum Canyon Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Rank Rd and Yaksum Canyon Rd	\$1,900,000	\$3,477,000
Pershing St	Maple St	McKittrick St	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Maple St and McKittrick St	\$1,600,000	\$2,928,000
Peters St	Easy St	Burch Mountain Rd	Low Cost Programmatic Bundle	Construct sidewalk and add crossing at Easy St or Burch Mountain Rd	\$78,000	\$143,000

Table B-6: Chelan County Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Pioneer Dr	Wescott Dr	Evergreen Dr	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 4 enhanced crossings from Wescott Dr to Evergreen Dr	\$1,400,000	\$2,562,000
School St	Melody Ln	Easy St	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 2 enhanced crossings from Melody Ln to Easy St	\$700,000	\$1,281,000
School St	Easy St	Knowles Rd	Standalone Multimodal Retrofi	Construct 1 enhanced crossings between Easy St and Knowles Rd	\$650,000	\$1,190,000
School St	Main St	End of Road	Standalone Multimodal Retrofit	Construct sidewalks where gaps exists between Main St and end of road	\$730,000	\$1,336,000
Ski Hill Dr	Pine St	City Limits	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Pine St and City Limits	\$3,900,000	\$7,137,000
Terminal Ave	Mission St	Methow St	Road Reconstruction with Improvements	Construct sidewalks where gaps exist, bike lanes, and 2 enhanced crossings between Mission St and Methow St	\$1,600,000	\$2,928,000
Terminal Ave	S Wenatchee Ave	Mission St	Preservation	Construct bike lanes between S Wenatchee Ave and Mission St	\$370,000	\$677,000
Titus Rd	City Limits	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between City Limits and UGA Boundary	\$1,100,000	\$2,013,000
Totem Pole Rd	Furey St	Hill St	Road Reconstruction with Improvements	Construct curb, gutter, and sidealks from Furey St to Hill St	\$6,000,000	\$10,980,000
Totem Pole Rd	Green Ave	Furey St	Road Reconstruction with Improvements	Construct curb, gutter, and sidealks from Green Ave to Furey St	\$3,000,000	\$5,490,000
Union Valley Rd	City Limits	UGA Boundary	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between City Limits and UGA Boundary	\$2,800,000	\$5,124,000
Walnut St	Western Ave	SR 285	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Western Ave and SR 285	\$4,200,000	\$7,686,000
Wescott Dr	Sunset Hwy	Pioneer Dr	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 3 enhanced crossings from Sunset Hwy to Pioneer Dr	\$1,400,000	\$2,562,000

Table B-7: Douglas County Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
10th St NE	Nile Ave	Lyle Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Nile Ave and Lyle Ave	\$2,300,000	\$4,209,000
21st St NE	Baker Ave	Devon Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist and bike lanes between Baker Ave and Devon Ave	\$200,000	\$366,000
23rd St NE	SR 28	Devon Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between SR 28 and Devon Ave	\$350,000	\$640,500
23rd St NW	Cascade Ave	SR 28	Road Reconstruction with Improvements	Construct sidewalks where gaps exist and bike lanes between Cascade Ave and SR 28	\$1,300,000	\$2,379,000
27th St NE	SR 28	Baker Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between SR 28 and Baker Ave	\$1,800,000	\$3,294,000
27th St NW	Empire Ave	Cascade Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist and bike lanes between Empire Ave and Cascade Ave	\$1,300,000	\$2,379,000
29th St NW	Empire Ave	Cascade Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Empire Ave and Cascade Ave	\$3,200,000	\$5,856,000
29th St NW	Cascade Ave	SR 28	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Cascade Ave and SR 28	\$1,300,000	\$2,379,000
31st St NW	Cascade Ave	SR 28	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist and bicycle boulevard between SR 28 and Cascade Ave	\$350,000	\$640,500
32nd St NW	SR 28	Loop Trail	Low Cost Programmatic Bundle	Construct bicycle boulevard between SR 28 and the 32nd PI NW Loop Trail Trailhead	\$3,000	\$5,490
33rd St NW	SR 28	Cascade Ave	Standalone Multimodal Retrofit	Construct sidewalk where gaps exist and 2 enhanced crossings between SR 28 and Cascade Ave	\$2,000,000	\$3,660,000
34th St NW	Empire Ave	Cascade Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Empire Ave and Cascade Ave	\$920,000	\$1,683,600

Table B-7: Douglas County Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
38th St NW	Empire Ave	Cascade Ave	New Construction	Extend 38th St NW to Wenatchi Landing interchange and Empire Ave	\$13,100,000	\$23,973,000
3rd St NE	Kentucky Ave	Lyle Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Kentucky Ave and Lyle Ave	\$490,000	\$896,700
4th St SE	Nile Ave	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Nile Ave and UGA Boundary	\$680,000	\$1,244,400
4th St SE	Kentucky Ave	Nile Ave	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 6 enhanced crossings from Kentucky Ave to Nile Ave	\$1,000,000	\$1,830,000
5th St NE	Kentucky Ave	Lyle Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Kentucky Ave and Lyle Ave	\$660,000	\$1,207,800
8th St NE	Nile Ave	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 1 enhanced crossings from Nile Ave to UGA Boundary	\$350,000	\$640,500
8th St NE	Kentucky Ave	Nile Ave	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 6 enhanced crossings from Kentucky Ave to Nile Ave	\$1,000,000	\$1,830,000
8th St SE	Kentucky Ave	Lyle Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Kentucky Ave and Lyle Ave	\$2,300,000	\$4,209,000
8th St SE	Lyle Ave	Nile Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Lyle Ave and Nile Ave	\$7,200,000	\$13,176,000
8th St SE	Rock Island Dr	S Kentucky Ave	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 3 enhanced crossings from Rock Island Dr to S Kentucky Ave	\$2,700,000	\$4,941,000
8th St SE	Nile Ave	Par Ln	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Nile Ave and Par Ln	\$2,400,000	\$4,392,000
Badger Mtn Rd	Eastmont Ave	Fancher Field Rd	Standalone Multimodal Retrofit	Realign an urban section of Badger Mtn Rd to avoid an active landslide	\$6,000,000	\$10,980,000

Table B-7: Douglas County Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Baker Ave	27th St NE	Eastmont Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 27th St NE and Eastmont Ave	\$762,000	\$1,394,000
Cascade Ave	35th St NW	US 2/97	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 35th St NW and US 2/97	\$740,000	\$1,354,200
Cascade Ave	19th St NW	29th St NW	Road Reconstruction with Improvements	Construct sidewalk where gaps exists, bike lanes, and 10 enhanced crossings from 19th St NW to 29th St NW	\$8,100,000	\$14,823,000
Cascade Ave	UGA Boundary	US 2/97	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 9 enhanced crossings from UGA Boundary to US 2/97	\$7,000,000	\$12,810,000
Cascade Ave	35th St NE	29th St NW	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 5 enhanced crossings from 35th St NE to 29th St NW	\$4,700,000	\$8,601,000
Columbia Ave	29th St NW	Willshire St	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between 29th St NW and Willshire St	\$3,700,000	\$6,771,000
Devon Ave	21st St NE	23rd St NE	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between 21st St NE and 23rd St NE	\$860,000	\$1,573,800
Empire Ave	27th St NW	29th St NW	Road Reconstruction with Improvements	Construct sidewalks where gaps exist and bike lanes between 27th St NW and 29th St NW	\$3,200,000	\$5,856,000
Empire Ave	35th St NW	29th ST NW	Road Reconstruction with Improvements	Construct sidewalks where gaps exis and bike lanes between 35th St NE and 29th ST NE	\$5,300,000	\$9,699,000
Empire Ave Extension	38th St NW	Cascade Ave	New Construction	Extend Empire Ave north from Wenatchi Landing Interchange to Cascade Ave	\$21,600,000	\$39,528,000
Fancher Field Rd	Baker Ave	Badger Mountain Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Baker Ave and Badger Mountain Rd	\$1,900,000	\$3,477,000

Table B-7: Douglas County Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Grant Rd	Kentucky Ave	Nile Ave	Preservation	Construct 7 enhanced crossings between Kentucky Ave and Nile Ave	N/A	N/A
Grant Rd	Nile Ave	Quincy St	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 3 enhanced crossings from Nile Ave to Quincy St	\$1,300,000	\$2,379,000
Highline Dr	3rd St SE	Iowa Ave	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 5 enhanced crossings from 3rd St SE to Iowa Ave	\$3,900,000	\$7,137,000
Iowa Ave	4th St SE	Rock Island Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between 4th St SE and Rock Island Rd	\$3,000,000	\$5,490,000
Kentucky Ave	Rock Island Rd	4th St SE	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 4 enhanced crossings from Rock Island Rd to 4th St SE	\$3,700,000	\$6,771,000
Lyle Ave	10th St NE	8th St NE	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between 10th St NE and 8th St NE	\$1,900,000	\$3,477,000
Lyle Ave	Grant Rd	8th St NE	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Grant Rd and 8th St NE	\$6,200,000	\$11,346,000
Nile Ave	8th St NE	Grant Rd	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 6 enhanced crossings from 8th St NE to Grant Rd	\$2,100,000	\$3,843,000
Nile Ave	8th St SE	Rock Island Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between 8th St SE and Rock Island Rd	\$2,800,000	\$5,124,000
Nile Ave	4th St SE	Grant Rd	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 4 enhanced crossings from 4th St SE to Grant Rd	\$1,400,000	\$2,562,000
Nile Ave	8th St SE	4th St SE	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 8th St SE and 4th St SE	\$1,400,000	\$2,562,000

Table B-7: Douglas County Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Rock Island Rd	3rd St SE	Kentucky Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist, bike lanes, and 11 enhanced crossings between 3rd St SE and Kentucky Ave	\$9,100,000	\$16,653,000
Rock Island Rd	Nile Ave	UGA Boundary	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist between Nile Ave and UGA Boundary	\$260,000	\$475,800
Rock Island Rd	Nile Ave	Kentucky Ave	Road Reconstruction with Improvements	Construct sidewalk where gaps exists and 9 enhanced crossings from Nile Ave to Kentucky Ave	\$7,200,000	\$13,176,000
Valley View Blvd	Devon Ave	Eastmont Ave	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists, bike lanes, and 3 enhanced crossings from Devon Ave to Eastmont Ave	\$600,000	\$1,098,000
Wenatchi Landing Interchange	N/A	N/A	New Construction	Construct half diamond interchange on US 2/97 and arterial road connection to 35th St	\$25,100,000	\$45,933,000
Wilshire St Nw	Columbia Ave	Cascade Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist and shared road bicycle boulevard between Columbia Ave and Cascade Ave	\$350,000	\$640,500

Table B-8: East Wenatchee Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
10th St NE	Eastmont Ave	Kentucky Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist and 6 enhanced crossings between Eastmont Ave and Kentucky Ave	\$800,000	\$1,464,000
10th St NE/ Eastmont Ave	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
11th St NE	Eastmont Ave	Baker Ave	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 2 enhanced crossings from Eastmont Ave to Baker Ave	\$15,000	\$27,000
11th St NE	11th St SE	Grover Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between 11th St SE and Grover Ave	\$1,900,000	\$3,477,000
11th St NE	Valley Mall Pkwy	Baker Ave	N/A	Construct 1 enhanced crossings between Valley Mall Pkwy and Baker Ave	N/A	N/A
11th St NE/ Eastmont Ave	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
15th St	SR 28	Apple Capital Loop Trail	Road Reconstruction with Improvements	Construct bike lanes between SR 28 and Apple Capital Loop Trail	\$860,000	\$1,574,000
15th St NE	SR 28	Eastmont Ave	Road Reconstruction with Improvements	Full reconstruction, curb, gutter, sidewalk, bike lanes, storm sewer, and illumination from SR 28 to Eastmont Ave	\$6,300,000	\$11,529,000
19th St NE	Cascade Ave	SR 28	Standalone Multimodal Retrofit	"Construct Center turn lane, curb, gutter and sidewalk, bike lanes, stormwater conveyance and street illumination from Cascade Ave to SR 28"	\$6,900,000	\$12,627,000

Table B-8: East Wenatchee Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
19th St NE/ Eastmont Ave	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
3rd St NE	Eastmont Ave	Kentucky Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist and bike lanes between Eastmont Ave and Kentucky Ave	\$4,600,000	\$8,418,000
3rd St SE	James Ave	Kentucky Ave	Road Reconstruction with Improvements	Construct bike lanes between James Ave and Kentucky Ave	\$1,500,000	\$2,745,000
3rd St SE	Highline Dr	Houston Ave	N/A	Construct 1 enhanced crossings between Highline Dr and Houston Ave	N/A	N/A
3rd St. SE	SR 28	Apple Capital Loop Trail	Preservation	Construct bike lanes between SR 28 and Apple Capital Loop Trail	\$145,000	\$265,000
4th St SE	Houston Ave	Kentucky Ave	N/A	Construct 3 enhanced crossings between Houston Ave and Kentucky Ave	N/A	N/A
5th St NE	Eastmont Ave	Grover Pl	Standalone Multimodal Retrofit	Curb, gutter and sidewalk or pedestrian pathway, illumination, and intersection improvement at Eastmont Ave	\$1,600,000	\$2,928,000
8th St NE	Eastmont Ave	Kentucky Ave	N/A	Construct 1 enhanced crossings between Eastmont Ave and Kentucky Ave	N/A	N/A
9th St Ne	Baker Ave	Eastmont Ave	N/A	Construct 1 enhanced crossings between Baker Ave and Eastmont Ave	N/A	N/A
9th St NE/ Baker Ave	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
Baker Ave	9th St NE	15th St NE	Preservation	Construct 1 enhanced crossings and bike lanes between 9th St NE and 15th St NE	\$1,200,000	\$2,196,000
Briarwood Terr/N Grover Ave	10th St NE	Brianwood Ter	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 10th St NE and Brianwood Ter	\$540,000	\$988,000

Table B-8: East Wenatchee Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Eastmont Ave	19th St NE	9th St NE	N/A	Construct 7 enhanced crossings between 19th St NE and 9th St NE	N/A	N/A
Eastmont Ave	Grant Rd	8th St NE	N/A	Construct 2 enhanced crossings between Grant Rd and 8th St NE	N/A	N/A
Highline Dr	3rd St SE	Grant Rd	N/A	Construct 1 enhanced crossings between 3rd St SE and Grant Rd	N/A	N/A
Iowa Ave	4th St SE	5th St NE	Standalone Multimodal Retrofit	Construct bicycle boulevard between 4th St SE and 5th St SE	\$16,000	\$29,000
James Ave	Grant Rd	5th St NE	Road Reconstruction with Improvements	Construct bicycle boulevard, sidewalk, curb, and gutter between Grant Rd and 8th St NE	\$4,800,000	\$8,784,000
James Ave	5th St NE	10 St NE	Preservation	Construct bike lanes between 8th St NE and 10 St NE	\$290,000	\$531,000
Kentucky Ave	4th St SE	Grant Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 4th St SE and Grant Rd	\$960,000	\$1,757,000
Kentucky Ave	Grant Rd	8th St NE	Road Reconstruction with Improvements	Construct sidewalks where gaps exist, bike lanes, and 2 enhanced crossings between Grant Rd and 8th St NE	\$4,800,000	\$8,784,000
Kentucky Ave	8th St NE	10th St NE	Road Reconstruction with Improvements	Construct sidewalks where gaps exist, bike lanes, and 2 enhanced crossings between 8th St NE and 10th St NE	\$1,400,000	\$2,562,000
Kentucky St/4th St SE	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
Rock Island Rd	3rd St SE	Grant Rd	Road Reconstruction with Improvements	Construct 2 enhanced crossings and bike lanes between 3rd St SE and Grant Rd	\$3,900,000	\$7,137,000
Valley Mall Pkwy	Grant Rd	9th St NE	Preservation	Construct 1 enhanced crossing and bike lanes between Grant Rd and 9th St NE	\$1,000,000	\$1,830,000
Valley Mall Pkwy	SR 28	9th St NE	Road Reconstruction with Improvements	Construct 2 enhanced crossings and bike lanes between SR 28 and 9th St NE	\$2,100,000	\$3,843,000

Table B-9: Leavenworth Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Commercial St	3rd St	Division St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 3rd St and Division St	\$400,000	\$732,000
Icicle Rd	US 2	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between US 2 and UGA Boundary	\$190,000	\$347,700
Pine St/Fir St	Titus Rd	Chumstick Hwy	Road Reconstruction with Improvements	Street reconstruction, sidewalks, storm drain, waterline and sewer. Construct dual lane roundabout at Chumstick Hwy/Fir St intersection	\$5,000,000	\$9,150,000
US 2 Ped Underpass	Link Park & Ride	Festhalle Parking Lot	Standalone Multimodal Retrofit	Construct pedestrian underpass between the US 2 park and ride and the Festhalle parking lot	\$4,500,000	\$8,235,000

Table B-10: Mansfield Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Mansfield Blvd	Railroad Ave	SR 172	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Railroad Ave and SR 172	\$400,000	\$1,830,000
Railroad Ave	Main St	Mansfield Blvd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Main St and Mansfield Blvd	\$190,000	\$1,190,000
Wall Ave	SR 172	Railroad Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between SR 172 and Railroad Ave	\$5,000,000	\$2,379,000

Table B-11: Entiat Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Entiat Way	Entiat River Rd	Cammack Ave	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 13 enhanced crossings from Entiat River Rd to Cammack Ave	\$2,200,000	\$4,026,000

Table B-11: Rock Island Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
3rd St SW	Douglas St	Rock Island Dr	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Douglas St and Rock Island Dr	\$2,900,000	\$3,509,000
Rock Island Dr	Garden Ave	Delaware Ave	N/A	Construct 1 enhanced crossings between Garden Ave and Delaware Ave	N/A	N/A
Rock Island Dr	Garden Ave	UGA Boundary	Road Reconstruction with improvements	Construct sidewalk where gaps exists, bicycle lanes, and 4 enhanced crossings between Garden Ave and UGA Boundary	\$950,000	\$1,149,500
Saunders Ave	Delaware Ave	Batterman Rd	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Delaware Ave and Batterman Rd	\$4,400,000	\$5,324,000

Table B-12: Waterville Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
3rd St	Columbia Ave	US 2	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Columbia Ave and US 2	\$680,000	\$1,244,000
Birch St	US 2	Monroe St	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 2 enhanced crossings from US 2 to Monroe St	\$180,000	\$329,000
Chelan Ave	US 2	City Limits	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between US 2 and City Limits	\$710,000	\$1,299,000
Chelan Ave	US 2	Road 2 NW	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between US 2 and Road 2 NW	\$360,000	\$659,000
Chelan Ave/ Kititas St	Spot	Spot	Standalone Multimodal Retrofit	New signal based on pedestrian warrants	\$850,000	\$1,555,500
Columbia Ave	US 2	Locust St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between US 2 and Locust St	\$690,000	\$1,263,000
Columbia Ave	Locust Ave	3rd St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Locust Ave and 3rd St	\$760,000	\$1,391,000
Monroe St	US 2	Birch St	Standalone Multimodal Retrofit	Construct sidewalk where gaps exists and 1 enhanced crossings from US 2 to Birch St	\$610,000	\$1,116,000
Monroe St	Airport Rd	US 2	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Airport Rd and US 2	\$690,000	\$1,263,000

Table B-13: Wenatchee Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
5th St	Surry Rd	Western Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist and 4 enhanced crossings between Surry Rd and Western Ave	\$5,100,000	\$9,333,000
9th St	Apple Capital Loop Trail	BNSF Railroad	Standalone Multimodal Retrofit	Construct bike lanes from BNSF railroad to Apple Capital Loop Trail	\$500,000	\$915,000
Castlerock Ave	Western Ave	Miller St	N/A	Construct 6 enhanced crossings between Western Ave and Miller St	N/A	N/A
Chehalis St	Columbia St	S Wenatchee Ave	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist between Columbia St and S Wenatchee Ave	\$170,000	\$311,000
Chelan Ave	Miller St	9th St	N/A	Construct 1 enhanced crossings between Miller St and 9th St	N/A	N/A
Cherry St	Miller St	Western Ave	N/A	Construct 4 enhanced crossings between Miller St and Western Ave	N/A	N/A
Columbia St	2nd St	Chehalis St	Road Reconstruction with Improvements	Construct sidewalks where gaps exist and bike lanes between 2nd St and Kititas St St	\$7,100,000	\$12,993,000
Columbia St	2nd St	Chehalis St	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Kititas St Chehalis St	\$7,100,000	\$12,993,000
Crawford Ave	Okanogan Ave	Mission St	Preservation	Construct 2 enhanced crossings and bike lanes between Okanogan Ave and Mission St	\$730,000	\$1,336,000
Crawford Ave	Okanogan	Miller St	Preservation	Construct 1 enhanced crossing and bike lanes between Okanogan and Miller St	\$740,000	\$1,354,000
Crawford Ave	Mission St	S Wenatchee Ave	Standalone Multimodal Retrofit	Construct bike lanes, sidewalk, curb, and gutter between Mission St and S Wenatchee Ave	\$600,000	\$1,098,000
Dawn Ter	Maiden Ln	Horse Lake Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Maiden Ln and Horse Lake Rd	\$350,000	\$641,000

Table B-14: Wenatchee Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Easy St	Penny Rd	US 2/97	Preservation	Construct bike lanes between Penny Rd and US 2/97	\$290,000	\$531,000
Easy St/ Melody Ln	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
Euclid Ave	Euclid Ave	US 2	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist, bike lanes, and 2 enhanced crossings between Euclid Ave and US 2	\$1,000,000	\$1,830,000
Euclid Ave	Olds Station Rd	Penny Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist, bike lanes, and 2 enhanced crossings between Olds Station Rd and Penny Rd	\$660,000	\$1,208,000
Ferry/Russell St	S Wenatchee Ave	Okanogan Ave	Preservation	Construct bike lanes between S Wenatchee Ave and Okanogan Ave	\$900,000	\$1,647,000
Ferry St/ Methow St	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
First St	Chelan Ave	Miller St	Road Reconstruction with Improvements	Complete First St Bikeway from Miller St to Elliott Ave	\$3,200,000	\$5,856,000
Loop Trail Expansion	Thurston St	Hawley St	New Construction	Widen the Apple Capital Loop Trail along the Wenatchee Waterfront between Thurston St and Hawley St	\$1,800,000	\$3,294,000
Maiden Ln	Rogers DR	SR 285	Low Cost Programmatic Bundle	Construct bike lanes between SR 285 and Harbel St	\$6,000	\$11,000
McKittrick St	Western Ave	Pershing St	Road Reconstruction with Improvements	Construct sidewalk where gaps exist between Western Ave and Pershing St	\$2,500,000	\$4,575,000
Methow St	Terminal Ave	Crawford Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist, bike lanes, and 2 enhanced crossings between Terminal Ave and Crawford Ave	\$2,700,000	\$4,941,000

Table B-14: Wenatchee Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Methow St	Orondo Ave	Marr St	Preservation	Construct bike lanes between Orondo Ave and Marr St	\$1,200,000	\$2,196,000
Miller St	Crawford Ave	Irrigation Canaal	Preservation	Construct bike lanes between Crawford Ave and Russel St	\$200,000	\$366,000
Miller St	Mission St	SR 285	N/A	Construct 2 enhanced crossings between Mission St and SR 285	N/A	N/A
Miller St/ Crawford St	Spot	Spot	Standalone Multimodal Retrofit	New mini roundabout to improve mobility and pedestrian safety	\$500,000	\$915,000
Millerdale Ave	Miller St	Appleland Dr	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Miller St and Lambert St	\$4,100,000	\$7,503,000
Mission St	Antles Ave	Crawford Ave	N/A	Construct 1 enhanced crossings between Antles Ave and Crawford Ave	N/A	N/A
Mission St/ Marr St	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,420,000	\$3,660,000
N Wenatchee Ave	5th St	2nd St	Road Reconstruction with Improvements	Construct median barrier, bicycle lanes, upgrade sidewalks, lighting, and landscaping consistent with subarea plan	\$1,500,000	\$2,745,000
N Wenatchee Ave	SR 285	9th St	Preservation	Construct 1 enhanced crossing and bike lanes between SR 285 and 9th St	\$670,000	\$1,226,000
N Wenatchee Ave	5th St	9th St	Preservation	Construct bike lanes between 5th St and 9th St	\$420,000	\$769,000
No 2 Canyon Rd	Skyline Dr	Western Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Skyline Dr and Western Ave	\$4,000,000	\$7,320,000
Ohme Garden Rd	Easy St	US 97A	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Easy St and US 97A	\$7,100,000	\$12,993,000
Okanogan Ave	Crawford Ave	Russell St	Preservation	Construct bike lanes, sidewalk, curb, and gutter between Crawford Ave and Russell St	\$1,100,000	\$2,013,000

Table B-14: Wenatchee Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Okanogan Ave	Circle St	Crawford Ave	Road Reconstruction with Improvements	Construct bike lanes, sidewalk, curb, and gutter between Circle St and Crawford Ave	\$3,000,000	\$5,490,000
Okanogan Ave	Orondo Ave	Ferry St	Road Reconstruction with Improvements	Construct bike lanes between Orondo Ave and Ferry St	\$3,600,000	\$6,588,000
Olds Station Rd	Horan Rd	Euclid Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist, bike lanes, and 2 enhanced crossings between Horan Rd and Euclid Ave	\$680,000	\$1,244,000
Orondo Ave	Columbia St	Chelan Ave	Standalone Multimodal Retrofit	Extend bike lanes, freight mobility, pedestrian improvements, parking from Columbia St to Chelan Ave	\$1,000,000	\$1,830,000
Penny Rd	Easy St	SR 285 On Ramp	Preservation	Construct bike lanes, sidewalk, curb, and gutter between Easy St and Locust Ave	\$1,100,000	\$2,013,000
Penny Rd	Easy St	Euclid Ave	Preservation	Construct bike lanes between Easy St and Euclid Ave	\$510,000	\$933,000
Pershing St	Springwater Ave	Maple St	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Springwater Ave and Maple St	\$2,400,000	\$4,392,000
Pioneer Canal Trail	Maiden Ln	Cordell St	New Construction	Construct shared-use path and bridge along SR 285 between Maiden Ln and Cordell St	\$3,100,000	\$5,673,000
Princeton Ave	Central Ave	Maple Ave	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist and bike lanes between Central and Springwater Ave	\$10,000	\$18,000
Princeton Ave	Springwater Ave	9th St	Road Reconstruction with Improvements	Construct 1 enhanced crossing and bicycle boulevard between Springwater Ave and 9th St	\$1,200,000	\$2,196,000
Princeton Ave	9th St	5th St	Preservation	Construct bicycle boulevard between 9th St and 5th St	\$290,000	\$531,000

Table B-14: Wenatchee Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
Princeton Ave	Central	Springwater Ave	Low Cost Programmatic Bundle	Construct sidewalks where gaps exist and bike lanes between Central and Springwater Ave	\$220,000	\$403,000
Princeton Bikeway	Washington St	4th St	Low Cost Programmatic Bundle	Construct shared boulevard between 3rd St and Millerdale Ave	\$8,000	\$15,000
Red Apple Rd	Miller St	Okanogan Ave	N/A	Construct 1 enhanced crossings between Miller St and Okanogan Ave	N/A	N/A
Riverside Dr	5th St	Worthen St	Low Cost Programmatic Bundle	Construct sidewalk where gaps exists and 1 enhanced crossings from 5th St to Worthen St	\$240,000	\$439,000
Russell St	Miller St	Okanogan Ave	Preservation	Construct bike lanes between Miller St and Okanogan Ave	\$590,000	\$1,080,000
S Wenatchee Ave	Kititas St	Ferry St	Road Reconstruction with Improvements	Improve balance of traffic, parking, sidewalks, and bicycle facilities consistent with subarea plan. Rebuild S Wen Ave	\$4,100,000	\$7,503,000
S Wenatchee Ave	Ferry St	Marr St	Standalone Multimodal Retrofit	Widen bike path and construct 1 enhanced crossings between Ferry St and Marr St	\$840,000	\$1,537,000
S Wenatchee Ave	Marr St	Terminal Ave	Preservation	Construct 2 enhanced crossings and bike lanes between Marr St and Terminal Ave	\$900,000	\$1,647,000
Skyline Dr	Number 2 Canyon Rd	Appleland Dr	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Number 2 Canyon Rd and Appleland Dr	\$4,500,000	\$8,235,000
Springwater Ave	Western Ave	Princeton Ave	Preservation	Construct 4 enhanced crossings and bike lanes between Western Ave and Miller St	\$1,500,000	\$2,745,000
SR 285	Wenatchee River	Hawley St	Standalone Multimodal Retrofit	Construct all access control, operational improvements, and pedestrian improvements identified in City's plans	\$35,000,000	\$64,050,000

Table B-14: Wenatchee Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
SR 285	McKittrick St	Maple St	Standalone Multimodal Retrofit	Construct 1 enhanced crossings between McKittrick St and Maple St	\$470,000	\$860,000
Walla Walla Ave	9th St	Miller St	Road Reconstruction with Improvements	Construct 3 enhanced crossings between 9th St and Miller St	\$3,800,000	\$6,954,000
Washington St	Western Ave	Miller St	Preservation	Construct 3 enhanced crossings and bike lanes between Western Ave and Miller St	\$1,400,000	\$2,562,000
Washington St/King St	Spot	Spot	Standalone Multimodal Retrofit	Curb bulbouts, crosswalk markings, ada curb ramps	\$715,000	\$1,308,450
Western Ave	Number 2 Canyon Rd	Cherry St	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between Number 2 Canyon Rd and Cherry St	\$620,000	\$1,135,000
Western Ave	Maple St	Maiden Ln	N/A	Construct 2 enhanced crossings between Maple St and Maiden Ln	N/A	N/A
Western Ave	Springwater Ave	9th St	N/A	Construct 1 enhanced crossings between Springwater Ave and 9th St	N/A	N/A
Western Ave	Springwater Ave	Maple St	N/A	Construct 1 enhanced crossings between Springwater Ave and Maple St	N/A	N/A
Western Ave	Cherry St	Washington St	N/A	Construct 3 enhanced crossings between Cherry St and Washington	N/A	N/A
Western Ave	Washington St	5th St	N/A	Construct 2 enhanced crossings between Washington St and 5th St	N/A	N/A
Western Ave/McKittrick St	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
Woodward Dr	5th St	Springwater Ave	Road Reconstruction with Improvements	Construct sidewalks where gaps exist between 5th St and Springwater Ave	\$3,900,000	\$7,137,000
Worthen St	Orondo Ave	Riverside Dr	Preservation	Construct two enhanced crossings between Riverside Dr and Orondo Ave	N/A	N/A

Table B-14: WSDOT Project Needs

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
SR 150	US 97	City Limits	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between US 97 and City Limits	\$3,500,000	\$6,405,000
SR 150	Manson Rd	350' W of W Parkview Rd	N/A	Construct 2 enhanced crossings from Spader Bay Rd to Chelan Park Boat Launch	N/A	N/A
SR 150/ Bradley St	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
SR 172	UGA Boundary	Railroad Ave	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between UGA Boundary and Railroad Ave	\$1,200,000	\$2,196,000
SR 172	Main St	Road 14 NE	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Main St and Road 14 NE	\$1,900,000	\$3,477,000
SR 173	SR 17	18th St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between SR 17 and 18th St	\$710,000	\$1,299,000
SR 173	Columbia Ave	Dezellem Hill Rd	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between Columbia Ave and Dezellem Hill Rd	\$630,000	\$1,153,000
SR 173	10th St	18th St	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between 10th St and 18th St	\$120,000	\$220,000
SR 28	Hadley St	35th St NW	Road Reconstruction with Improvements	Construct bike lanes, sidewalk, curb, and gutter between Hadley St and 35th St NW	\$13,000,000	\$23,790,000
SR 28/ Batterman Rd	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$3,000,000	\$5,490,000
SR 28/35th St NE	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$2,000,000	\$3,660,000
US 297	SR 28	38th St Loop Trailhead	Standalone Multimodal Retrofit	Construct shared-use path on north side of US 2/97 from Eastmont Ave to the 38th St NW Loop Trail Trailhead	\$590,000	\$1,080,000

Table B-15: WSDOT Project Needs Cont.

Road	Start	End	Implementation Category	Description	Total Cost (2025)	Total Cost (2044)
US 297/Easty St	Spot	Spot	Standalone Multimodal Retrofit	Improve Intersection	\$5,000,000	\$9,150,000
US 97	SR 150	Apple Blossom Dr	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between SR 150 and City Limits	\$1,300,000	\$2,379,000
US 97	Woodin Ave	SR 150	Standalone Multimodal Retrofit	Construct 1 enhanced crossings between Woodin Ave and SR 150	\$320,000	\$586,000
US 97A	N Lakeshore Dr	UGA Boundary	Standalone Multimodal Retrofit	Construct sidewalks where gaps exist between N Lakeshore Dr and UGA Boundary	\$2,200,000	\$4,026,000



C

BIKEWAY ELEMENT

Table of Contents

Bikeway Planning Context C-1

Public Engagement C-6

Policies.....C-11

Planned Bikeway Network..... C-18

Implementation.....C-20

Funding.....C-37

Bike Parking C-41

Program Recommendations..... C-57

Wayfinding C-66

Bikeway Planning Context

The Chelan-Douglas Transportation Council (CDTC) is responsible for regional transportation planning and programming in Chelan and Douglas counties, including bicycle planning. In 2013, CDTC completed the Greater Wenatchee Valley Bicycle Master Plan (Bike Plan) which identified recommendations for a comprehensive bikeway network in the urbanized areas of the region (Wenatchee, East Wenatchee and Rock Island). In 2018 the Bike Plan was updated to track the progress of bikeway implementation; improve the Plan's utility for planned bikeway implementation; and identify complementary planning programs, such as bike parking and wayfinding, to improve bicycle transportation.

In 2022 the Bike Plan was updated again, building on the comprehensive policy, network, and program recommendations developed in the first two iterations of the Bike Plan by refining the details of network recommendations and complementary bicycling programs and expanding the scope of the plan to the small towns and rural communities outside the Wenatchee Valley urban area to provide recommendations on bicycle travel between communities. The Bike Plan was a collaborative product of CDTC and the Regional Bicycle Advisory Committee (RBAC) a subcommittee to the CDTC Board consisting of community members, non-profit stakeholders, and members of the CDTC Technical Advisory Committee. The Bike Plan was the direct result of their enthusiasm for bicycling and their commitment to improving bicycle transportation in their communities. The Regional Bicycle Advisory Committee was dissolved upon the completion of the 2022 update with its purpose now carried out at the project level and facilitated by the local agencies.

The Bike Plan is now the Bikeway Element of the RTP to strengthen the connection between CDTC's bicycle planning policies and broader regional transportation goals and to document the basis for the bikeway network vision and subsequent bikeway needs identified by the RTP multi-modal level of service (MMLOS) framework. The Bikeway Element outlines the long-term vision for a safe and connected bicycle network and provides tools for prioritization and implementation.

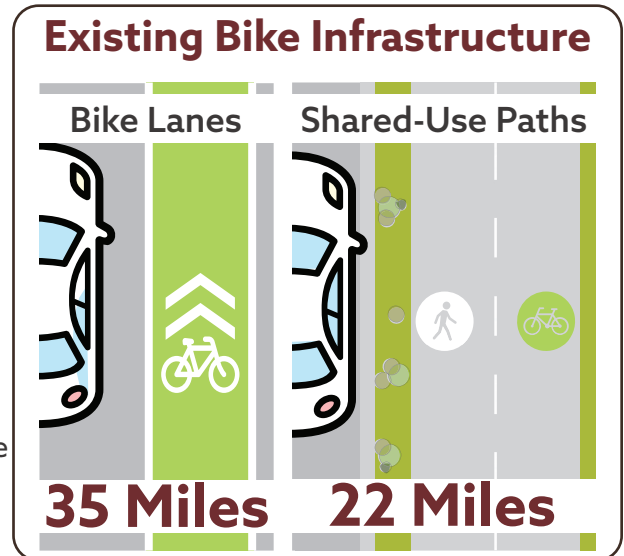
Prior to the incorporation of the Bikeway Element into the RTP, the bikeway network was unprioritized. The bikeway element now classifies the existing and planned bikeways as local or regional bikeways to differentiate between bikeways that provide regional mobility and are identified as needs in the RTP and those that provide local bicycle mobility. This focuses CDTC's bikeway planning work on critical regional routes while providing local agencies a clearer approach for implementing and prioritizing the planned bikeway network. CDTC has an active role in the implementation of the prioritized regional bikeways, while the non-regional system is wholly within the purview of the local agencies to implement. Some local neighborhood roads are identified as regional bikeways because they combine high connectivity with low volume and low speed and are more desirable than adjacent arterial streets.

This document is part of a suite of interactive bicycle planning tools. Multiple complementary, interactive maps and technical guides are available on chelan-douglas.org and bikwenatcheevalley.org to aid in the ongoing analysis and implementation of the bikeway network recommendations and programs.

Bicycling in the Region

Wenatchee Valley Urban Area

There are roughly 200 center-line miles of arterial and collector roads in the Wenatchee Valley, 35 of which include on-street bikeways infrastructure, in addition to 22 miles of shared use paths most of which is encompassed by the Apple Capital Loop Trail (Figure C-1). Most arterial and collector streets have fewer than 10,000 vehicles per day and would be comfortable for bicycling with on street bicycle facilities. Higher volume roads typically have higher speeds and require additional separation between vehicles and bicyclists to create a comfortable facility. Most local roads are low volume, low speed roads and comfortable for all user types despite lacking dedicated bicycle infrastructure. In some cases these low stress neighborhood roads provide connectivity across the urban area and are preferred to the adjacent arterial or collector. Since the adoption of the first bike plan in 2013, approximately 30 miles of bikeway infrastructure have been implemented.



Small Towns and Rural Areas

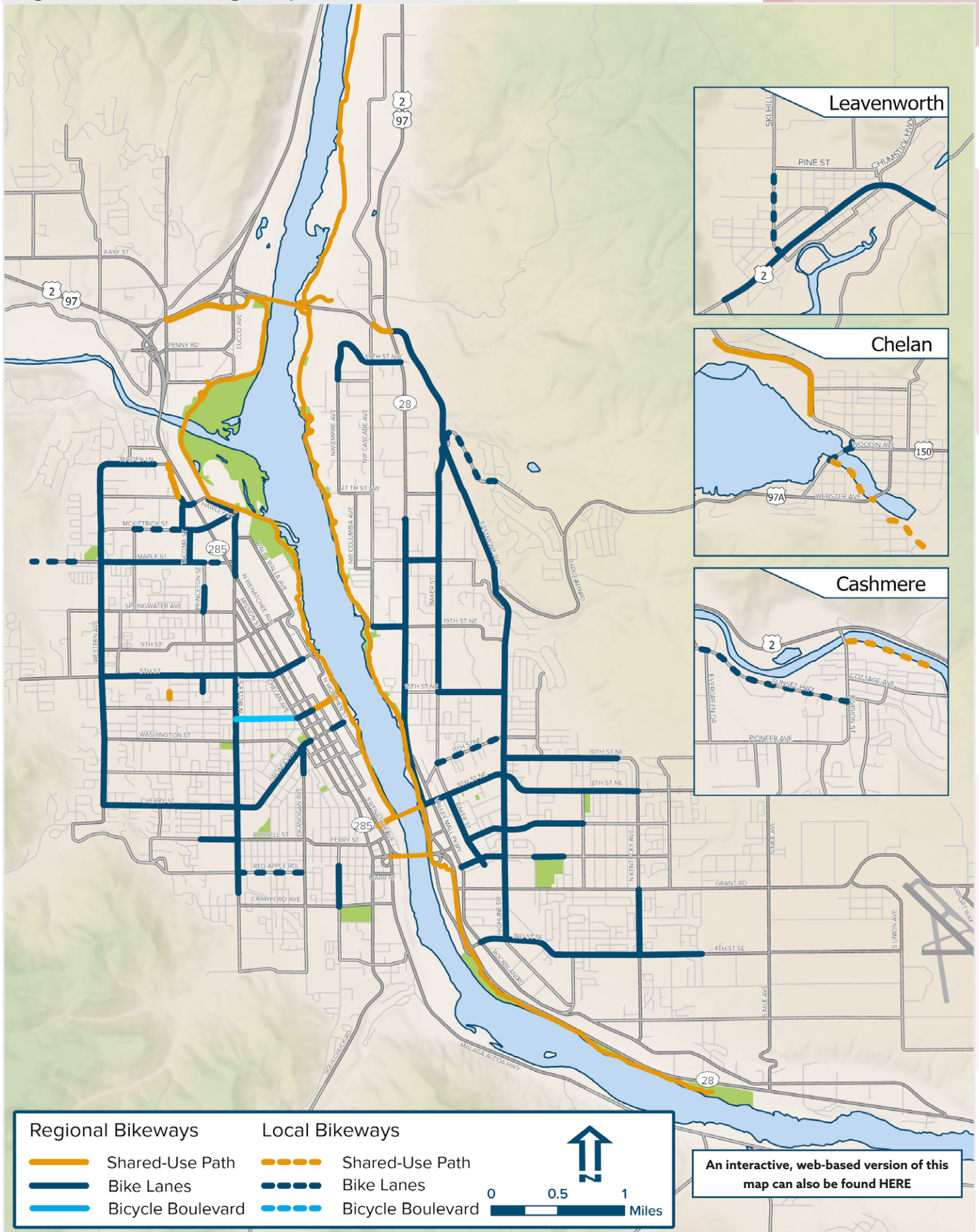
Bicycle transportation outside of the Wenatchee Valley Urban Area is characterized by the needs of unique user groups. Long distance bikers use the shoulders of small-town and rural roadways, often mixing with diverse roadway users like agriculture equipment and heavy trucks. Tourists in the resort towns of Leavenworth and Chelan create high demand for recreational riding in the often-congested downtowns and adjacent pathway networks. This unique demand creates the need for context sensitive planning and close coordination with diverse stakeholders.

Few small towns within the region have on-street bikeways. Leavenworth has roughly two and a half miles of bike lanes and a little more than one mile of shared use pathways. Chelan has just under one-half mile of bike lanes and roughly one mile of shared-use pathways. Cashmere has one-half mile of bike lanes and shared use paths.

The small towns within the region are connected by a network of medium-to-high speed, low volume county roads and high-speed, high-volume state highways constrained by the region's mountains and river valleys. These roadway characteristics and topographic constraints create unique challenges for establishing comfortable bikeway connections between the outlying rural areas and the Wenatchee Valley. Throughout the west, legacy railroad corridors are repurposed for active transportation, but in the CDTC region, there are few rail corridors where this opportunity exists. CDTC and its partner agencies must identify alternative strategies for making these connections. Numerous irrigation canal easements traverse the rural communities and could be repurposed for shared use paths.

Though expensive and complex, shared-use paths are the most comfortable bikeway type for connecting rural communities. In locations where shared-use paths are infeasible bicycles are accommodated on rural roads using signage and wide shoulders.

Figure C-1: Existing Bicycle Infrastructure



Bikeway Standards

CDTC uses standards consistent with the National Association of City Transportation Officials (NACTO) bikeway standards guide to determine existing bike facilities in urban areas and AASHTO/WSDOT standards in rural areas. A bike lane must be a minimum of 5' wide when measured from the curb face and minimum of 3' wide when measured from a longitudinal joint. A shared road must include signage and pavement markings to indicate that bicycle and vehicles share the same travel lane. Shared use paths must be separated from vehicle travel lanes by an open space and vertical separation (curbing) or physical barrier.

Public Engagement

Thorough public engagement has been conducted over the course of CDTC's bicycle planning efforts. These efforts provided a glimpse of the preferences and opinions of the bicycling and non-bicycling public. In 2018 a public survey was conducted to aid the Bike Plan update. The responses to the survey are summarized as follows:

Barriers to Bicycle Transportation

1. 30% of responses mention a lack of bike lanes, trails or routes
2. 16% of responses mention safety around vehicles
3. 15% of responses mention weather
4. 9% of responses mention "other" barriers
5. 8% of responses mention lack of bike parking
6. 7% of responses mention business (work, kids, pets, hobbies)
7. 7% of responses mention hilly terrain

Where people bike most often:

- 1. Neighborhood Streets; 31% bike/or would like to bike to trailheads, parks & recreation**
- 2. Loop Trail; 25% bike/or would like to bike to shopping, dining, errands**
- 3. City Streets; 21% bike/or would like to bike to their workplace**

How should the bike network be improved?

1. Create connections to the Loop Trail
2. Create a network of neighborhood streets with wayfinding and bike route information
3. Create safe routes for walking and bicycling around schools



What type of bicycle facilities would improve the network?

1. Protected or buffered bicycle lanes
2. Bicycle lanes
3. Off-Street Trails (like the Loop Trail)

What bike programs are needed:

1. School programs (youth bike programs and education)
2. Bike parking improvements
3. Resources for businesses and employers to help employees commute by bike
4. Bike education for cyclists (classes, events, bike rodeos)

Ongoing public engagement to refine the Bike Plan was done through multiple, localized planning efforts aiming to refine bicycle network recommendations. These efforts were led by CDTC and the local agencies in the region and are summarized below.

Chelan County Multi-Use Pathways Plan – 2021

The Chelan County Multi-Use Pathways Plan will guide investments for inter-urban trails and related facilities to better connect communities and destinations within the county. The plan identified 7 corridors connecting major recreation, tourism, economic, and residential destinations to focus additional bikeway planning and resources. Public engagement included a steering committee consisting of public agencies and various local organizations, and an online survey/mapping tool generating responses from nearly 1,500 participants.

South Wenatchee Bike Network Connectivity Study – 2022

CDTC conducted a feasibility study for creating safe, comfortable bicycle connections on multiple roads between the South Wenatchee neighborhood and a funded bridge over the BNSF railroad tracks in the vicinity of Bridge St connecting South Wenatchee Avenue to the Loop Trail. South Wenatchee is a predominately Spanish speaking necessitating a targeted public engagement strategy that met the community members in their neighborhood at comfortable and familiar locations.

CDTC attended multiple community events in South Wenatchee, held focus groups with the community and city council members, directly solicited feedback from local businesses, and held a “bike rodeo” event showcasing the results of the study. In total 20-30 surveys were completed and nearly 100 people attended the bike rodeo.

¿ANDAS EN BICICLETA South Wenatchee ?

El Consejo de Transporte de Chelan-Douglas (CDTC) y la Ciudad de Wenatchee están llevando a cabo un Estudio de conectividad de bicicletas

y queremos saber de usted!

Responda la encuesta utilizando el QR Code que aparece a continuación o visitando bikesouthwenatchee.com para compartir sus historias e inquietudes, y brindar comentarios sobre cómo podemos mejorar la seguridad de las bicicletas en South Wenatchee.

¡escanee aquí para completar la encuesta!

PARA OBTENER MÁS INFORMACIÓN, COMUNÍQUESE CON
Biley Shoukri

Chelan-Douglas TRANSPORTATION COUNCIL CDTC

Project Information Translated to Spanish

2022 Our Valley, Our Future Action Plan

Our Valley Our Future (OVOF) is a community-based organization that engages and collaborates with the people and organizations of the Wenatchee Valley to achieve our region's shared, long-range vision. Using the input from more than 1,300 community members and six subcommittees of subject-matter experts The Action Plan identifies actions that need to be taken to meet the region's shared vision.

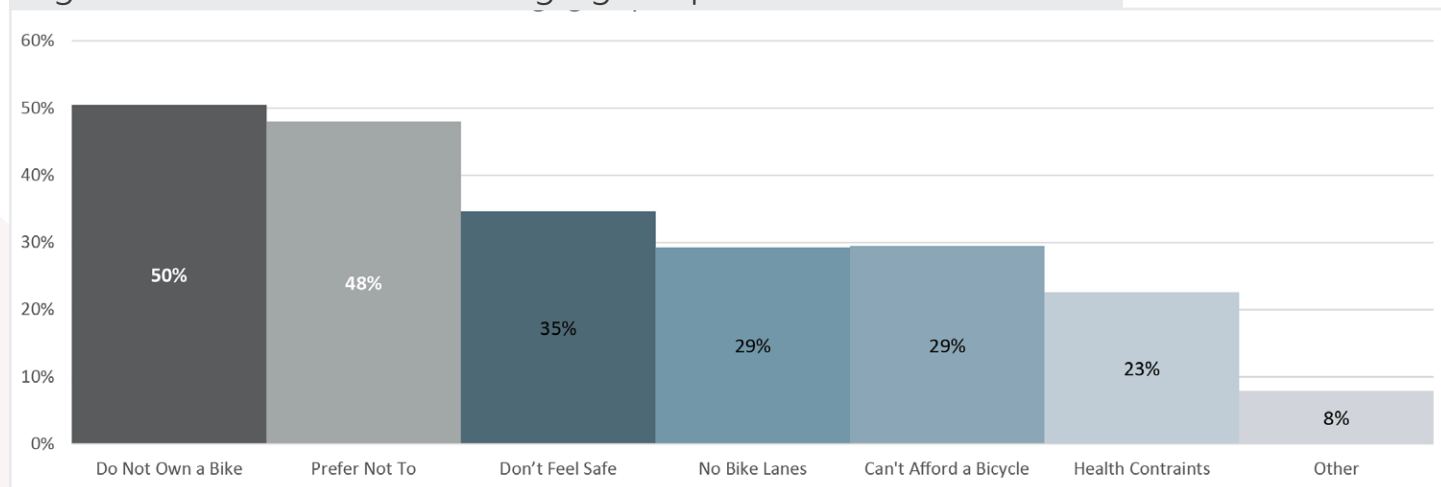
The Action Plan identifies the CDTC as a supporting partner to prioritize development of a bike-and pedestrian-friendly transportation infrastructure, including building pathways that connect local communities and installing bike lanes and pedestrian sidewalks and trails in urbanized areas.

Regional Transportation Plan Public Opinion Survey – 2023

At the beginning of the RTP planning process CDTC conducted a public opinion survey to understand the public's preferences and opinions on transportation issues relevant to CDTC policy and planning. The survey was completed by over 1,000 residents of Chelan and Douglas counties with the number of survey participants in each zip code being proportional to the zip code's share of the regional population.

Multiple questions related to bicycling were asked and are summarized below. The first asked respondents what discourages them from riding, and what would to change to for respondents to ride. One-third of of respondents that rarely or never ride bicycles on streets or paved pathways list a lack of safety or infrastructure as reasons that discourage them from biking as summarized in Figure C-2. When asked what would encourage them to ride bicycles on streets or paved paths, the same respondents that ride rarely or never listed safe bicycles lane.

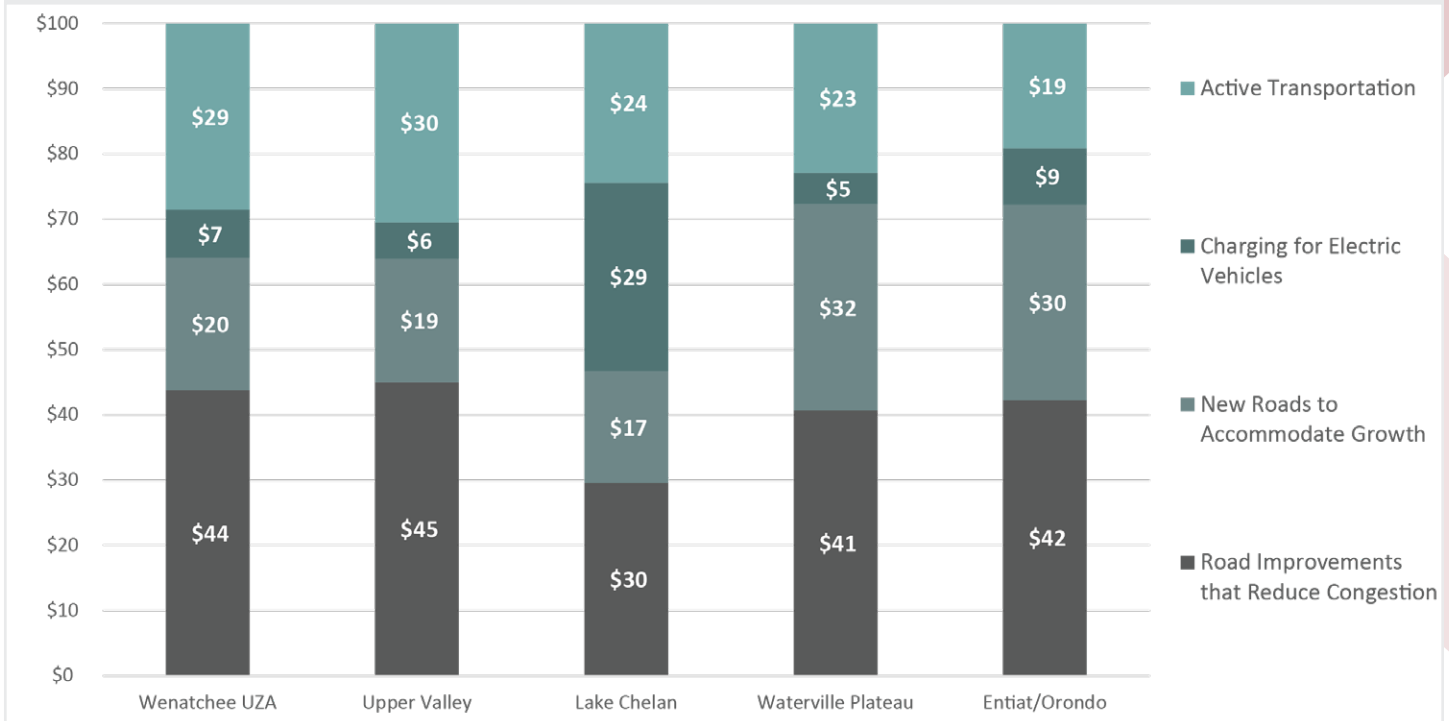
Figure C-2: Factors Discouraging Respondents to Ride Bikes



Another question asked respondents how they would budget \$100 between four expenditure categories. Individual responses were grouped and averaged by zip code and show that on average 20%-30% of the budget would be allocated to active transportation expenditures as summarized in Figure C-3.

The survey also asked respondents whether or not they own electric bicycles. Roughly 10% of respondents do own electric bicycles with 25% of respondents stating that they are considering or probably will purchase an electric bicycle.

Figure C-3: Respondents' Average Allocation of a \$100 Budget by Expenditure

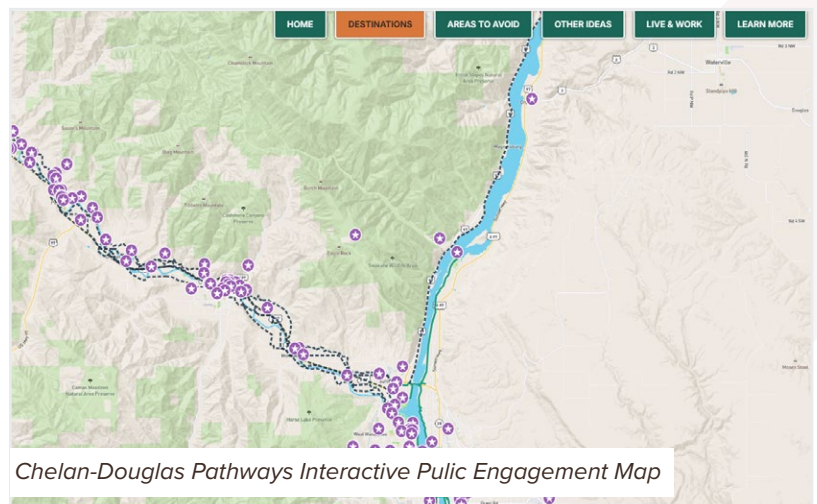


Chelan - Douglas Regional Pathways Plan - 2025

CDTC conducted a planning process that identified paved, multi-use pathways alignments to connect communities in the following 4 corridors:

- » Chelan - Manson
- » Leavenworth - Wenatchee
- » Wenatchee - Malaga
- » East Wenatchee - Rock Island

Comprehensive public engagement was conducted throughout the process and anchored by a website that included opportunities for the public to interact with mapping tools and respond to project surveys. Additionally, citizen advisory committees consisting of residents, business owners, and other stakeholders were formed for each corridor to provide feedback to the project team at critical milestones and to create awareness of the plan within their communities. In total, over 1,200 individuals interacted with the project website while over 100 individuals attended project meetings and open houses.



Bikeway Planning Policies

The goal of the bikeway element is to guide and support local agency implementation and stewardship of a safe and connected bikeway network. This section summarizes the policies that aid best practice planning, implementation, and stewardship and identifies the corridors recommended for bicycle improvements. Supporting programs can be found on pages C-56 through C-64.

The policy recommendations described below are the foundation for developing a comprehensive bicycle network. Adopting these policies at the local level creates more strategic flexibility for local governments to implement bicycle projects. Moreover, these policy decisions take the stance that bikeway needs should be accommodated in project design and implementation using best practices.

Review bikeway standards, markings, and other design features

Working through the Technical Advisory Committee, local agencies should consider reviewing and adopting standards for bikeway design and signage to be consistent across the region. CDTC recommends use of the National Association of City Transportation Officials (NACTO) bikeway standards in urban areas and AASHTO/WSDOT standards in rural areas. These standards represent best practices for bike lanes, cycle tracks, shared roads, intersection treatments, signals, and wayfinding/signage. These standards are used by CDTC to determine whether a corridor is identified as an existing bikeway and represent the expectation for infrastructure treatments in projects funded by CDTC that include a bikeway component.

Improve Bikeway Maintenance

The variety of weather experienced in North Central Washington makes maintenance difficult across all public infrastructure. Introducing new materials and road designs comes with additional challenges for street maintenance departments and local budgets but the need is present regardless of current budget constraints.

Examples of bikeway system maintenance include:

- » Street sweeping (including soon after snowmelt)
- » Signage and wayfinding repair/replacement
- » Re-striping and replacement of pavement markings
- » Pavement and pothole repairs
- » Vegetation management
- » Snow removal

Additional funding is needed to adequately maintain existing and future bicycle facilities. It's been found in multiple cases that bikeway development can catalyze economic activity and help to pay for its maintenance ¹. The most effective way to improve bicycle and pedestrian infrastructure maintenance is it to create dedicated funding mechanisms that keep infrastructure maintained to an adequate standard. Revenue options and funding mechanisms are discussed in Chapter 3.

1: Alliance for Biking & Walking; League of American Bicyclists: How Communities are Paying to Maintain Trails, Bike Lanes, and Sidewalks

One of the most challenging maintenance tasks for bikeways is snow removal. Snow is often pushed to the edges of a roadway, covering bike lanes, making them unusable. The local agencies and WSDOT are encouraged to evaluate additional costs for bikeway maintenance during the winter in order to support year-round access to the urban area bikeway network, where determined to be feasible.

Improve Existing Bikeways

Many bicycle facilities can be greatly benefited by making relatively simple and modest improvements to aid functionality, comfort, and safety. Many of the improvements are low-cost and high-benefit to existing bicycle routes.

Examples of improvements:

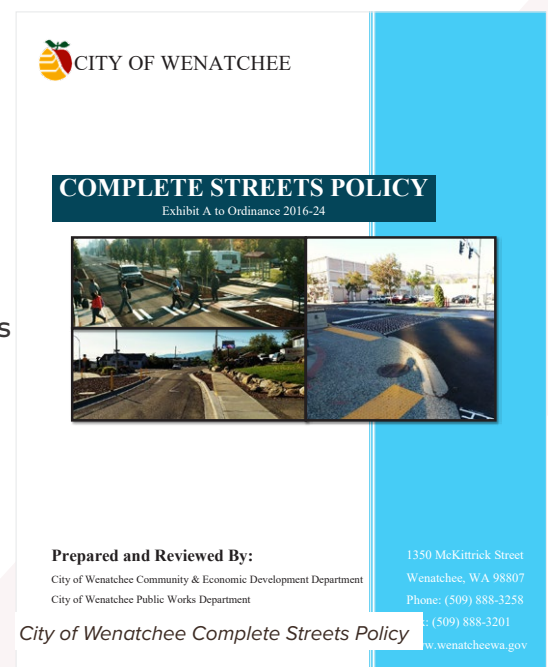
- » Adding better lighting on busy corridors,
- » Adding bicycle detection at signalized intersections,
- » Striping through intersections,
- » Adding green paint and other modern pavement markings.

Additionally, bikeways along high volume corridors and areas with a high density and heavily used driveways can benefit from more robust improvements such as:

- » Creating separated bikeways through installation of a physical barrier or relocation of a bike lane/ route
- » Widening bike lanes to exceed minimum width standards
- » Providing enhanced conditions at intersections to protect cyclists
- » Providing separated crossings (bridges or tunnels) of busy routes

Complete Streets Policies

In general, Complete Streets policies require the consideration and recommendation of improvements for all modes of transportation throughout all phases of transportation projects. This includes publicly funded projects and projects associated with development. Local agency Complete Streets policies should consider the identification of a bikeway in this Plan as the justification for including a bikeway in any transportation project. Additionally, local agencies with codified Complete Streets policies qualify for bike specific grant programs at the federal, state, and regional levels.



Bikeways Funded by Development

Adding new bicycle infrastructure at the time of development can reduce the costs of adding new facilities through costly retrofits or land acquisitions in the future.

Local agencies are encouraged to review development policies and code and consider establishing a formal process to evaluate bicycling infrastructure needs concurrent with development of new subdivisions, businesses, multifamily buildings, commercial properties, and new parks and trails projects. Specific infrastructure and treatments should be consistent with the context and impact of development.

It is recommended that new development be reviewed against bicycle network gaps and consider the potential for increased cycling related to the development. The results of this review should be incorporated into the development process.

Periodic Roadway Preservation

Often times, bikeways can be added as a low-cost addition to periodic road resurfacing. A public hearing may be required in cases where right-of-way needs to be repurposed for the bikeway. Local agencies are encouraged to review the bike plan as they develop roadway preservation projects and incorporate recommended bikeway treatments where feasible, in order to advance potential low-cost opportunities for development of the planned bikeway network.

Continue planning

With the exception of periodic updates and refinements to the RTP, the comprehensive bikeway network vision in the Wenatchee Valley and the key inter-community corridors have been identified and agreed upon. The bikeway planning focus within the region should shift to concept development of the planned network in a way that best prepares local agencies for implementation, and if desired, development of a bikeway network vision in the small towns outside the Wenatchee Valley. Additionally, local agencies are encouraged to adopt or reference the planned bikeway network in future updates to the transportation element of their comprehensive plans.

Bikeway Network

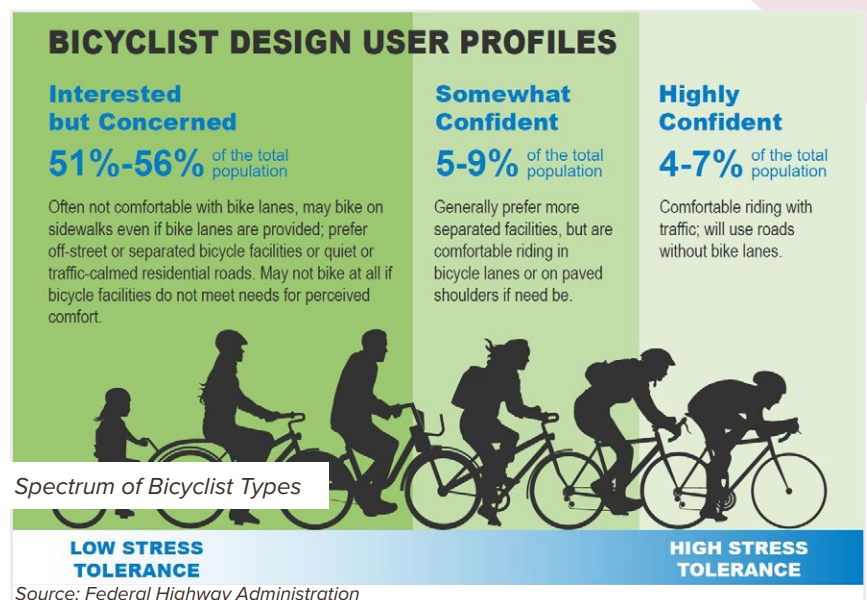
Scope of the Bike Plan and Relationship to Other Plans

The Bikeway Element identifies the bikeway network vision for the Wenatchee Valley and key corridors that connect communities. In general, bikeway recommendations are non-perspective corridor improvements that require additional concept development, analysis, and design depending on a variety of factors. For example, a recommendation for "bike lanes" could be implemented as conventional, buffered, or separated bike lanes. Some bikeway recommendations are closer to implementation due to additional planning, concept development, and engineering conducted by CDTC and the local agencies, but because not all recommendations have been developed to this level of detail they are also shown as non-prescriptive recommendations. Users of this plan can review the following supporting documents when seeking details of specific recommendations that have been developed at a level of detail beyond the bike plan.

- » Wenatchee Riverfront Park Master Plan (Chelan PUD)
- » Wenatchi Landing Sub-Area Plan (Douglas County)
- » Chelan County Multi-Use Pathways Plan (Chelan County)
- » SR-28 Corridor Study (CDTC)
- » South Wenatchee Bicycle Connectivity Study (CDTC)
- » Chelan-Douglas Regional Pathways Plan (CDTC)
- » Reimagine Wenatchee Master Plan (City of Wenatchee)
- » Chelan-Douglas Pathways Master Plan (CDTC)

Planning for All Ages and Abilities

To achieve growth in bicycling, bikeway planning and design needs to meet the needs and desires of all potential bicyclists. This framework is often described as planning for the eight and eighty year old. Often times, bikeway planning and infrastructure design excludes most people who might otherwise ride, traditionally favoring very confident riders, who tend to be adult men. CDTC considers the needs of all users in its bikeway planning and encourages the local agencies in the region to do the same during design and implementation.



The principle goal of the Bike Plan is to identify an implementable, safe, comprehensive, and connected bikeway network. Though progress has been made since the adoption of the first Bike Plan in 2013 there are still many gaps in the bikeway network. The network recommendations were identified in two ways:

- » Inclusion of bikeway concepts and recommendations identified in plans and studies conducted by CDTC's partner agencies.
- » Collaboration with the RBAC and TAC to identify corridors to include in the recommended bikeway network vision.

Additional detail may exist for some bikeway concepts and its encouraged that users of this plan review the supporting plans and documents listed on page C-14 when seeking additional detail on a bikeway recommendation.

Bikeway Recommendation Types

The bikeway recommendations in Figure C-4 are one of the following four types:

Shared Roads

Regardless of the presence of bicycle infrastructure, all roads are shared roads except where bicycling is expressly prohibited. In the context of the Bikeway Element, existing or planned shared road designations are reserved for roads in urban areas with traffic volumes below 3000 ADT and speeds of 25mph or less. On these roads, shared lane markings (sharrows) and/or signage indicating that bicycle and vehicles share the same travel lane are adequate for use by interested but concerned user types.

Bicycle Boulevards

Bicycle boulevards are similar to shared roads but are designed to prioritize bicycle travel through traffic calming strategies such as neck downs, pinch points, chicanes, mini traffic circles, and traffic diversion strategies at major intersections to reduce through traffic.

Bike Lanes

A bike lane recommendation includes all bike lane types from conventional, striped bike lanes to physically protected bike lanes. A final decision about specific facility type should be determined during project development and implementation.

Shared-use paths

Shared-Use Paths are separated from the roadway using an open space and vertical separation or barrier within the road right of way or within their own right of way.

Wenatchee Valley Bikeway Network

Bikeways in the Wenatchee Valley are classified as either regional bikeways or local bikeways. Though all recommendations are a part of the bicycle network blueprint, a refined list of priority regional bikeways has been identified to sharpen the focus of the plan and provide local agencies a clearer approach for implementing and prioritizing the bikeways that build out the critical network and provide the greatest connectivity between destinations. Regional Bikeways are identified using the following factors:

Loop Trail Connectivity

Does the bikeway provide new or improved connectivity to the loop trail? Does the bikeway fill a gap on or extend an existing bikeway with connectivity to the loop trail?

Bikeway Spacing

Regional bikeways are spaced roughly ¼ - ½ mile apart.

Bikeway Demand

High surrounding population/job density, intersection density, destination density (schools, services), and transit presence.

Equity

Presence of low income/minority populations.

CDTC has an active role in the implementation of the prioritized regional bikeways, while the non-regional, local system is wholly within the purview of the local agencies to implement.

Typically, the regional bikeway network shares the same primary roadway network used by general purpose vehicle traffic. These roads often provide the best connectivity and direct routing between bicycle trip generators. However, some local neighborhood roads provide high connectivity with low volume and low speed and are more desirable than adjacent arterial streets. The planned regional network within the Wenatchee Valley consists of approximately 26 miles of bike lanes, 5 miles of shared roads, and 4 miles of shared-use paths. The planned local network within the Wenatchee Valley consists of approximately 31 miles of bike lanes, 1 mile of bicycle boulevards, and 0.5 miles of shared-use paths. Figure C-4 shows the planned bikeway network.

Regional Shared-Use Pathways

In addition to the comprehensive bikeway network in the Wenatchee Valley, a regional pathway network is also desired to connect the small towns in the region to each other and to the Wenatchee Valley.

Multiple plans and studies have identified pathway alignments for making those connections. Chelan County conducted a community driven planning process that focused on identifying shared-use, inter-urban trails connecting the cities and towns in the county. Additionally, CDTC conducted an alternatives comparison study of SR 28 between East Wenatchee and Rock Island that included the evaluation of extending the Loop Trail to Rock Island.

These efforts have laid the groundwork for implementing safe, comfortable, and equitable pathways between the small towns and communities in the region. Like the Wenatchee Valley bikeway network, pathways are classified in two different ways, community connectors or rural connectors. Community connectors have termini between areas with existing or proposed urban growth boundaries. For example, the Upper Valley Trail connecting Leavenworth, Cashmere, and Wenatchee. Rural connectors terminate or connect unincorporated areas. For example, the pathway between Leavenworth and Plain identified in Chelan County's Pathways Plan. CDTC actively participates in the planning and implementation of community connectors, while rural connectors are left to the discretion of the local jurisdiction.

In total, approximately 70 miles of community connectors and 75 miles of rural connectors are planned. Figure C-5 shows the planned regional pathway network.

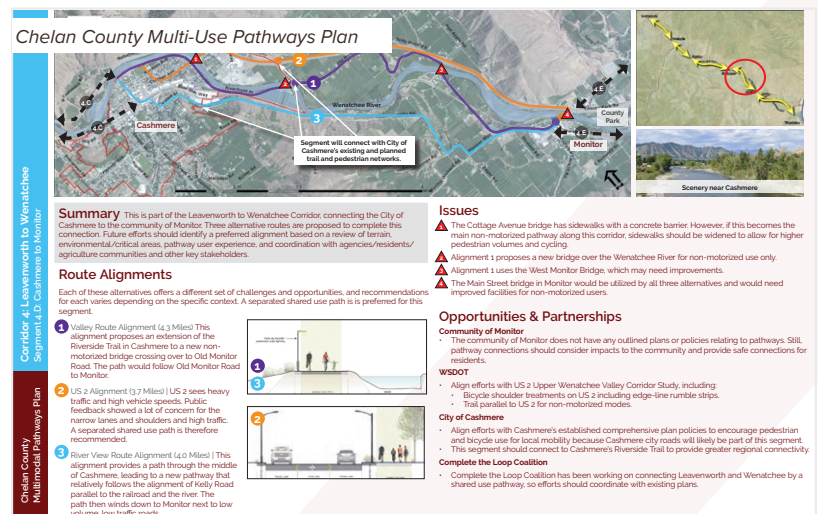


Figure C-4: Regional Shared-Use Pathways

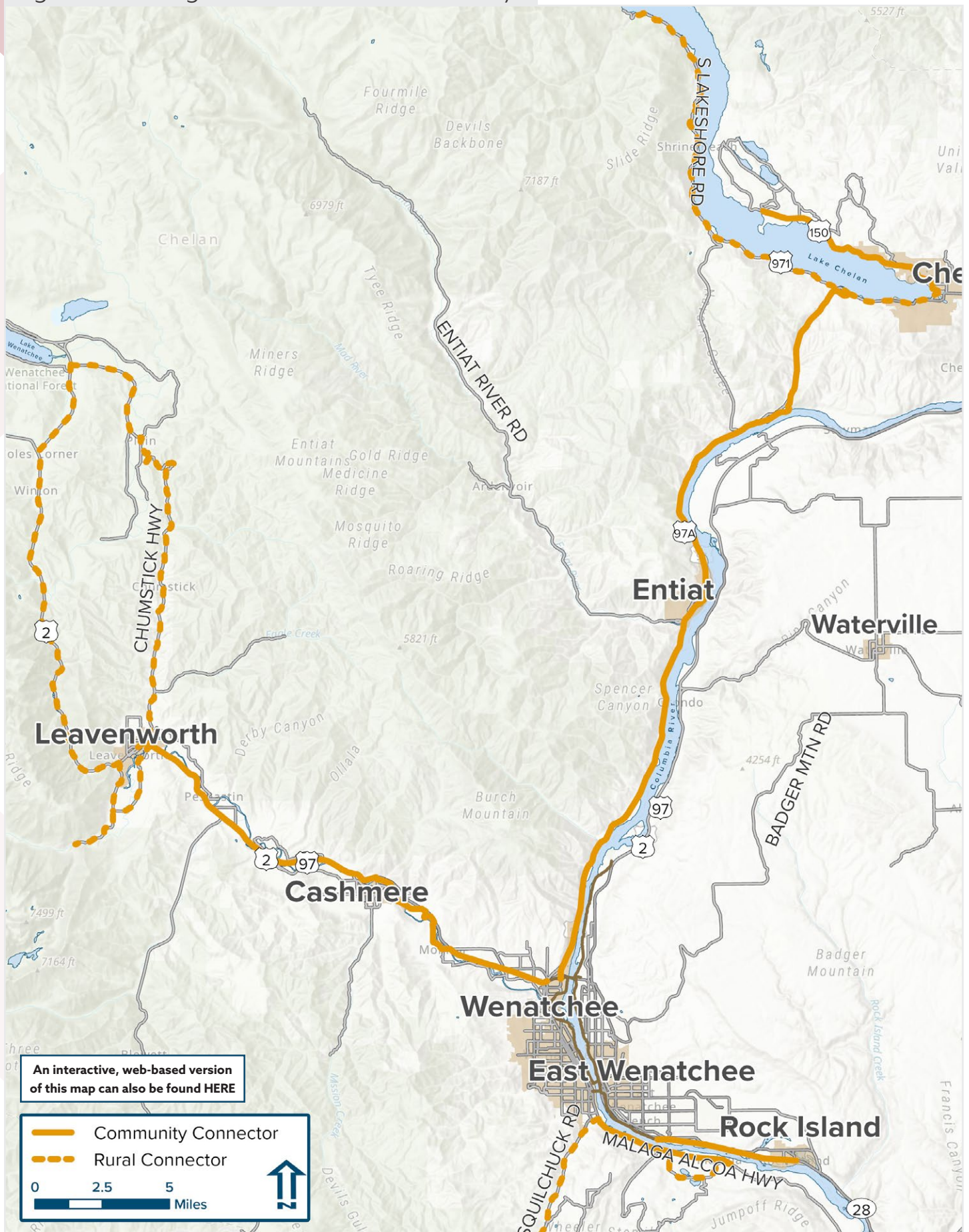
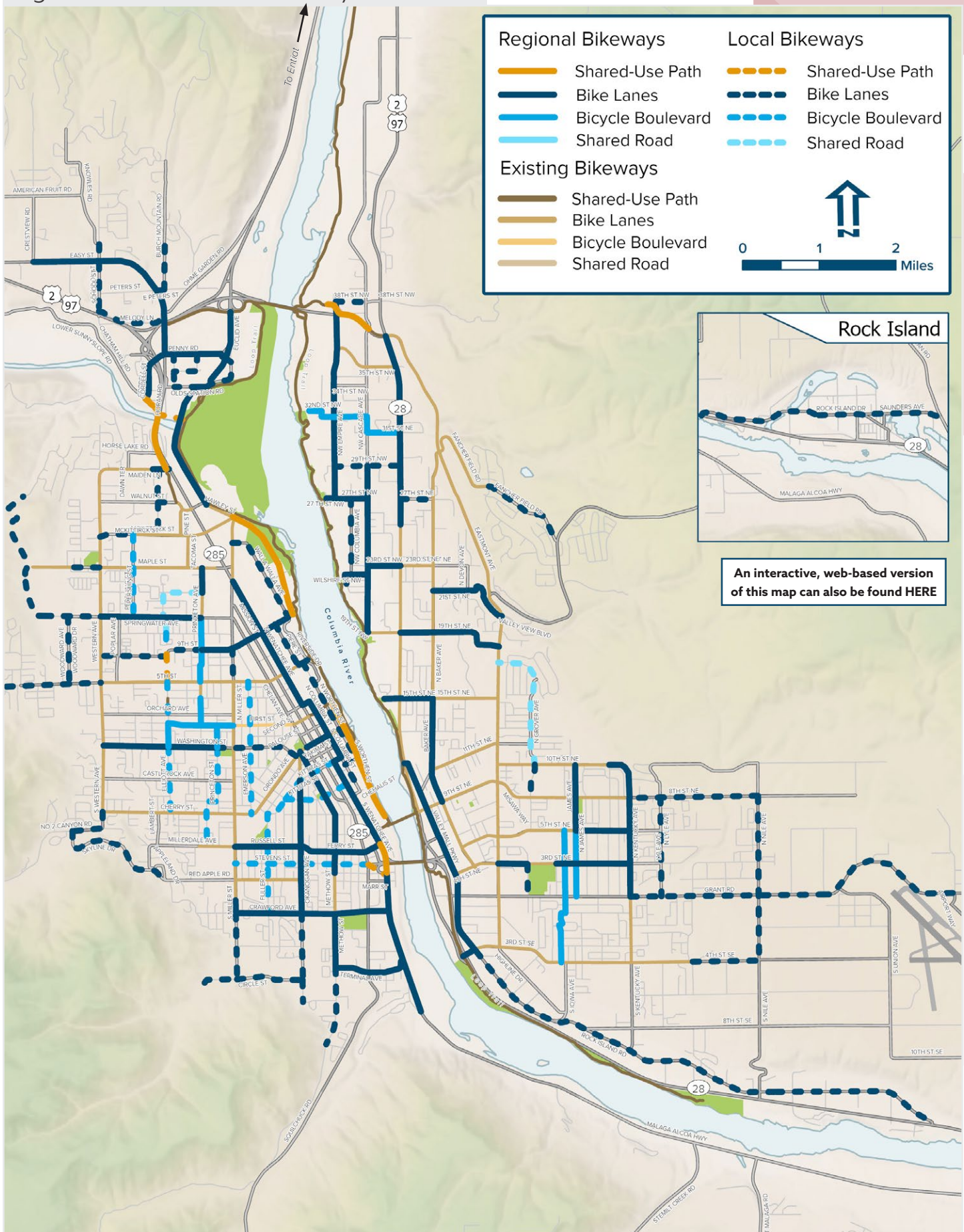


Figure C-5: Planned Bikeway Network



Implementation

Most bikeways are implemented as a component of broader transportation investments. For example, roads needing bicycle and sidewalk improvements are typically implemented when a road requires full reconstruction. Reconstructions create the opportunity to widen the road if necessary for bikeway implementation, and construct other roadway infrastructure like drainage. While this approach maximizes the value of each dollar spent on transportation and minimizes the portion of project cost associated with bikeway implementation, it does not consider the value of each bikeway and whether one should be implemented before another, nor does it result in a fast pace of bikeway implementation. Currently, bikeway implementation is constrained by the transportation budgets within each agency but the following strategies will help move the region closer towards completing the network.

Implementation Strategies

Include Bikeway Striping in Preservation Treatments

Local agencies and WSDOT are encouraged to implement bicycle facilities during road construction and periodic pavement preservation and striping projects whenever feasible. This is the easiest way to implement conventional, striped bike lanes and shared roads. 22 bikeways could be implemented if included in pavement preservation treatments.

Pursue Grants and New Revenues

Local agencies are encouraged to continue pursuing grants for active transportation improvements and evaluate new revenue sources to implement both bicycle programs and bicycle network projects.

Complete Streets Policies

All cities and counties in the region are encouraged to develop a Complete Streets ordinance consistent with the CDTC Complete Streets Policy, and to be eligible for the state Complete Streets funding program. For consistency, it is recommended that Complete Streets policies applicable within the Wenatchee Urbanized Area (Chelan County, Douglas County, Wenatchee, East Wenatchee and Rock Island) reference the presence of a recommended bikeway in this Plan as the basis for determining when bicycle accommodation is a necessary component of a transportation project.

Continue Planning and Defining Major Projects

CDTC and the local agencies should continue to plan and develop projects in order to position the region for additional grant funds and to have projects included in state and federal legislative packages. Bikeway projects or bikeways as components of larger projects that have been identified through detailed planning and are identified in multiple plans are often more competitive. Local agencies are encouraged to adopt or reference the RTP and Bikeway Element in future updates to the transportation element of their comprehensive plans.

Bikeway Implementation Details

As discussed above, it may be feasible to include bikeway striping during basic preservation activities, while others may require roadway space reallocation, reconstruction, or even widening. Each bikeway is implemented as one of the following types of projects as identified in Tables C-1 through C-5.

- » Preservation: Resurfacing the existing roadway
- » Roadway Reconstruction with Improvements: Reconstructing a road due to poor pavement or subgrade condition and adding new bike lanes and sidewalk where applicable.
- » New Road & Bridge Construction: Construction of a new road or bridge that includes bicycle infrastructure.
- » Standalone Multimodal Retrofit: Adding bikeways to roads with existing drainage and pedestrian infrastructure; often includes reallocation of general purpose or parking lanes.
- » Low Cost Programmatic Bundle: Short segments of bikeways that may require reallocation of parking and/or general purpose lanes and construction of curb, gutter, and sidewalk that can be bundled into a single programmatic project implemented by a grant or local revenue source.

The associated impacts to the road prism are provided where applicable. The most common impact to the roadway prism is rededicating pavement previously used for vehicle traffic and parking. These details should be viewed as a starting point for determining feasibility and require further evaluation and scrutiny during project development. Cost estimates reflect the cost to construct bicycle infrastructure and any other applicable infrastructure associated with additional multimodal needs as detailed in Appendix B.

Table C-1: Bikeway Implementation Details - Wenatchee

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
5th St	Bike Lane	Surry Rd	Western Ave	Road Reconstruction with Improvements	Parking	\$5,100,000
9th St	Bike Lane	Apple Capital Loop Trail	BNSF Railroad	Standalone Multimodal Retrofit	General Purpose Lanes	\$500,000
Broadview Extension	Bike Lane	Maiden Ln	Maple St	New Construction	N/A	\$13,000,000
Central St	Shared Road	9th St	Princeton Ave	Preservation	None	\$1,100,000
Chester Kim Road	Bike Lane	Penny Rd	Old Station Rd	Preservation	Parking	\$360,000

Table C-1: Bikeway Implementation Details - Wenatchee Cont.

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Columbia St	Bike Lane	2nd St	Chehalis St	Road Reconstruction with Improvements	Parking	\$7,100,000
Confluence Parkway	Bike Lane	Euclid Ave	Hawley St	New Construction	N/A	\$173,000,000
Crawford Ave	Bike Lane	Okanogan Ave	Mission St	Preservation	Parking	\$730,000
Crawford Ave	Bike Lane	Okanogan	Miller St	Preservation	Parking	\$740,000
Crawford Ave	Shared-Use Path	Mission St	S Wenatchee Ave	Standalone Multimodal Retrofit	Parking	\$600,000
Easy St	Bike Lane	Penny Rd	Melody Ln	Preservation	None	\$290,000
Elliott St Bikeway	Bicycle Boulevard	5th St	Cherry St	Low Cost Programmatic Bundle	None	\$6,000
Euclid Ave	Bike Lane	Olds Station Rd	Penny Rd	Standalone Multimodal Retrofit	Parking	\$660,000
Euclid Ave	Bike Lane	Euclid Ave	US 2	Standalone Multimodal Retrofit	None	\$1,000,000
Ferry/Russell St	Bike Lane	S Wenatchee Ave	Okanogan Ave	Preservation	Parking	\$900,000
First St	Bicycle Boulevard	Chelan Ave	Miller St	Road Reconstruction with Improvements	None	\$3,200,000

Table C-1: Bikeway Implementation Details - Wenatchee Cont.

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Fifth St	Bike Lane	Western Ave	No. 1 Canyon Rd	Road Reconstruction with Improvements	Parking	\$5,100,000
Franklin Ave	Bicycle Boulevard	5th St	Orondo Ave	Preservation	None	\$1,500,000
Fuller Bikeway	Bicycle Boulevard	Spokane St	Crawford Ave	Preservation	None	\$1,400,000
Horan PUD Path	Bike Lane	Apple Capital Loop Trail	SR 285 Pathway	New Construction	N/A	\$440,000
Kittitas St.	Bicycle Boulevard	Spokane St	Columbia St	Preservation	None	\$670,000
Loop Trail Expansion	Bike Lane	Thurston St	Hawley St	New Construction	N/A	\$1,800,000
Maiden Ln	Bike Lane	Rogers DR	SR 285	Low Cost Programmatic Bundle	None	\$6,000
Maple St	Bike Lane	Gabriela Ln	Western Ave	Road Reconstruction with Improvements	None	\$1,800,000
McKittrick St	Bike Lane	Western Ave	Pershing St	Road Reconstruction with Improvements	None	\$2,500,000
Melody Ln	Bike Lane	School St	Easy St	Roadway Reconstruction with Improvements	None	\$3,300,000

Table C-1: Bikeway Implementation Details - Wenatchee Cont.

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Methow St	Bike Lane	Terminal Ave	Crawford Ave	Road Reconstruction with Improvements	Parking	\$2,700,000
Methow St	Bike Lane	Orondo Ave	Marr St	Preservation	None	\$1,200,000
Methow St	Bike Lane	Terminal Ave	Saddlehorn Ave	Roadway Reconstruction with Improvements	None	\$3,500,000
Miller St	Bike Lane	5th St	9th St	Preservation	General Purpose Lanes	\$300,000
Miller St	Bike Lane	C/L	Irrigation Canaal	Preservation	Parking	\$300,000
N Wenatchee Ave	Bike Lane	5th St	2nd St	Road Reconstruction with Improvements	General Purpose Lanes	\$1,500,000
N Wenatchee Ave	Bike Lane	SR 285	9th St	Preservation	General Purpose Lanes	\$670,000
N Wenatchee Ave	Bike Lane	5th St	9th St	Preservation	None	\$420,000
Ninth St	Bike Lane	Western Ave	Miller St	Preservation	Parking	\$1,500,000
No 2 Canyon Rd	Bike Lane	Skyline Dr	Western Ave	Road Reconstruction with Improvements	Widening	\$4,000,000
Okanogan Ave	Bike Lane	Crawford Ave	Russell St	Preservation	Parking	\$1,100,000

Table C-1: Bikeway Implementation Details - Wenatchee Cont.

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Okanogan Ave	Bike Lane	Orondo Ave	Russell St	Road Reconstruction with Improvements	Parking	\$3,600,000
Okanogan Ave	Bike Lane	Circle St	Crawford Ave	Road Reconstruction with Improvements	Parking	\$3,000,000
Okanogan Ave	Bike Lane	Circle St	Chrisand Ln	Roadway Reconstruction with Improvements	None	\$970,000
Olds Station Rd	Bike Lane	Horan Rd	Euclid Ave	Standalone Multimodal Retrofit	Parking	\$680,000
Orondo Ave	Bike Lane	Columbia St	Chelan Ave	Standalone Multimodal Retrofit	Parking or General Purpose Lanes	\$1,000,000
Penny Rd	Bike Lane	Easy St	SR 285 On Ramp	Preservation	None	\$1,100,000
Penny Rd	Bike Lane	Easy St	Euclid Ave	Preservation	None	\$510,000
Pershing St	Bicycle Boulevard	Springwater Ave	Maple St	Road Reconstruction with Improvements	None	\$2,400,000
Pierre St	Bike Lane	5th St	9th St	Preservation	Center left turn lane	\$530,000
Pioneer Canal Trail	Shared-Use Path	Maiden Ln	Cordell St	New Construction	None	\$3,100,000
Princeton Ave	Bike Lane	Central Ave	Maple Ave	Low Cost Programmatic Bundle	None	\$10,000

Table C-1: Bikeway Implementation Details - Wenatchee Cont.

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Princeton Ave	Bicycle Boulevard	Springwater Ave	9th St	Road Reconstruction with Improvements	None	\$1,200,000
Princeton Ave	Bicycle Boulevard	9th St	5th St	Preservation	None	\$290,000
Princeton Ave	Bicycle Boulevard	Central	Springwater Ave	Low Cost Programmatic Bundle	None	\$220,000
Princeton Bikeway	Bicycle Boulevard	Washington St	Millerdale Ave	Low Cost Programmatic Bundle	None	\$8,000
Princeton Bikeway	Bicycle Boulevard	Washington St	4th St	Low Cost Programmatic Bundle	None	\$8,000
Russell St	Bike Lane	Miller St	Okanogan Ave	Preservation	Parking	\$590,000
S Wenatchee Ave	Bike Lane	Kittitas St	Ferry St	Road Reconstruction with Improvements	General Purpose Lanes	\$4,100,000
S Wenatchee Ave	Bike Lane	Ferry St	Marr St	Standalone Multimodal Retrofit	None	\$840,000
S Wenatchee Ave	Bike Lane	Marr St	Terminal Ave	Preservation	None	\$900,000
Skyline Dr	Bike Lane	Number 2 Canyon Rd	Appleland Dr	Standalone Multimodal Retrofit	Widening	\$4,500,000
Stevens St	Bicycle Boulevard	Mission St	Wenatchee Ave	Standalone Multimodal Retrofit	None	\$290,000
Spokane St.	Bicycle Boulevard	Kittitas St	Columbia St	Preservation	None	\$800,000

Table C-1: Bikeway Implementation Details - Wenatchee Cont.

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Springwater Ave	Bike Lane	Western Ave	Princeton Ave	Preservation	Parking	\$1,500,000
Springwater Ave	Bike Lane	Western Ave	End of Road	Roadway Reconstruction with Improvements	Widening	\$2,500,000
Springwater Extension	Shared Road	Springwater St	Maple St	New Construction	N/A	\$1,200,000
Stella Ave	Bike Lane	Walnut St	McKittrick St	Preservation	Parking	\$362,000
Stella Ave	Bike Lane	McKittrick St	Maiden Ln	Roadway Reconstruction with Improvements	ROW	\$1,500,000
Stevens St	Bicycle Boulevard	Miller St	Mission St	Preservation	None	\$1,200,000
Tech Ctr. Way	Bike Lane	Chester Kimm Rd	Penny Rd	Preservation	Parking	\$441,000
Thurston St	Bike Lane	Columbia St	Worthen St	Unknown	Unknown	N/A
Walla Walla Ave	Bike Lane	9th St	Miller St	Roadway Reconstruction with Improvements	Widening	\$3,800,000
Walnut St	Bike Lane	Pine St	Stella Ave	Road Reconstruction with Improvements	Widening	\$1,200,000
Washington St	Bike Lane	Orondo Ave	Miller St	Preservation	None	\$730,000
Washington St	Bike Lane	Western Ave	Miller St	Preservation	None	\$1,400,000

Table C-1: Bikeway Implementation Details - Wenatchee Cont.

Street/Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Western Ave	Bike Lane	Number 2 Canyon Rd	Cherry St	Road Reconstruction with Improvements	None	\$620,000
Woodward Dr	Bike Lane	5th St	Springwater Ave	Standalone Multimodal Retrofit	Widening	\$3,900,000
Worthen St	Bike Lane	Thurston St	Riverside Dr	N/A	Parking	\$700,000
Worthen St	Shared-Use Path	Thurston St	Hale Park	Standalone Multimodal Retrofit	Unknown	\$250,000
WVC Campus Shared Use Path	Shared-Use Path	5th St	9th St	Standalone Multimodal Retrofit	None	\$2,000,000

Table C-2: Bikeway Implementation Details - East Wenatchee

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
15th St NE	Bike Lane	SR 28	Apple Capital Loop Trail	Roadway Reconstruction with Improvements	None	\$860,000
15th St NE	Bike Lane	SR 28	Eastmont Ave	Road Reconstruction with Improvements	None	\$6,300,000
19th St NE	Bike Lane	Cascade Ave	SR 28	Standalone Multimodal Retrofit	Widening	\$6,900,000
3rd St NE	Bike Lane	Eastmont Ave	Kentucky Ave	Road Reconstruction with Improvements	Parking	\$4,600,000
3rd St SE	Bike Lane	James Ave	Kentucky Ave	Road Reconstruction with Improvements	None	\$1,500,000
3rd St. SE	Bike Lane	SR 28	Apple Capital Loop Trail	Preservation	None	\$145,000
5th St NE	Bike Lane	Eastmont Ave	Grover Pl	Standalone Multimodal Retrofit	None	\$1,600,000
Baker Ave	Bike Lane	9th St NE	15th St NE	Preservation	Parking	\$1,200,000
Briarwood Terr/ Grover Ave	Shared Road	10th St NE	Brianwood Ter	Standalone Multimodal Retrofit	None	\$540,000
Georgia Ave	Shared Road	3rd St SE	Grant Rd	Preservation	Parking	\$357,000

Table C-2: Bikeway Implementation Details - East Wenatchee Cont.

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Grover Ave	Bike Lane	10th St NE	8th St NE	Preservation	Parking	\$370,000
Iowa Ave	Bicycle Boulevard	4th St SE	5th St NE	Standalone Multimodal Retrofit	None	\$16,000
James Ave	Bicycle Boulevard	Grant Rd	5h St NE	Road Reconstruction with Improvements	None	\$4,800,000
James Ave	Bike Lane	5th St NE	10 St NE	Preservation	None	\$290,000
Kentucky Ave	Bike Lane	Grant Rd	8th St NE	Road Reconstruction with Improvements	Parking	\$4,800,000
Kentucky Ave	Bike Lane	8th St NE	10th St NE	Road Reconstruction with Improvements	None	\$1,400,000
Rock Island Rd	Bike Lane	3rd St SE	Grant Rd	Road Reconstruction with Improvements	None	\$3,900,000
Valley Mall Pkwy	Bike Lane	Grant Rd	9th St NE	Preservation	General Purpose Lanes	\$1,000,000
Valley Mall Pkwy	Bike Lane	SR 28	9th St NE	Road Reconstruction with Improvements	General Purpose Lanes	\$2,100,000

Table C-3: Bikeway Implementation Details - Douglas County

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
21st St NE	Bike Lane	Baker Ave	Devon Ave	Standalone Multimodal Retrofit	Parking	\$200,000
23rd St NW	Bike Lane	Cascade Ave	SR 28	Road Reconstruction with Improvements	Widening	\$1,300,000
27th St NE	Bike Lane	SR 28	Baker Ave	Road Reconstruction with Improvements	Widening	\$1,800,000
27th St NW	Bike Lane	Empire Ave	Cascade Ave	Standalone Multimodal Retrofit	Widening	\$1,300,000
29th St NW	Bike Lane	SR 28	Empire Ave	Standalone Multimodal Retrofit	Widening	\$4,500,000
31st St NW	Bicycle Boulevard	Cascade Ave	SR 28	Standalone Multimodal Retrofit	None	\$350,000
32nd St NW	Bicycle Boulevard	SR 28	Loop Trail	Low Cost Programmatic Bundle	None	\$3,000
4th St SE	Bike Lane	Kentucky Ave	Nile Ave	Standalone Multimodal Retrofit	Widening	\$1,000,000
8th St NE	Bike Lane	Kentucky Ave	Nile Ave	Standalone Multimodal Retrofit	Widening	\$1,000,000

Table C-3: Bikeway Implementation Details - Douglas County Cont.

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Cascade Ave	Bike Lane	19th St NW	29th St NW	Road Reconstruction with Improvements	Widening	\$8,100,000
Columbia Ave	Bike Lane	29th St NW	Willshire St	Road Reconstruction with Improvements	Parking/ Widening	\$3,700,000
Empire Ave	Bike Lane	27th St NW	29th St NW	Road Reconstruction with Improvements	None	\$3,200,000
Empire Ave	Bike Lane	35th St NW	29th ST NW	Road Reconstruction with Improvements	Widening	\$5,300,000
Empire Ave Extension	Bike Lane	35th St NW	38th St NW	New Construction	N/A	\$22,000,000
Fancher Field Rd	Blke Lane	Baker Ave	Badger Mountain Rd	Standalone Multimodal Retrofit	Parking	\$1,900,000
Grant Rd	Bike Lane	Kentucky Ave	Nile Ave	Preservation	General Purpose Lanes	\$1,300,000
Grant Rd	Bike Lane	Nile Ave	Quincy St	Standalone Multimodal Retrofit	Widening	\$1,300,000
Grant Rd	Bike Lane	UGA Boundary	Airport Wy	Roadway Reconstruction with Improvements	Widening	\$7,000,000
Lyle Ave	Bike Lane	Grant Rd	8th St NE	Road Reconstruction with Improvements	Parking/ Widening	\$6,200,000

Table C-3: Bikeway Implementation Details - Douglas County Cont.

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Nile Ave	Bike Lane	8th St NE	Grant Rd	Standalone Multimodal Retrofit	Parking/ Widening	\$2,100,000
Nile Ave	Bike Lane	4th St SE	Grant Rd	Standalone Multimodal Retrofit	Widening	\$1,400,000
Rock Island Rd	Bike Lane	3rd St SE	Kentucky Ave	Road Reconstruction with Improvements	Widening	\$9,100,000
Rock Island Rd	Bike Lane	Nile Ave	UGA Boundary	Low Cost Programmatic Bundle	None	\$260,000
Rock Island Rd	Bike Lane	Nile Ave	Kentucky Ave	Road Reconstruction with Improvements	Widening	\$7,200,000
Rock Island Rd	Bike Lane	SR 28	Rock Island Dr	Roadway Reconstruction with Improvements	Widening	\$9,300,000
Rock Island Rd	Bike Lane	SR 28	UGA Boundary	Roadway Reconstruction with Improvements	Widening	\$7,500,000
Valley View Blvd	Bike Lane	Devon Ave	Eastmont Ave	Standalone Multimodal Retrofit	Parking	\$600,000
Wilshire St NW	Bike Lane	Columbia Ave	Cascade Ave	Standalone Multimodal Retrofit	None	\$350,000

Table C-4: Bikeway Implementation Details - Chelan County

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Burch Mountain Rd	Bike Lane	Peters St	Rolling Hills Ln	Standalone Multimodal Retrofit	Parking	\$1,700,000
Circle St	Bike Lane	Miller St	Okanogan Ave	Road Reconstruction with Improvements	Widening	\$3,900,000
Circle Street	Bike Lane	Miller St	Dry Gulch Trailhead	Roadway Reconstruction with Improvements	Widening	\$1,500,000
Cordell St	Bike Lane	Penny Rd	Lemaister Ave	Preservation	Parking	\$470,000
Cordell St	Bike Lane	Lemaister aVe	Chatham Hill Rd	Low Cost Programmatic Bundle	Parking	\$94,000
Easy St	Bike Lane	US 2/97	UGA Boundary	Standalone Multimodal Retrofit	None	\$6,400,000
Miller St	Bike Lane	Circle St	Crawford Ave	Road Reconstruction with Improvements	Parking	\$4,700,000
Pershing St	Bicycle Boulevard	Maple St	McKittrick St	Road Reconstruction with Improvements	None	\$1,600,000
Peters St	Bike Lane	Easy St	Burch Mountain Rd	Low Cost Programmatic Bundle	Widening	\$78,000

Table C-4: Bikeway Implementation Details - Chelan County Cont.

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
School St	Bike Lane	Melody Ln	Knowles Rd	Standalone Multimodal Retrofit	Widening	\$1,200,000
Terminal Ave	Bike Lane	Mission St	Methow St	Road Reconstruction with Improvements	Parking	\$1,600,000
Terminal Ave	Bike Lane	S Wenatchee Ave	Mission St	Preservation	Parking	\$370,000

Table C-5: Project Implementation Details - CDTC/Rock Island/WSDOT

Street/ Bikeway Name	Type	From	To	Project Type	Road Prism Impacts	Cost
Hydro Park - Rock Island Pathway	Shared- Use Path	Hydro Park	Rock Island	Standalone Multimodal Retrofit	N/A	
Leavenworth - Wenatchee Pathway	Shared- Use Path	Leavenworth	Wenatchee	Road Reconstruction with Improvements	N/A	
Malaga Wenatchee Path	Shared- Use Path	Terminal Ave	Malaga	Roadway Reconstruction with Improvements	N/A	
Manson - Chelan Pathway	Shared- Use Path	Wapato Lake Rd	Bighorn Way	Preservation	N/A	
Rock Island Dr	Bike Lane	Garden Ave	UGA Boundary	Low Cost Programmatic Bundle	Widening	\$950,000
Saunders Ave	Bike Lane	Delaware Ave	Batterman Rd	Standalone Multimodal Retrofit	Widening	\$4,400,000
SR 28	Bike Lane	Hadley St	35th St NW	Road Reconstruction with Improvements	None	\$13,000,000
US 2/97	Shared- Use Path	SR 28	38th St Loop Trailhead	Road Reconstruction with Improvements	N/A	\$590,000

Funding

Bikeway implementation is constrained by needs across all government services, and within transportation budgets. The RTP provides a description of the revenue sources available to fund transportation investments broadly. This section describes how those sources are used to fund bikeway implementation specifically. There are four primary funding sources for bikeway implementation as discussed below and summarized in Table C-6.

Local Options

Few local agencies have dedicated funding for bikeway projects. Local dollars are commonly used as match for state and federal grants for bike specific programs or broader roadway improvement programs where a bikeway may be implemented in conjunction with a larger project. Local agencies are encouraged to consider dedicating portions of their transportation budgets to bikeway projects and/or explore other local revenue options for bikeway implementation. Most local options are used by at least one agency in the region, though no single agency uses all options.

State Options

There are multiple competitive grant programs at the state level that fund bikeway projects. The local agencies in the region have been very successful winning these dollars in recent cycles and should continue to develop bikeway projects that have a high chance of success in state funding programs. The projects submitted to these programs are often developed with input from the funding agency so that the agency receives projects applications that best meet the priorities of the grant agency. As a result, bikeways implemented through these programs may not reflect an implementation strategy that prioritizes the bikeways most valuable to the region. It is recommended that local agencies consult the regional bikeway network when strategizing applications for competitive programs.

There are also opportunities for bikeway projects to be included in state legislative appropriations. These appropriations are typically limited to high cost projects which cross jurisdictional boundaries and require consensus and coalition building. It is recommended that local agencies coordinate with CDTC if considering lobbying for legislative appropriations. Moreover, CDTC will continue to monitor state legislation for new opportunities or increases in grant programs and how the local agencies may position themselves for increased success with these programs.

Federal Options

There are multiple federal grant programs available to bike projects and programs. CDTC manages and awards five-to-six million of competitive federal grants funds every two years for a wide range of projects with an \$800 thousand minimum spending threshold for active transportation improvements. Like other competitive grant programs, CDTC typically funds projects that include numerous benefits, maximizing the value of each dollar. CDTC's annual allocation of federal funds for alternative mode projects has increased with each reauthorization of its federal funding program. CDTC may consider setting aside a larger pot of funds to construct more standalone bikeway projects. FHWA also administers multiple competitive grant programs with bikeway investment eligibility. These programs most often

fund high cost capital projects such as grade separations, long distance paths, or a program of capital investments. Lastly, major active transportation projects like bridges or purchasing railroad grades can be included as funding line items in new legislation. CDTC will continue to monitor federal legislation for new opportunities and increases to grant programs. Under the current federal administration, active transportation improvements are a low priority.

Non-Government Funding Options

Businesses and non-profits often award grants or serve as partners for projects and programs that support walking and biking. Non-government entities may be interested in supporting active communities for a variety of complementary reasons. Increasingly, employers are recognizing that creating places to bike and walk is one way to build community and attract a quality work force. For example, In northwest Arkansas, the Walton Family Foundation, the non-profit entity of Walmart, has provided over \$70 million to support the construction of 163 miles of natural-surface trails and paved paths, generating an estimated \$51 million business benefit to the economy in northwest Arkansas. Locally, Crunch Pak contributed over \$100 thousand to reconstruct Sunset Hwy in Cashmere, which includes bike lanes.

Table C-6: Funding Options

Program	Funding Type	Description
Motor Vehicle Fuel Tax	Local/Regional Revenue Option	With voter approval, counties in Washington may levy a local option motor vehicle fuel tax for local transportation purposes. The maximum rate is ¢4.9/gallon
Transportation Benefit District (TBD)	Local/Regional Revenue Option	Cities and counties may establish TBDs and most commonly generate revenue through sales tax and registration fees, but can also include property tax levies.
Transportation Impact Fees	Local Revenue Option	Impact fees are one-time charges assessed by a local government against real estate developers to help pay for new or expanded public facilities and infrastructure that will directly address the increased demand for services created by new development.
Metropolitan Parks District (MPD)	Local/Regional Revenue Option	MPDs be created for the management, control, improvement, maintenance, and acquisition of parkways, boulevards, and recreational facilities. An MPD may include territory located in portions or in all of one or more cities or counties. MPDs generate revenue through property tax levies at six year increments, subject to voter approval.

Table C-6: Funding Options Cont.

Program	Funding Type	Description
Surface Transportation Block Grant Program (STBG); Transportation Alternatives Program (TA); Carbon Reduction Program (CRP)	Federal Grants	CDTC awards between \$5 and \$6 million in flexible federal funds every two years. A minimum of \$800,000 must be spent on active transportation improvements. The size of this fund is expected to grow in coming years and CDTC may consider creating a larger set-aside for bikeway projects.
Federal Lands Access Program (FLAP)	Federal Grants	The FLAP funds transportation improvements that provide access to, on, or adjacent to federal lands. This program is an updated version of the Forest Highway Program. Transportation improvements may include public roads, bridges, trails, or transit systems.
Recreational Trails Program	Federal Grants	Program that develops and maintains recreational trails and trail-related facilities. Funds for this program are from the Federal Highway Trust Fund and represent a portion of the motor fuel excise tax collected from non-highway recreational fuel use (snowmobiles, all-terrain vehicles, off-highway motorcycles, and off-highway light trucks)
BUILD Grant; RURAL Grant; Safe Streets and Roads For all (SS4A) Grant; Reconnecting Communities	Federal Grants	Numerous grant programs managed by FHWA exist for the planning and/or construction of major capital projects, including bikeways and shared use paths. Project eligibility, matching fund requirements, and award recipient obligations vary by program and should be understood in detail before funding applications are submitted.

Table C-6: Funding Options Cont.

Program	Funding Type	Description
Pedestrian and Bicycle Program & Safe Routes to School (SRTS)	State Grants	WSDOT issues a call for projects for its Bicycle/ Pedestrian and Safe Routes to School (SRTS) programs in even number years to select and prioritize projects for funding in the next biennial budget proposed in odd year legislative sessions. Since 2005, approximately \$314million has been awarded for 559 projects statewide between the two programs. The local agencies in the region have received approximately \$14 million between the two programs.
Regional Mobility Grants	State Grants	WSDOT provides a grant program for projects that promote multimodal transportation and improve high occupancy travel in order to reduce travel delay for people and goods. Projects can be capital construction, equipment acquisition, and operating expenses. Most funded projects in this program are transit-related.
Transportation Improvement Board Grants	State Discretionary Program	There are multiple programs administered by the Transportation Improvement Board that include bikeway implementation eligibility such as the Urban Arterial Program, the Active Transportation Program, the Small Cities Program, and the Complete Streets Program.
REI Foundation; People for Bikes; The Robert Wood Johnson Foundation; Rails to Trails; Doppelt Family Trail Development Fund; Private project-level contributions	Non-Government Funding	Multiple private and non-profit organizations make funds available to local governments or other non-profits through grants and donations. The funds are used for a wide variety of programs and projects in cities and towns of all sizes. Additionally, local private individuals or businesses may view bikeway investment as beneficial to thier interests and may contribute funds at the project level.

Bike Parking

There has long been a need for best practice bicycle parking at public and private destinations within the Wenatchee Valley. As an agency with no authority over implementation, CDTC relies on its local partners to develop and follow best practices for bike parking on public property and programs to incentivize private businesses to install better bike racks. CDTC has developed a webpage dedicated to bike parking at bikewenatcheevalley.org that provides multiple resources for staff at the local agencies and private business owners.

History

The Greater Wenatchee Bicycle Advisory Board (GWBAB), the predecessor to the RBAC, purchased and installed bike racks around Wenatchee in 2007. They are the brown staple bike racks still seen at some businesses on downtown Wenatchee streets today. There isn't a complete record of their process and what was done, but it is known that the GWBAB purchased and installed the bike racks. The GWBAB was a City of Wenatchee advisory committee managed by both the Public Works and the Parks and Recreation departments.

The 2013 and 2018 Greater Wenatchee Bicycle Master Plans identified bicycle parking and amenities as a recommendation, specifically it calls for adding permanent & secure bicycle parking, adding temporary event bicycle parking, provide commuter stations (showers, locked bike rooms), develop bike share, & incentivize development to include bike amenities.

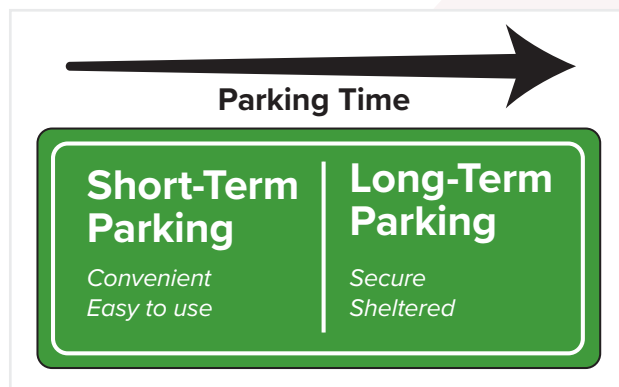
During the development of the plan (2012), CDTC staff and Regional Bicycle Advisory Board members worked with the Wenatchee Downtown Association to develop a pilot program and install the first bicycle corral in downtown Wenatchee. Their meetings also identified other locations and recommendations for bike parking.

In 2014, the City of Wenatchee, Arlberg Sports & the Wenatchee Downtown Association developed and installed a "bicycle hub" in Hedeem Plaza (First Street and Wenatchee Ave), which includes covered bike parking, an air pump and a bicycle repair vending machine (as of 2019 the vending machine has moved).

The City of East Wenatchee comprehensive plan also lists bicycle parking areas, specifically bike corrals, as an identified need in the Rediscover Historic Downtown Plan.

Short Term vs Long Term Bike Parking

There are two types of bike parking: short-term and long-term. These two kinds of parking serve different needs, and the starting point for most bike parking projects is recognizing whether the installation should serve short-term users, long-term users, or both. If users will typically be parking for two hours or longer, they are likely to value security and shelter above the convenience and ease that characterizes short-term parking.



Rack Design Standards

The APBP is the leading resource on best practice bike parking guidelines and standards. The APBP created bike parking guidelines that are used by jurisdictions across the country and identify the five following criteria for bike rack design:

- » Support bikes upright without putting stress on wheels;
- » Accommodate a variety of bicycle types and attachments (cargo bikes, trailers, trikes);
- » Allow for locking of the frame and at least one wheel with a U-lock bike lock;
- » Provide security and longevity features appropriate for the intended location; and
- » Be intuitive

Additional information can be found in the Bicycle Parking Guidelines, Volume 2 book or the abbreviated Essentials of Bike Parking: Selecting and Installing Bicycle Parking that Works document at <https://www.apbp.org/Publications>. The APBP's recommended and non-recommended rack types are shown below and on the next page.

APBP Recommended Rack Types

RACKS FOR ALL APPLICATIONS

When properly designed and installed, these rack styles typically meet all performance criteria and are appropriate for use in nearly any application.

INVERTED U
also called
staple, loop



Common style appropriate for many uses; two points of ground contact. Can be installed in series on rails to create a free-standing parking area in variable quantities. Available in many variations.

POST & RING



Common style appropriate for many uses; one point of ground contact. Compared to inverted-U racks, these are less prone to unintended perpendicular parking. Products exist for converting unused parking meter posts.

WHEELWELL -
SECURE



Includes an element that cradles one wheel. Design and performance vary by manufacturer; typically contains bikes well, which is desirable for long-term parking and in large-scale installations (e.g. campus); accommodates fewer bicycle types and attachments than the two styles above.

APBP Non-Recommended Rack Types

Because of performance concerns, APBP recommends selecting other racks instead of these.

WAVE
ALSO CALLED
UNDULATING
OR SERPENTINE



Not intuitive or user-friendly; real-world use of this style often falls short of expectations; supports bike frame at only one location when used as intended.

SCHOOLYARD
ALSO CALLED
COMB, GRID



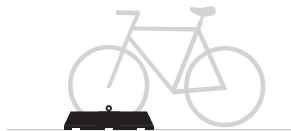
Does not allow locking of frame and can lead to wheel damage. Inappropriate for most public uses, but useful for temporary attended bike storage at events and in locations with no theft concerns. Sometimes preferred by recreational riders, who may travel without locks and tend to monitor their bikes while parked.

COATHANGER



This style has a top bar that limits the types of bikes it can accommodate.

WHEELWELL



Racks that cradle bicycles with only a wheelwell do not provide suitable security, pose a tripping hazard, and can lead to wheel damage.

BOLLARD



This style typically does not appropriately support a bike's frame at two separate locations.

SPIRAL



Despite possible aesthetic appeal, spiral racks have functional downsides related to access, real-world use, and the need to lift a wheel to park.

SWING ARM
SECURED



These racks are intended to capture a bike's frame and both wheels with a pivoting arm. In practice, they accommodate only limited bike types and have moving parts that create unneeded complications.

Existing Bike Parking

From 2018-2021 RBAC members inventoried bike racks in the Wenatchee Valley. The inventory can be found at bikewenatcheevalley.org or by using the hyperlink in Figure C-6 and includes the following information:

- » Location Name
- » Type of bike rack
- » Whether it meets the Association of Pedestrian and Bicycle Professionals (APBP) standards (yes/no)

The existing bike rack inventory provides a broad overview of the state of bike parking and allows the local agencies in the region to make policy level recommendations that may improve bicycle parking. In summary there are:

- » **136** total bike racks
- » **98** Racks in Wenatchee
- » **38** Racks in East Wenatchee
- » **847** spaces of Capacity

Only 27 of the 136 bike racks inventoried meet the Association of Pedestrian and Bicycle Professional standards (APBP) with the most common rack types being "wave" and "schoolyard" style racks.

The inventory includes locations with long term bike parking but did not specifically inventory bike rooms and lockers. Some long term parking is located at some employers and multifamily housing locations in the Wenatchee Valley. The bike parking inventory included only locations that are easy to see or currently known to RBAC members.

Bike parking needs

Short-Term Parking

The RBAC spent several months reviewing bike racks. As they collected the information, it became clear that the most valuable information would include locations where bike parking is needed but not provided.

Table C-7 includes mostly public destinations needing short-term parking such as:

- » Medical clinics
- » Transit
- » Parks and trailheads
- » Public space in commercial centers
- » Social services



- » Government offices
- » Community destinations (museum, stadiums)
- » Downtown destinations

Long-Term Parking

Long-term parking may be needed in locations where bikes are parked longer than two hours including but not limited office buildings, apartments, transit park & ride lots, hospitals, and universities. Long term parking consists of a wider variety of fixture types and site plan layouts and includes racks in cages and bike lockers. The following should be considered when implementing long term parking:

- » Clear and concise signage
- » Controlled access
- » Lighting and surveillance
- » Weather protection

Implementation of most long-term parking is at the discretion of private organizations, but local governments may want to consider incentivizing the construction of long-term parking during commercial and residential development. The list in Table C-7 only includes locations where short-term parking would be appropriate.

Table C-7: Short-Term Bike Parking Needs

Location Name	Address	City	Racks Needed	New or Upgrade	Property Owner	Property Type
Confluence- East Wenatchee Clinic	100 Highline Drive	East Wenatchee	1	New	Confluence Health	Medical Clinic
Confluence- Cashmere	303 Cottage Avenue	Cashmere	1	New	Confluence Health	Medical Clinic
City of Chelan	Downtown	Chelan	1	New	City of Chelan	Government Offices
Washington Park	110 S Miller Street	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Pioneer Park	220 Fuller Street	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Wenatchee Swimming Pool	220 Fuller Street	Wenatchee	1	New	Wenatchee Parks and Rec	City Park

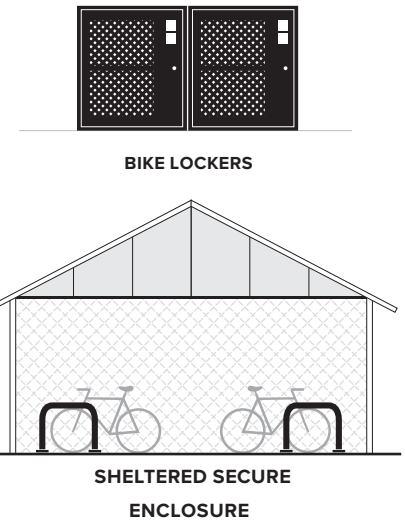


Table C-7: Short-Term Bike Parking Needs Cont.

Location Name	Address	City	Racks Needed	New or Upgrade	Property Owner	Property Type
Centennial Park	130 S Wenatchee Avenue	Wenatchee	1	Upgrade	Wenatchee Parks and Rec	City Park
Lincoln Park	1410 S Mission Street	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Chase Park	145 S Delaware Ave	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Pennsylvania Park	219 Pennsylvania Ave	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Rotary Park	1810 Maple Street	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Lewis and Clark Park	Princeton Ave	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Hale Park	720 South Worthen	Wenatchee	1	New	Wenatchee Parks and Rec	City Park
Walla Walla Park	1351 Walla Walla Ave	Wenatchee	1+	New	Chelan PUD	PUD Park
Linden Tree Park	Loop Trail and 9th Street	Wenatchee	1	New	Chelan PUD	PUD Park
Kirby Billingsley Hydro Park (both ends)	SR 28	East Wenatchee	1+	New	Chelan PUD	PUD Park
Sage Hills- Day Road Trailhead	980 Kookaburro Run	Wenatchee	1	New	CDLT	Trailhead
Sage Hills- Lester Trailhead	Sage Hills Drive	Wenatchee	1	New	CDLT	Trailhead
Sage Hills- Horse Lake Trailhead	Horselake Road	Wenatchee	1	New	CDLT	Trailhead

Table C-7: Short-Term Bike Parking Needs Cont.

Location Name	Address	City	Racks Needed	New or Upgrade	Property Owner	Property Type
Castle Rock Trailhead	1963 Castlerock Avenue	Wenatchee	N/A	N/A	City of Wenatchee	Trailhead
Kenzie's Landing	2105 Maiden Ln	Wenatchee	1	New	City of Wenatchee	Trailhead
Loop Trail @ 27th Street	27th Street	East Wenatchee	1	New	Douglas County	Trailhead
Loop Trail @ 32nd Street	32nd Street	East Wenatchee	1	New	Douglas County	Trailhead
Loop Trail @ 19th Street	140 19th St NW	East Wenatchee	1+	Upgrade	Douglas County	Trailhead
Douglas County Courthouse	203 S Rainer Street	Waterville	1	New	Douglas County	Government Offices
19th Street Public Services Building	140 19th St NW	East Wenatchee	1+	New	Douglas County	Government Offices
Kenroy Park	700 N James Ave	East Wenatchee	1	New	Eastmont Parks	City Parks
Eastmont Community Park	N. Georgia Ave	East Wenatchee	1	New	Eastmont Parks	City Parks
Tedford Park	1st St SE and S Jarvis Ave	East Wenatchee	1	New	Eastmont Parks	City Parks
Kenroy Park	700 N James Ave	East Wenatchee	1	New	Eastmont Parks	City Parks
Apple Bowl Stadium	1005 Orondo Ave	Wenatchee	1	New	Wenatchee School District?	Stadium
WB Smith Gymnasium	1592 Fifth St	Wenatchee	1	New	Wenatchee Valley College	Gym
Wenatchee Valley Museum	127 S Mission Street	Wenatchee	1+	New	City of Wenatchee	Museum
U.S. Post Office	1050 Maple Street	Wenatchee	1	Upgrade	USPS	Post office
Wenatchee City Hall	301 Yakima Street	Wenatchee	1+	New	City of Wenatchee	Government Offices

Table C-7: Short-Term Bike Parking Needs Cont.

Location Name	Address	City	Racks Needed	New or Upgrade	Property Owner	Property Type
Chelan County Courthouse	350 Orondo Avenue	Wenatchee	1+	Upgrade	Chelan County	Government Offices
Wenatchee Police Station	140 S Mission Street	Wenatchee	1	New	City of Wenatchee	Government Offices
Town Toyota Center	1300 Walla Walla Ave	Wenatchee	1	New	Greater Wenatchee Public Facilities District	Event Center
Wenatchee Public Works	1350 McKittrick Street	Wenatchee	1	New	City of Wenatchee	Government Offices

Downtown Wenatchee Bike Parking

Downtown Wenatchee has been a focus of bike parking planning for multiple reasons:

1. Downtown Wenatchee has few bike racks that meet APBP standards. Downtown also has significant sidewalk and curb space limitations.
2. Bike parking in downtown has been identified as a priority in many plans (right, a study from 2012 looking at the Wenatchee Downtown Streetscape with recommended bike parking).
3. Downtown Wenatchee is a significant bicycle destination for the region with a major transit hub, employment opportunities, dining and shopping, and destinations that draw people from the surrounding neighborhoods.
4. Downtown Wenatchee has been growing and changing. There are new businesses (including bike shops), more bars and restaurants, and plans for more urban development and downtown housing options that will increase the need for additional bike parking.



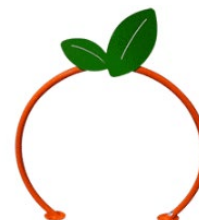
The next steps for improving bicycle parking in Downtown Wenatchee will be to determine a timeline and budget for implementation. The Wenatchee Downtown Association and local businesses are key partners on this work and should be asked to review and provide feedback on the recommendations identified here.

Some funding may be available through the City of Wenatchee's Complete Street program. Additional funding will be needed to meet the entirety of downtown Wenatchee's bike parking needs identified in the following lists and maps.

Bike Rack Design

Specific branding and design aesthetics are used in cities across the country. The examples at right and below show potential options and themes should the City choose to use bike racks design specifically for downtown.

- » Above and right, The City of Ellensburg's custom designed downtown bike racks
- » Right: An inverted U rack in Provo, Utah
- » Bottom of page and right: inverted U rack in Denver, Colorado
- » Bottom of page and right: An inverted U rack made to look like an apple



The recommended locations for bike racks in Downtown Wenatchee are shown in Figure C-7.

[illegible]

Detailed Recommendations

On-Street Corral vs. Sidewalk

The bike parking type identified in the maps and table are based on available space. Since 2013, Café Mela on Wenatchee Avenue has had a corral on the street in front of their coffee shop; There are additional no-parking zones available on Wenatchee Avenue to add racks (see photos on page C-52). The spaces identified during this process avoid handicap parking spaces and fire hydrants but have not been reviewed for other siting issues (space, snow removal, etc.).

Sidewalk bike racks might look different based on the space available and the exact need at each location. Racks may be corrals grouped together on the sidewalk perpendicular to the buildings or individual racks placed parallel to the building and spaced throughout the block.

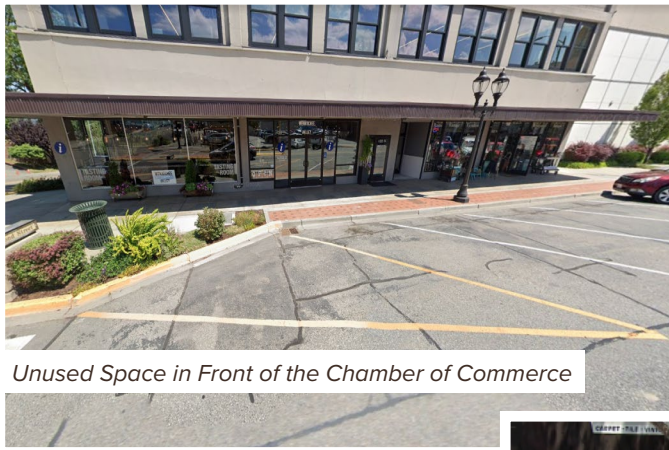
Details on site spacing requirements can be found in the APBP resources identified on page A-2.

Table C-8: Downtown Wenatchee Bike Rack Needs

Map #	Name	Type	Location Notes
1	2nd Street – Wenatchee Valley Chamber of Commerce	Sidewalk	Replace old rack with 2 new racks
2	Wenatchee Ave – Wenatchee Valley Chamber of Commerce	On-street Corral	See Photos
3	Wenatchee Ave – Lemolo Cafe	On-street Corral	See Photos
4	Wenatchee Ave – Numerica PAC	Sidewalk or on-street corral	Alternatives: Providing better bike parking in Hedeem Plaza or any bike parking on the East side of the building is another alternative
5	1st Street	Sidewalk	Upgrade bike parking at repair station next to Owl Soda Fountain
6	Wenatchee Ave – Chelan-Douglas Land Trust	On-street Corral	See Photos
7 – 11, 13-14	Palouse/Mission Streets	Sidewalk	There is space for a couple small corrals on the sidewalk or to space single racks out in this area. There are several small businesses, employers and the Liberty movie theater in this area.
12	Wenatchee Avenue- River of Life Center Church	On-Street Corral	See Photos

Table C-8: Downtown Wenatchee Bike Rack Needs Cont.

Map #	Name	Type	Location Notes
15	Wenatchee Avenue – Rent A Center	On-Street Corral	See Photos
16	Wenatchee Avenue – former Seattle First Bank Building	On-Street Corral	See Photos
17- 19	Orondo Avenue – Columbia Street to Chelan Avenue	Sidewalk	Wider sidewalks along Orondo Avenue likely allow for either a couple corrals grouped together or individual racks spaced along the street along the downtown blocks.
20	BPOE	Sidewalk	Wide sidewalk
21	Wenatchee Avenue – Key Bank	On- Street	See Photos
22	Centennial Park	Sidewalk	Racks could be added to any level space in Centennial Park
23 - 27	Yakima Street	Sidewalk	There is space on the sidewalk to add racks between Columbia Street and Mission Street
28 - 39	Kittitas Street	Sidewalk	There is space on the sidewalk to add racks between Columbia and Mission Street near existing businesses
30 - 34	Mission Street	Sidewalk	There is space on the sidewalk to add racks in this area to provide parking at existing businesses



Unused Space in Front of the Chamber of Commerce



Example of a Post & Ring Bike Rack



Bike Racks in Front of Mela Coffee Roasting Co.

Other Locations

There is still a significant gap in bike parking along the edges of downtown that were not included. Bike parking along the sidewalk in these areas would be beneficial to existing and future businesses. There are also significant development and redevelopment projects planned or underway along Wenatchee Avenue, Mission Street, and Chelan Avenue like the Chelan PUD site; a major apartment building on the corner of Mission Street and Kittitas Street; remodeling and expansion of Wenatchee City Hall; and the Bridge Street Loop Trail connection and plaza.

Bike Parking Policies and Ordinances

Existing Codes and Requirements

Wenatchee:

- » No ordinances
- » 2017 comprehensive plan calls for reducing parking requirements when bike parking is added (this is not in code)
- » City of Wenatchee Parks and Recreation adopted the Inverted U as the preferred rack for their parks and now includes bike parking in new parks/park redevelopment projects.

East Wenatchee:

- » Bike parking should be added to new streets where bike use is expected

- » Illegal to block sidewalk with parked bikes
- » Economic Development and Capital Improvement Projects section of the comp plan calls for bike corrals in downtown

Chelan County:

- » None, with exception of Peshastin UGA

Douglas County:

- » No ordinances

Recommendations for Improved Policies

Education and Outreach

The RBAC has created a brochure and a "business card" with bicycle parking information for businesses and developers. Additionally, bikwenatcheevalley.org has a page dedicated to bicycle parking. Distributing the brochure and advertising the website to local businesses and developers might help raise awareness about the need for bike parking and provide guidance for best practice bike parking installation.

Outreach to local businesses and developers can be done in several ways:

- » Sustainable Wenatchee helps local businesses review sustainability initiatives and plans to distribute the bike brochure when meeting with local businesses
- » RBAC plans to continue distributing business cards with the bike parking webpage information.
- » The cities and counties can have the brochure and business cards available at their public service counters and their websites for when new businesses or developers contact them for resources and planning information

Local Ordinances

When updating their comprehensive plans, local agencies are encouraged to review their existing policies for opportunities to strengthen requirements for bicycle parking in new development. Additionally, its encouraged that local agencies and WSDOT adopt APBP Standards.

Implementation and funding strategies

Implementation

This plan, the needs list, the brochure and bike parking "business cards" can be used for outreach. Its important to raise awareness of bike parking needs beyond the biking public. The lack of bike parking at major businesses and services creates a challenge for those that exclusively use bicycles for transportation.

Funding Strategies

Partnerships – Donate a bike rack program

There are multiple case studies from cities across the country demonstrating opportunities for partnerships with non-profits and the city to install bike parking. For example, an agency installs and pays 50% of the cost while the remainder is paid by the requesting business, non-profit, or individual. The Wenatchee Downtown Association, Chamber of Commerce, or a non-profit bicycle club like Wenatchee Valley Velo would be an ideal partner for these types of programs.



Grants

Grant funding could be used to purchase bike parking. Examples include: Community Foundation grants, some federal transportation funds, public health/foundation grants, the Transportation Improvement Board's Complete Streets program, Community Development Block Grant funding, and bike funding organizations like People for Bikes.

Agency budgets

Local agencies could add one-time bike parking costs to their budget, or they could set up a program to pay for bike parking. Transit agencies and jurisdictions across the country have started to budget for bike parking.

Private businesses

Most of the bike parking in the Wenatchee Valley has been paid for by private businesses for use on private property. Riverway Family Dental in Wenatchee purchased and installed this bike rack in a partially covered location in view of the reception desk because they had multiple patients biking to their dental appointments.

Program Recommendations

Building the physical infrastructure is only one side of the equation for increasing bicycle transportation. Education and encouragement are also critical to improving the efficacy of bicycle transportation. For example, new bikeway designs can be confusing to cyclists and drivers, this can lead to dangerous conflicts between modes. Or, a person who could otherwise bike to work may not know how to maintain their bike properly to do so. Lastly, some portions of the community, both children and adults, don't own or know how to ride a bicycle. Supporting programs managed by government agencies, non-profits, and private organizations can increase the use of bicycle transportation infrastructure.

The program recommendations described here contribute to achievement of long-term bike plan goals:

- » Encourage and increase bicycle use; and
- » Improve bicycling safety

Tables C-9 through C-14 provide estimates of the resources needed (time, funding, staff support, political capital) and potential partners for program implementation. Where possible, ideas for specific programs have been identified. Some of these programs may be under development or consideration currently, and others are long-term ideas that may take many years to implement. None of these programs have specific funding identified at this time, but many could be eligible for state, federal or foundation grants.

Improve access to bikes, bike repair services, and bicycle infrastructure .

Access to reliable bicycles and maintenance/repair services has been identified as a barrier to cycling in the region. Low-income community members who rely solely on bicycles for transportation may be helpless if that bicycle breaks, incurs a flat tire, or requires basic maintenance. Moreover, many low-income community members simply don't use bicycles for transportation because they can't afford one. These barriers to cycling have been affirmed repeatedly through meetings, outreach at events, and while collecting existing conditions information throughout CDTC and local agency bikeway planning efforts.

The community already has many successful one-day programs and events which provide bikes or helmets to youth and adults (e.g. Make a Difference Day, individual community volunteers, holiday drives, etc.). These efforts are typically well attended and provide a measurable benefit to cycling in the region, however; these opportunities are of limited scope and duration for daily riders. It is recommended that these types of programs be continued and expanded to make bicycles and repair services available to all community members, especially underrepresented or minority groups.

Table C-9: Bike Access, Repair, and Infrastructure Programs

Potential Programs	Resources Needed	Potential Partners	Timeline
Community/non-profit bike shops that offer used bikes, shop space, classes, and tools for community use	Medium-High	Churches, non-profits, health organizations, schools, Cashmere Bike Repair Club, Puget Sound organizations (Bike Works, Cascade Bicycle Club)	Long-term
Earn-a-bike programs like the Major Taylor Bike Project At Cascade Bicycle Club	Medium	Non-profits, local bike shops, schools, community organizations, Puget Sound organizations (Bike Works, Cascade Bicycle Club), Wenatchee Valley College,	1-5 years
Bike Swaps/Used Bike Marketplace (e.g. Cascade Bicycle Club sponsors Seattle's annual Bike Swap/fundraiser)	Medium	Wenatchee Valley Velo, community organizations, bike shops, Wenatchee Valley College, Cashmere Bike Repair Club	1-5 years

Increase the number of resources, events & programs in Spanish

Most events and bike planning efforts far have struggled to engage the Latino community, which represents about 30% of the region. Based on event outreach its known that there is latent demand and interest in biking from the Latino community that is not currently being met. It is recommended that implementation of this bike plan consider how we can better provide resources, events, and programs in Spanish.

Examples of successful local bilingual outreach include:

- » The 2017 Wenatchee Valley Bike Map and all Bike Plan update materials in Spanish
- » Goathead Warriors did door to door outreach with Spanish materials in summer 2017
- » Team Naturaleza's programs and partnerships with the Chelan-Douglas Land Trust to provide hiking and recreation resources and event opportunities in Spanish
- » City of Wenatchee's work with the South Wenatchee neighborhood organization on the South Wenatchee Action Plan focused heavily on transportation issues
- » The Orondo Ave/Methow St popup project explicitly engaged the Latino community by scheduling Latino vendors and performers during a week-long temporary intersection redesign which featured a new plaza at the end of a closed one-way street
- » The South Wenatchee Bicycle Connectivity Study held focus groups and public events that were facilitated by a Latino community organization and included translators and decision makers from the Latino community.

Education

Develop & Support Coordinated Safe Routes to School (SRTS) Programs

Currently there aren't any coordinated SRTS programs at the regional or school district level. Both cities and counties generally work with their school districts to apply for Safe Routes to School grants and fix safety issues around the schools. Teachers and staff at individual schools have also taken on coordinating events for bike-to-school day and applying for grants to support bike education or after school bike clubs. Across the country and state there are examples of successful, long-term programs at schools and in communities of every shape and size. One of the first steps for the region may be convening all potential partners to determine what is needed to improve biking and walking to school and developing a coordinated approach.

Table C-10: Potential Safe Routes to School Programs

Potential Programs	Resources Needed	Potential Partners	Timeline
Develop coordinated regional SRTS plan. Look at ways to fund and support SRTS improvements across the region/districts, identify infrastructure needs, and inventory existing activities.	Medium	CDTC, cities & counties, STEM education, Educational Service District, health organizations	1-5 years
Conduct Bike and walk audits at schools. Develop walking/biking route maps for every school, look for needed safety improvements.	Medium	Cities & counties, Educational Service District, health organizations, CDTC	1-5 years
Institute formal bike education program. As an example, some WA school districts require every 5th grader to participate in a bike education program in PE class.	High	Educational Service District, school districts, non-profits	Long-term
Hire SRTS coordinators. Paid staff to coordinate SRTS program and grant applications. Other communities have staff at the school site, regional, or district level.	High	Health district, health organizations, CDTC, cities and counties, Educational Service District	Long-term
Develop bicycling programs. After-school programs or community programs to support youth bike education (e.g. bike repair, mountain bike clubs)	Medium	Schools, school districts, local bike groups, community education, Eastmont Parks & Wenatchee Parks, non-profits	Ongoing

Bike Education

There are currently no regularly scheduled classes offered for someone interested in learning about bicycle transportation in the region. Wenatchee Valley Velo and the local bike shops are a great resource and have learning opportunities and group rides for recreational road and mountain biking, but there are no resources for general bicycle transportation. It is recommended that community bicycle transportation programs be offered. Example program topics include; bike repair, traffic skills 101, bike commuting, winter biking, and how to ride a bike for the first time.

Table C-11: Potential Bike Education Programs

Potential Programs	Resources Needed	Potential Partners	Timeline
Host a League of American Bicyclists Cycling Instructor training to train volunteers to teach traffic skills 101 classes	Low	Thriving Together NCW, local non-profits or health organizations, Wenatchee Valley Velo, bike shops, Wenatchee Valley College, CDTC, Schools	1-5 years
Host more bike rodeos and temporary pop-up projects	Medium	Eastmont Parks, Safe-Kids Chelan-Douglas, Wenatchee Parks & Rec, Wenatchee Valley Velo, Schools	Ongoing
Develop a local bike guide with laws, resources, & tips for biking locally	Medium	Cities & Counties, CDTC	1-5 years
Develop resources, outreach, and materials to inform all road users (cyclists, pedestrians, drivers) on how to navigate new bike facilities	Medium	Cities & Counties, CDTC, law enforcement agencies, Schools	Ongoing
Conduct classes or events targeted seniors, Spanish-speaking residents, families, women, etc.	Medium	CDTC, Eastmont Parks, Wenatchee Parks & Rec, WVC Community Education, Wenatchee Valley Velo, health organizations/non-profits, bike shops, Schools	1-5 years

Encouragement

Resources for Employers and Businesses to Encourage Bicycle Transportation

In Washington State, the Commute Trip Reduction Act has funded and provided a structure for many employers to offer resources and incentives for employees to commute by biking, walking, transit or carpooling. The Wenatchee Valley has never been required to participate or been eligible to receive funding so there are no major employers that offer bicycle programs for employees. Some work has been happening in recent years at major employers, but there aren't any coordinated efforts or staff dedicated to this topic in the region. As the region grows and transportation demand increases, it is recommended that appropriate programs be adopted to encourage bicycle commuting.

Table C-12: Potential Bicycling Incentive Programs

Potential Programs	Resources Needed	Potential Partners	Timeline
Develop regional campaigns, incentive programs, website materials, trainings, and/or outreach materials to encourage bike commuting. This could be combined with other modes, such as transit, carpooling, and walking.	Medium	CDTC, major employers, Link Transit, cities & counties, Sustainable Wenatchee, Climate Change NCW, health organizations	1-5 years
Encourage major employers to develop bicycle or multimodal transportation (bike/walk/carpool/telework/bus) programs. Participating employers could develop plans, hire transportation coordinators, promote options, etc.	Low - high	Major employers and institutions, Wenatchee Valley College, Central Washington Hospital, cities and counties, CDTC, Link Transit	Ongoing
Develop a transportation management organization to promote transportation options. Examples include Commute Options (Bend, OR), Whatcom Smart Trips (Bellingham, WA), Transmanage (Bellevue, WA)	High	WSDOT, counties, cities, CDTC, etc	Long-term

Table C-13: Potential Bike Events

Potential Programs	Resources Needed	Potential Partners	Timeline
Current Bike Events: Open Streets/Ciclovias Family biking Expanding bike to work day and bike month events Slow rides, Ride of Silence Themed rides (photography, brewery tours, bike to local farms)	Low-high	bike shops, local non-profits and bike clubs, community organizations, volunteers	Ongoing, and to be continued
Possible New Bike Events: Brewery/winery/cidery tours Locavore farm tours Bicycle scavenger hunts Architectural tours Geology tours Birdwatching tours	Low-high	bike shops, local non-profits and bike clubs, community organizations, volunteers	1-5 years and long-term

Bike Share

According to the Pedestrian and Bicycle Information Center, bike sharing is an innovative transportation program, ideal for short distance point-to-point trips providing users the ability to pick up a bicycle at a station and return it to a different station in the service area.

Bike share has grown in popularity across the U.S. in recent years and can be found on college campuses (WSU in Pullman is a local example), in large cities like Seattle, and in small to mid-size cities across the country (e.g. Corvallis, OR; Truckee, CA; Carmel, IA).

Bike sharing programs have been shown to improve safety because the visibility of bicycles increases with bike share. More people are biking for short trips in the city. The bikes are also often brightly colored and easily recognizable.

In the CDTC region specifically, bike share can help Link Transit better accommodate transportation needs by improving first-mile last-mile connections to transit for intercity routes. Buses in Link's system are equipped with two- or three-capacity bike racks. If bike racks are full, riders may experience additional wait times and choose not to take their trip by bus at all. At peak travel times, bus frequency may need to

increase to allow sufficient capacity for bike share.

Bike share can boost the economy, support tourism, and help the region recruit new businesses and employees. Cities across the country have developed bike share programs for these reasons and should be used as an example for developing a program in the region.

Bike share can improve public health by getting people out moving for short trips during the day. As an example, a participant who drives from Waterville to Olds Station for work can use a bike share bike to run errands on their lunch break in Wenatchee, or ride the Loop Trail.

This plan recommends applying to the WSDOT Consolidated Grant Program for a planning grant to complete a bike share feasibility study. The study could begin in the near future and make recommendations for bike share implementation in the region. The study could help answer feasibility questions about the type of bike share program to develop and assist in developing an implementation plan.

Key questions to be answered by the feasibility study:

- » Is a bike share system feasible or needed in the region?
- » What are the costs associated with bike share? Is it sustainable?
- » Should the bike share system be regional or should each city develop their own as needed?
- » Does it include stations or is it primarily dockless?
- » Will bike share maximize and improve transit connections by bike?
- » Will bike share support tourism goals and plans for the region?
- » Is there interest or support from any major employers and local hospitals and clinics?
- » What type of program would help ensure bike share is equitable and accessible to the widest audience possible? The study would explore payment methods, locations, languages, partners, etc.
- » Can the program include adaptive bicycles to encourage ridership among the elderly and disabled populations in our region?
- » Are e-bikes a possibility for the region?



Docked Bike Share; Boulder Co

Maintain and Expand the Goathed Warriors Program

Since 2016, community volunteers organized within the Goathed Warriors Program have been removing goatheads, also known as puncture vine, from the Loop Trail. The spiny seeds of these plants are regionally known to cause many flat bicycle tires. Anecdotally we know this to be a barrier for biking for many youths and families in the region, which makes it a key maintenance issue for the region.

In 2017, the Goathed Warriors Program began expanding this program into the local neighborhoods with the goal to eradicate goatheads from the region. Public outreach and expanded programs could eradicate goatheads in the Wenatchee Valley. This program should be maintained, encouraged, and expanded.

Wayfinding

Creating a regionally coordinated bicycle wayfinding plan has been identified as a need by multiple organizations. Consistent wayfinding provides effective direction to the biking public, advertises the region as a bicycle friendly community, and provides branding for a region with a growing tourism economy. Though bicycle wayfinding is already implemented in some jurisdictions, a coordinated plan will tie wayfinding efforts together so that directions to and from destinations in different jurisdictions are clear, intuitive, and accurate.

Benefits of wayfinding

According to the National Association of City Transportation Officials (NACTO), there are 6 key benefits of developing a bicycling specific wayfinding system.

1. Familiarizes users with the bicycle network
2. Identifies the best routes to destinations
3. Overcomes a "barrier to entry" for infrequent bicyclists
4. Signage that includes mileage and travel time to destinations may help minimize the tendency to overestimate the amount of time it takes to travel by bicycle
5. Visually indicates to motorists that they are driving along a bicycle route and should use caution
6. Passively markets the bicycle network by providing unique and consistent imagery throughout the region.

Existing Conditions

On-Street Bikeways

CDTC staff and RBAC members documented existing bicycle route signage and recorded all known signs in the region; There are approximately 150 existing signs. Wenatchee has a network of signed bicycle routes that date back to the 1980s, likely making it one of the oldest in the state of Washington. East Wenatchee and Douglas County don't have wayfinding signage with the exception of Loop Trail. The existing signage in Wenatchee is included on routes in most parts of the city, however there are issues:

- » Existing signs have no route or destination information.
- » Most signs only include arrows, making it difficult for visitors and infrequent riders to navigate certain routes
- » Some streets are not comfortable for bicycling (Example: Okanogan Avenue is a bus route, has heavily utilized on-street car parking, and has roughly 4000 cars a day and is currently a signed bicycle route with no bicycle amenities beyond signs)



5th St "Decision" Sign

- » The route signs have not been updated to reflect changes in bicycle facilities
- » The route signs end at city limits. They provide no connections to nearby cities or areas in Chelan County

The City of Wenatchee installed the first “Decision” bicycle wayfinding signs on 5th Street when adding bicycle lanes to the corridor.

Shared Use Paths

The Loop Trail and adjacent trail connections have a variety of signage installed by the different managing agencies. There are no consistent wayfinding signs going to or from the trail.

Loop Trail Mile Post Markers (mile 0-10)

The Chelan County PUD has installed decorative milepost markers along the Apple Capital Loop trail. These markers do not include information on distance to destinations.



Loop Trail Mile Post Markers

Bike Route signs

Bike route signs are also used on some trails. In the photo at right, 3 different signs within 20 feet of each another indicate “bike routes” on the Loop Trail, Thurston St, and Worth St.



Bike Route Signs



37th St Trailhead

Some of the north end trailheads were marked with Bike Route Ends signs. The one pictured at Right is at the 37th Street trailhead. The Sellar Bridge trail connection also includes bike route signs.

Brown Trail Wayfinding Signs

The North End of Douglas County and also the Euclid Street exit have trail wayfinding signs that clearly mark junctions and trailheads. Brown signs are in place with wayfinding noting the “east loop trail” and “west loop trail”. These do not provide clear direction to trail users unfamiliar with the region. The Rocky Reach Trail extension is also not signed accurately on all signs.



Brown Loop Trail Wayfinding Signs

Wayfinding Framework

Technical Guidance

There are multiple technical guidance documents for bicycle route wayfinding. The Washington State Department of Transportation (WSDOT) Design Manual includes minimal guidance for bicycle wayfinding and signage (see 1520.05(1) for details) and direct users to the Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) bicycle and pedestrian page.

There are two different design manuals which cover bicycle wayfinding signage. The following guidance comes from the MUTCD and NACTO:

NACTO

The NACTO Urban Bikeway Design Guide provides the following design guidance for bike route wayfinding

Required Features

- » Follow MUTCD standards (Section 9B.01—Application and Placement of Signs) and (Section 9B.20—Bicycle Sign Guides)

Recommended Features

- » Decision signs should be before turns (near side of intersection) or other route decision points
- » Decision signs should include destinations, directional arrows and distance
- » Travel time can be used to supplement information (estimate using 10 mph bicycle speeds)
- » Place the closest destination to each sign in the top slot, followed by the second and third destinations. Intermediate destinations can be used on long routes
- » Place turn signs on the near-side of the intersection to indicate where the route turns
- » Confirmation signs should be placed every ¼ mile to ½ mile along off-street bicycle routes and every 2 to 3 blocks along on street routes, and on the far side of major street intersections
- » Clearway Hwy Font is commonly used for signs

Optional Features

- » Signs can be placed on “feeder streets” between the bicycle route and nearby destinations
- » Bicycle route map signs can be placed along routes to provide additional information to users
- » Conventional Street name signs along bicycle routes may be redesigned to identify the street as a bicycle route
- » The placement of signs may be limited solely to the designated bicycle network to avoid other streets that may be difficult or dangerous to bicyclists
- » Pavement markings may be useful where signs are difficult to see
- » Some wayfinding signs use a route numbering system (MUTCD Section 9B.21 includes standards

and options)

There is no standard color, but green is the most common color used for bicycle wayfinding

Manual on Uniform Traffic Control Devices (MUTCD)

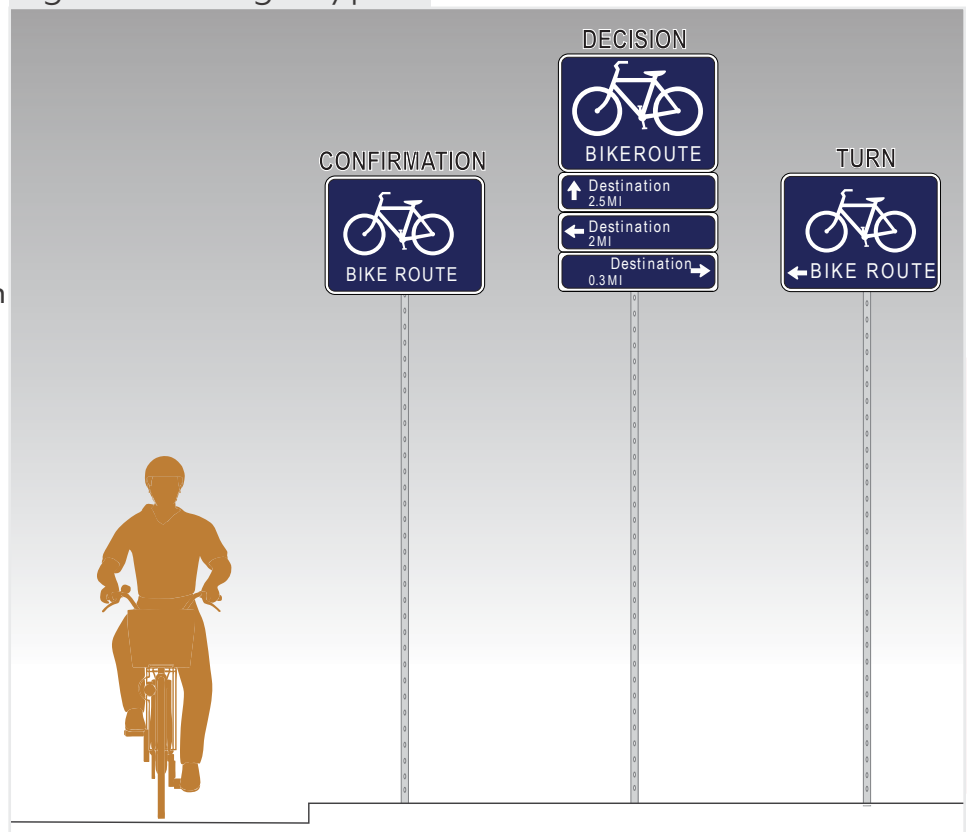
Bicycle signage design and placement standards can be found in Section 9B.01. There are both standards and optional guidance included in the chapter. Additionally, MUTCD Section 2D.50 allows for custom colors and logos to support community wayfinding systems. Guidance in this section covers wayfinding for bicycle, pedestrian, and tourist wayfinding signage.

AASHTO

The 2024 AASHTO Guide for the Development of Bicycle Facilities cites the MUTCD's provisions for the design and placement of bicycle guide signs. However, It goes on to provide supplemental information on best practices for the following wayfinding signage systems considerations:

- » Core Principles
- » When to Use Wayfinding Systems
- » Design User
- » Wayfinding System Goal
- » Wayfinding Sign Assemblies
- » Style and Branding
- » Signage Content
- » Placement and Installation
- » Wayfinding for Detours and Work Zones

Figure C-8: Sign Types



Sign Types

There are three types of signs typically used for bicycle wayfinding: Decision, Turn, and Confirmation.

Decision Signs: Mark the junction of two or more routes and provide a list of destinations

Confirmation sign: Inform bicyclists and motorists that they are traveling on a bicycle route

Turn Signs: Inform bicyclists when the bikeway turns from one street onto another street or directs a cyclist to a destination not on the bikeway

Branding and Design

CDTC staff developed 3 branded wayfinding sign options for the Regional Bicycle Advisory Committee and Technical Advisory Committee to review. It is recommended that the local agencies and WSDOT use this design style to maintain wayfinding consistency across the bikeway network. The preferred signage branding is shown below and on page C-72.

Figure C-9: Branding Template - Decision Signs

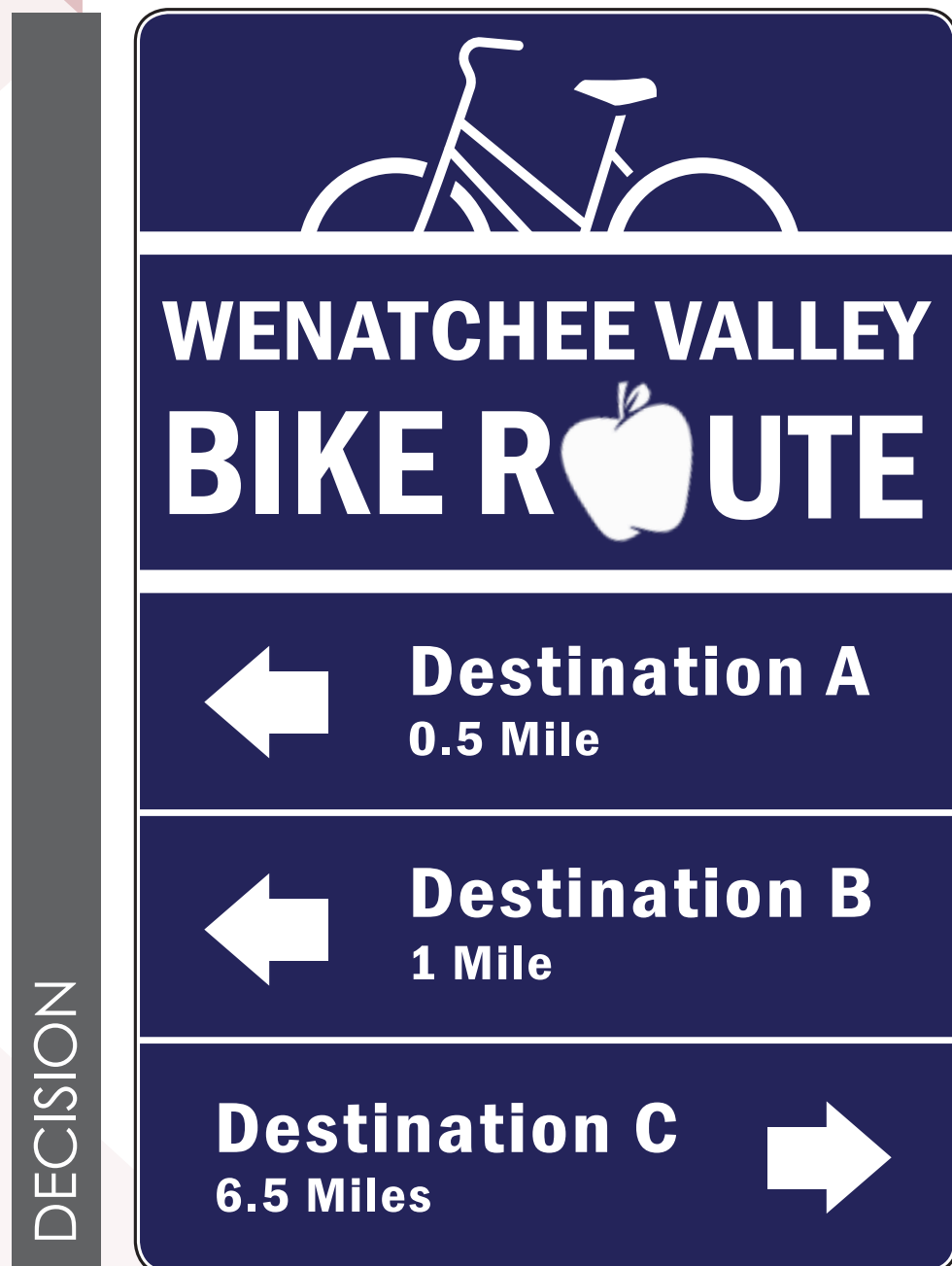
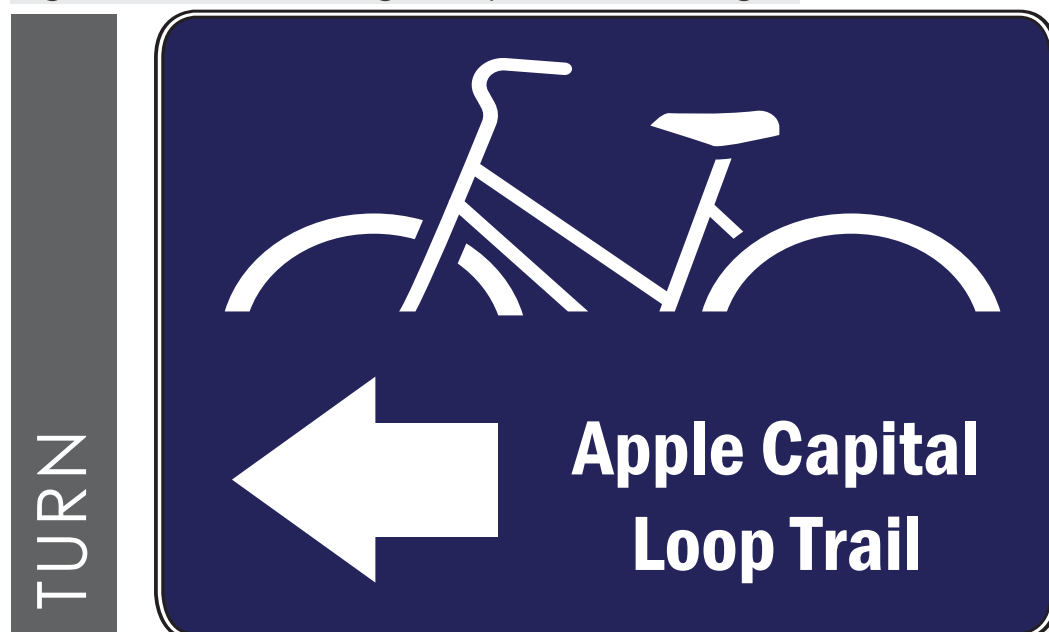


Figure C-10: Branding Template - Confirmation Signs



Figure C-11: Branding Template - Turn Signs



Signage Recommendations

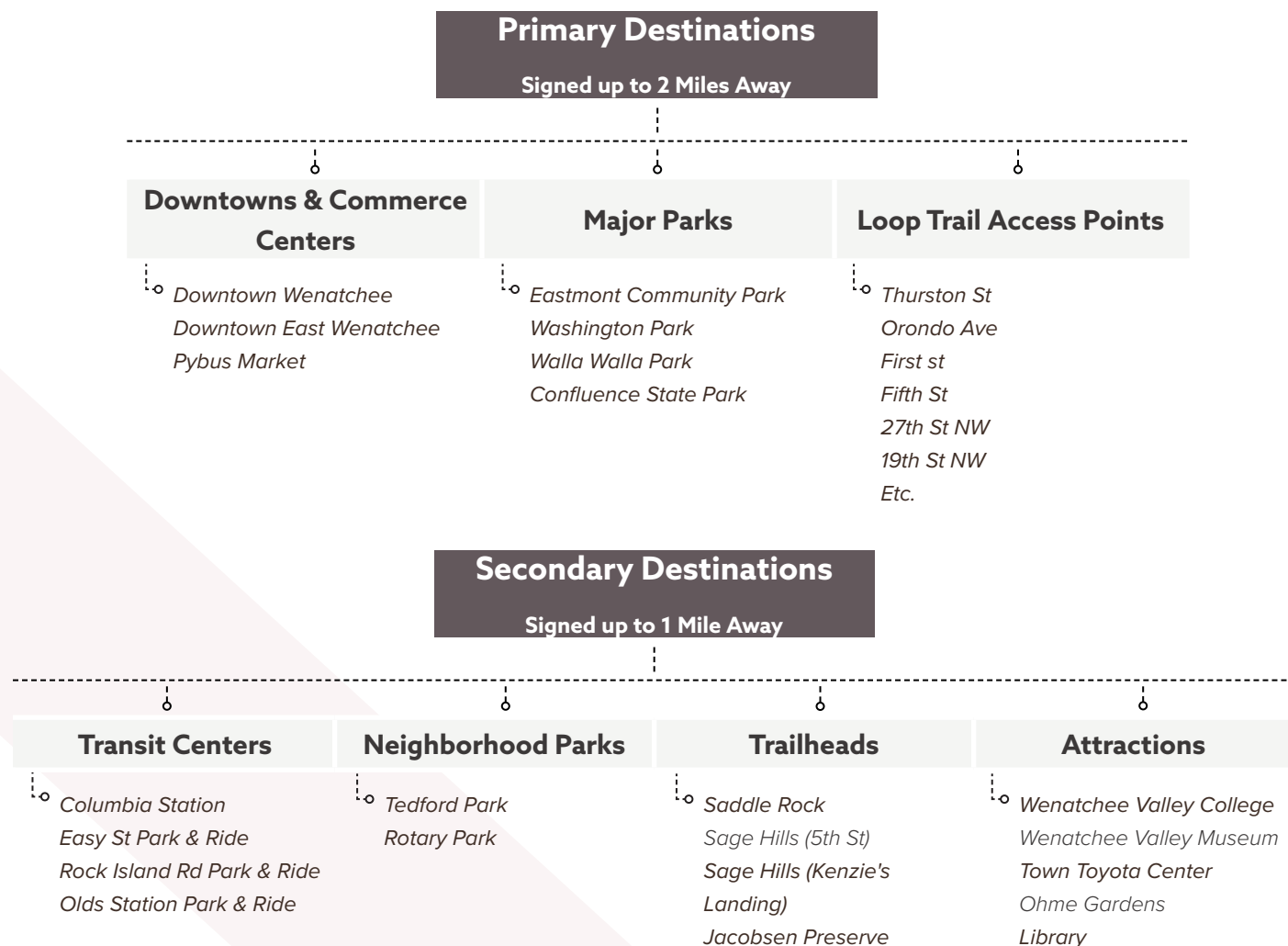
Destination Selection + Prioritization

A hierarchical list of destinations based on their relative importance was created prior to identifying sign location and content. The list was reviewed and confirmed by a working group of public works staff from the cities and counties and staff from the Chamber of Commerce.

A particular destination's ranking in the hierarchy was used to determine the physical distance from which the locations were signed. Multiple distances were tested for each hierarchy class and compared to wayfinding plans from other metro areas. Because of the relatively small size of the Wenatchee Valley, two classes were used. Primary destinations are to be signed up to 2 miles away. Secondary destinations are to be signed up to one mile away.

Some destinations were recommended for signing only within certain neighborhoods or in certain systems like Chamber of Commerce in downtown Wenatchee or the parks along the Apple Capital Loop Trail. Therefore, the some destinations are recommended on signage further than 2 miles away or only within a specific geographic area including the Chamber of Commerce, Lincoln Rock State Park, Hydro Park, Hale Park, and Linden Tree Park. All other destinations are shown in the figure below.

Figure C-12: Primary and Secondary Destinations



Signage Recommendation Methods

Sign post location and signage content recommendations were made for all existing and recommended bicycle network recommendations. Not all intersections are recommended for signage, for example, at the end of a short block where additional signage wouldn't provide new information to the user. Directions to primary destinations were provided even if the destination wasn't on the same corridor as the sign. Directions to secondary destinations were only signed if the destination was on the same corridor as the sign. All distances to destinations were measured in ArcGIS Pro. It's important to note that sign placement in the map is generalized, exact locations of each sign should be determined during project design and meet local signage standards. In total, 351 decision signs, 454 confirmation signs, and 102 turn signs are recommended for on-street bikeways. 34 signs were recommended for the Loop Trail. Approximately 189 existing signs will need to be retrofitted by either moving sign posts, changing the sign plaque, or both. Final determinations should be made during project design. The recommended sign locations, types, and content **can be found HERE**.

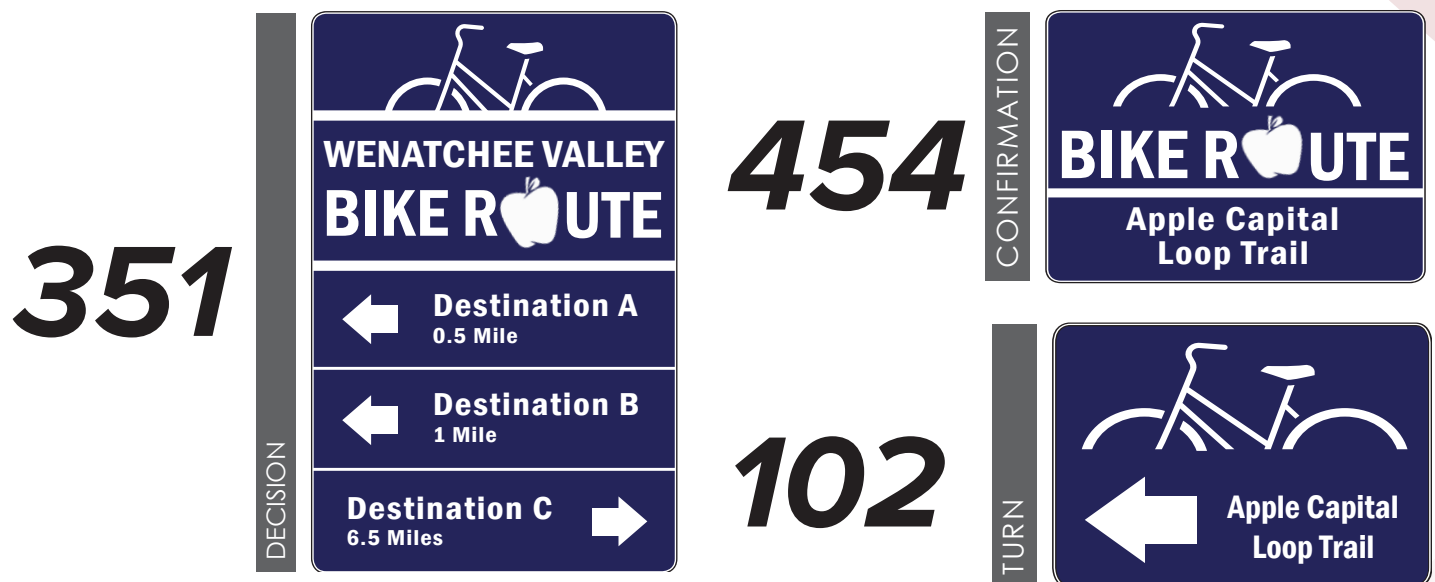


Table C-14: Sign Cost Estimates

	Wenatchee		East Wenatchee		Chelan County		Douglas County		Chelan PUD	
	Signs	Cost ¹	Signs	Cost	Signs	Cost	Signs	Cost	Signs	Cost
Existing Network Retrofits/Installs	181	\$26,800	95	\$14,300	0	\$0	36	\$5,200	28	\$0
Recommended Network Installs	459	\$47,200	114	\$11,700	20	\$2,000	163	\$15,100	34	\$4,900

1: Sign material costs only

Sign Features

Decision Signs

- » Decision signs should be placed in advance of all turns (near side of the intersection) or decision points along the bicycle route.
- » Decision signs should include destinations, directional arrows, and distance. Travel time required to reach the destination provides bicyclists with additional information and may also be included.
- » The nearest destination should be placed in the top slot. Destinations that are further away can be placed in slots two and three. This allows the nearest destinations to “fall off” the sign and subsequent destinations to move up the sign as the bicyclist approaches.

Confirmation Signs

- » Confirmation signs should be placed every $\frac{1}{4}$ to $\frac{1}{2}$ mile on off-street facilities and every 2 to 3 blocks along on-street bicycle facilities
- » Confirmation signs can include destinations, distance and time but do not include arrows
- » Confirmation signs should be placed soon after a turn to confirm that the bicyclists are on the correct route
- » Pavement markings may be used in place of confirmation signs

Turn Signs

- » Turn signs should be placed on the near-side of the intersection to indicate where the bike route turns or where a bicyclists must turn to reach a destination not on a bikeway.
- » Pavement markings may be used in place of turn signs

Sign Placement

The following section describes the recommended placement of decision, confirmation, and turn signs at a variety of intersections. Wayfinding signage should be located in a consistent matter across jurisdictions to aid wayfinding system utility and encourage bicycle use.

Clearance + General Placement

Per both the MUTCD and AASHTO, the nearest edge of any potential bikeway obstruction including signs should be a minimum of two feet from the edge of travelway. The lowest edge of post-mounted signs should be seven feet.

When two bikeways intersect, the general approach is to place a directional sign prior to the decision point followed by a confirmation sign or pavement marking after the intersection to confirm intended direction. While this approach provides redundant information, it ensures that the system does not break down if one sign is compromised. Signs may be placed on existing posts, poles, or other supports as practical, which should be determined during design and installation.

Figure C-13: Clearance Recommendations

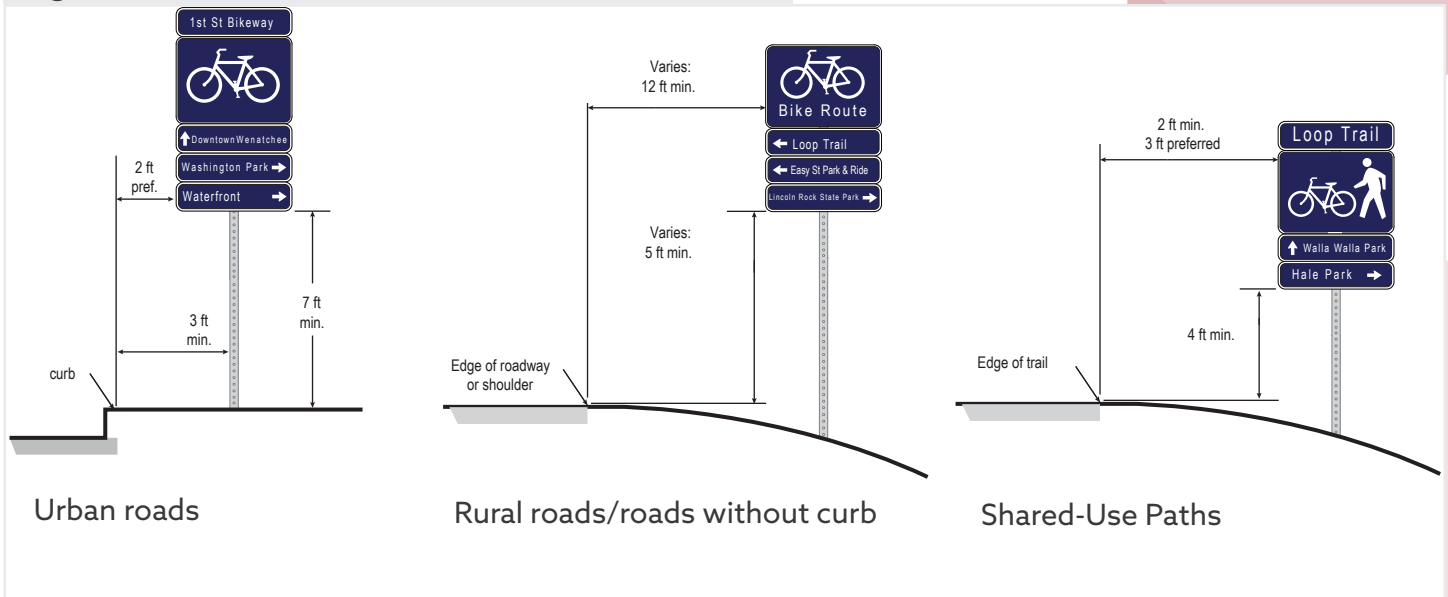
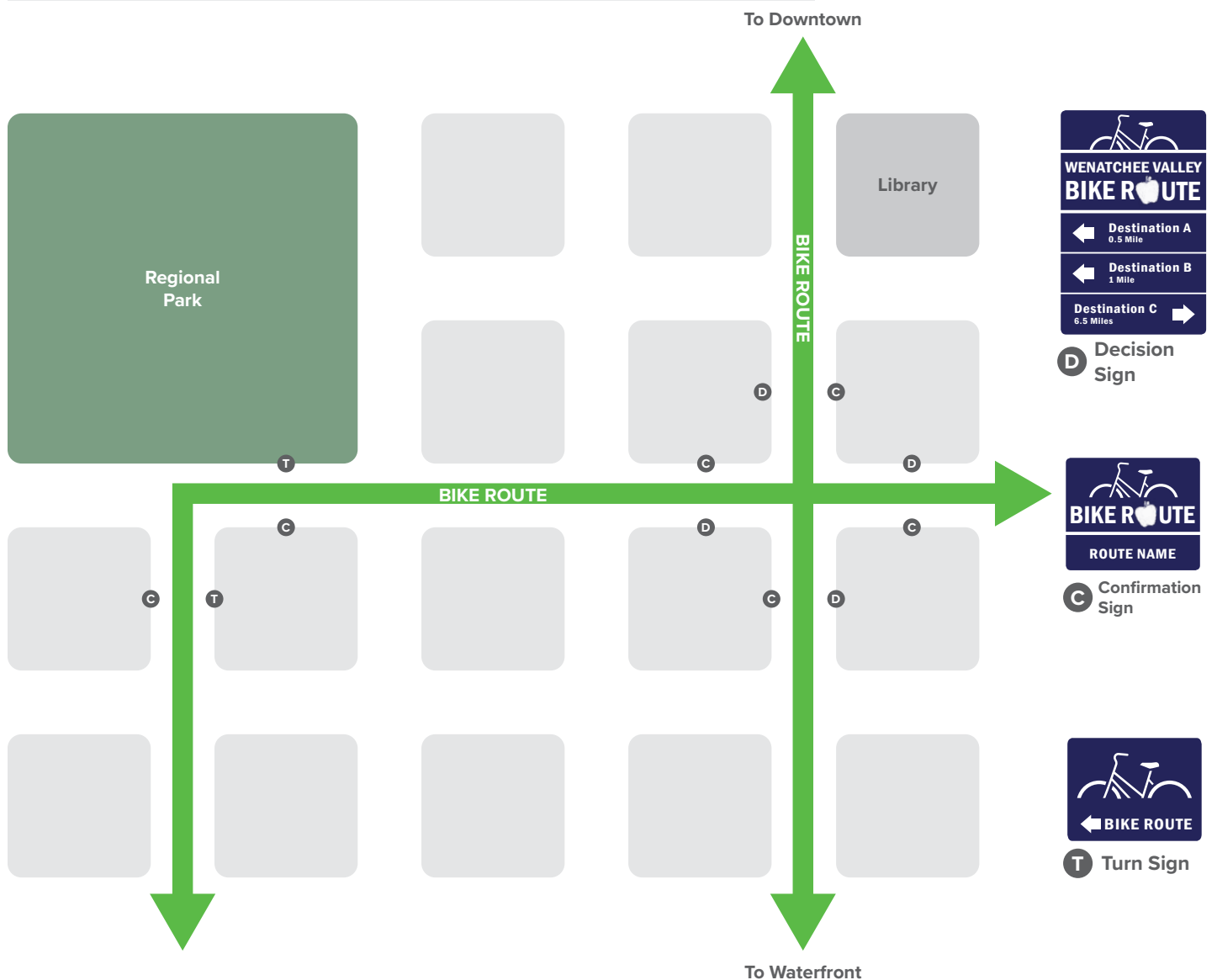


Figure C-14: General Placement Recommendations



On-Street Bikeway/Shared-Use Path Transitions

Where transitions are made between on-street and shared-use paths, decision signs shall be placed on the approach to the facility transition. Once on-street, confirmation signs should be placed after the pathway transition point to indicate a continuation of a designated bike route.

Destinations Not on a Bikeway

Some destinations aren't directly on bikeway frontage. Destinations off-network may be signed when a straight, safe bicycle connection or route is available. Engineering judgment must be used to determine whether the connecting route is suitable for cycling.

Roundabouts

Roundabouts are a unique challenge for cyclists in general. The recommended bikeway accommodation at roundabouts for bike lanes is to provide a ramp for cyclists to use the sidewalk and crosswalk to navigate the roundabout if this treatment isn't feasible, sharrows within the roundabout may be used. In either case it's recommended that wayfinding signage be placed well before a cyclist needs to make movement onto the sidewalk or into the roundabout.

Figure C-15: On-Street Bikeway/Shared Use Path Transitions

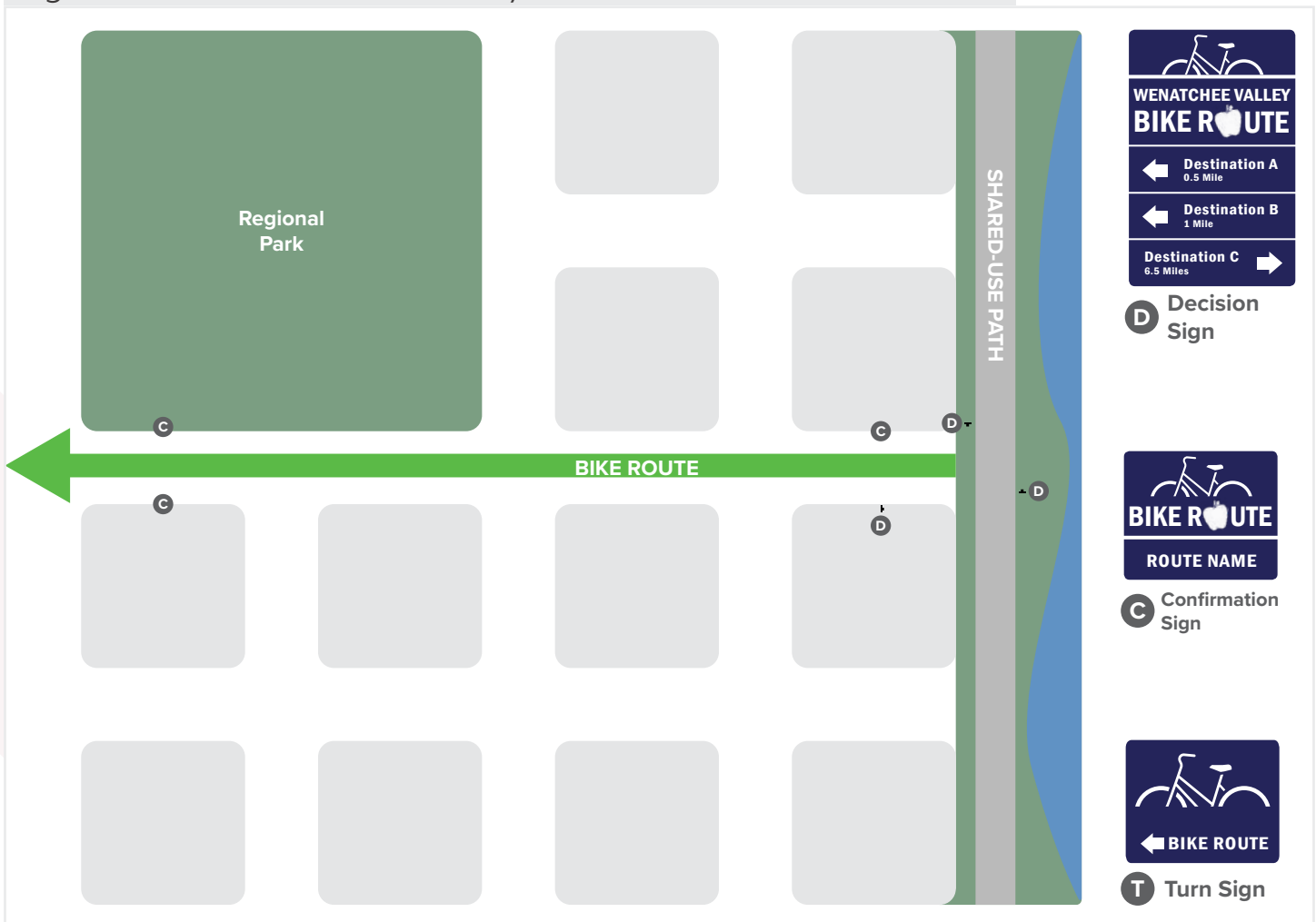


Figure C-16: Roundabout Placement



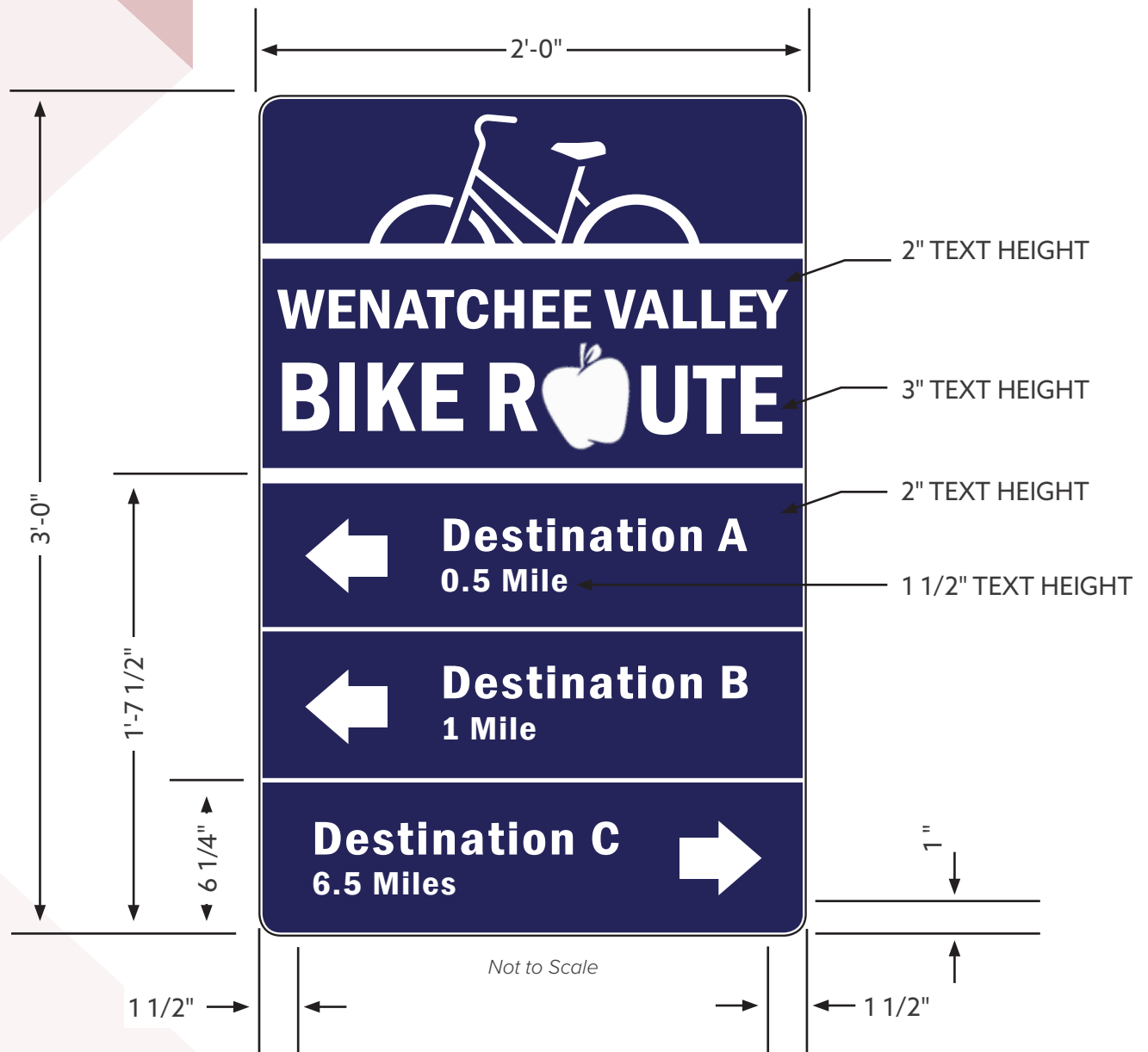
Long Distance Wayfinding

Distance cycling, or adventure cycling, is increasing in popularity in Washington. The state is home to multiple United States Bike Routes (USBR), mostly in Western Washington, but a new route is being proposed that generally follows the US 97 highway corridor from Canada to Oregon (and eventually Mexico.) The designation of this route and the growing number of cyclists wanting to ride long distances on other roads across the region creates a need for unique wayfinding that provides directions for following preferred routes and informing cyclists of nearby services. Wayfinding signage does not run out of battery power, wireless reception, or experience technical difficulties. Providing permanent wayfinding signage for adventure cyclists is an important part of improving experience, safety, and comfort for long distance riding.

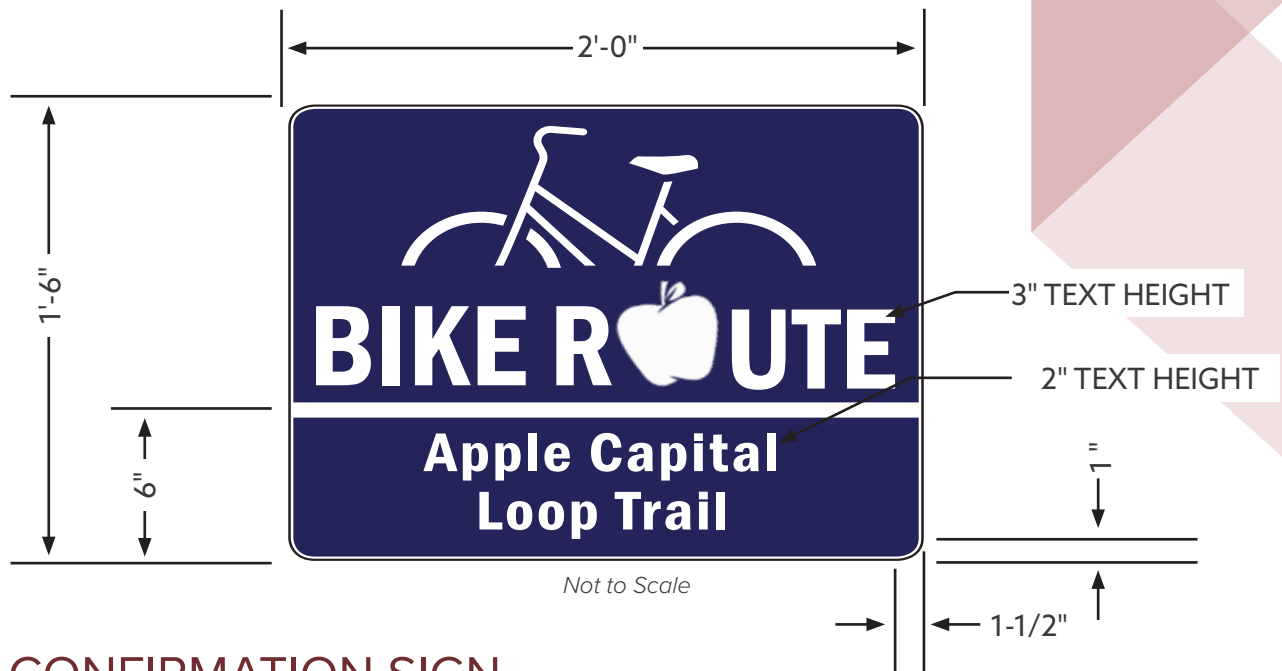
Implementation of distance wayfinding requires close coordination between jurisdictions as preferred routes traverse city, county, and state facilities. It's recommended that local agencies and WSDOT consider the needs of distance cyclists and evaluate the potential for wayfinding signage as they perform other road preservation, maintenance, and improvements. It's recommended that this plan be reviewed for consistency as distance wayfinding signage is implemented.

It's recommended that wayfinding signage consistent with the framework in this plan be included in the development of the paths and trail concepts identified in the CDTC regional pathways plan. It may be beneficial to create unique branding consistent with the designs on page C-74 and C-75 to inform users and provide directions in a way that's consistent and interoperable with the rest of the wayfinding system in the Wenatchee Valley.

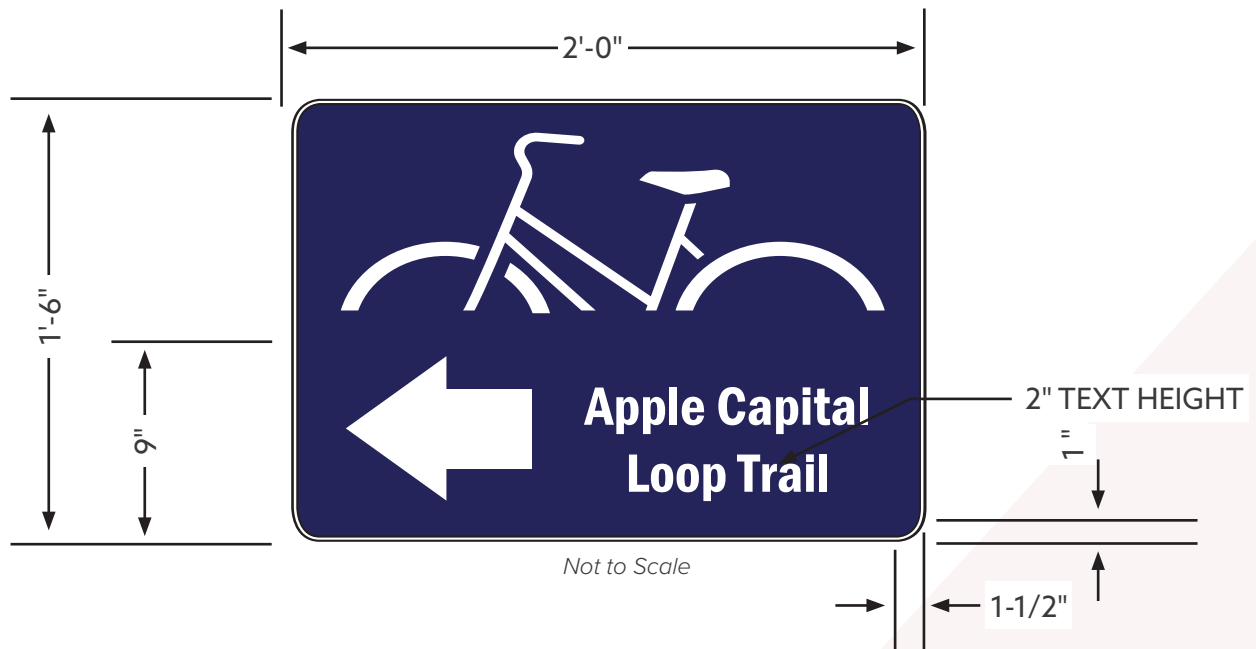
Dimensions and Graphic Standards



DECISION SIGN



CONFIRMATION SIGN



TURN SIGN

Color Palette



White
C0 M0 Y0 K0



Blue
C100 M98 Y35 K29

Typography

Franklin Gothic Demi Condensed

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz 1234567890

D

BENEFITS & IMPACTS



This appendix documents the process for evaluating the benefits and impacts of the RTP on underserved communities. CDTC defines underserved populations as individuals that have been systematically denied the opportunity to participate fully in aspects of economic, social, and civic life through systematic discrimination or from the negative effects of persistent poverty. These individuals can be geographically dispersed or concentrated.

In the context of transportation policy making, programming, infrastructure design, and provision of services, the challenges experienced by these individuals or groups are further exacerbated by:

- » Limiting access to economic, social, and civic opportunities within a region that other groups can access through personal mobility or public transport.
- » Placing a disproportionate burden of environmental impacts from transportation infrastructure, including air pollution, noise, etc. on a group.
- » Locating highways and other primary thoroughfares in locations that primarily negatively impact minority and/or low-income communities.
- » Investing in transportation infrastructure and services that disproportionately and primarily benefit non-underserved communities.

An evaluation of the RTP development process, policies, and funding priorities is performed to ensure the RTP doesn't result in the outcomes described above. The evaluation identifies and maps the following traditionally underserved groups (Figures D-1 – D-5).

Minority

Minorities are individuals that identify as having Latino or Hispanic ethnicity, regardless of race, and individuals that don't identify as white. Minorities are often geographically concentrated making them susceptible to disproportionate burdens and limitations of benefits from transportation investments. Additionally, language and cultural barriers can limit access to services, economic opportunities, social processes. Indigenous and Native American persons are uniquely burdened by decisions to location transportation infrastructure on places of cultural significance.

Low-income

Low-income individuals are defined as having income at or below the poverty level as reported by the US Census Bureau. Like minorities, low-income individuals are often geographically concentrated and susceptible to disproportionate burdens or limitations of benefits from transportation investments. Low income may also have limited access to services, economic opportunities, and social processes due to lower levels of mobility due to roadway designs and operating policies that favor vehicle speed over pedestrian safety, accessibility, efficiency, and comfort.

Disabled

Disabled individuals are defined as the population that have hearing, vision, cognitive, ambulatory, self-care, and independent living difficulty as reported by the US Census Bureau. Disabled individuals are primarily affected by transportation infrastructure that does not meet the Americans with Disabilities Act (ADA) requirements. All new transportation infrastructure must comply with ADA requirements. However, any infrastructure built prior to the passing of the ADA may not be ADA compliant, impairing the mobility of disabled individuals and limiting access to services and economic and social opportunities.

Limited English Proficiency (LEP)

Individuals with limited English proficiency are defined as the population 5 years or older who self-identify as speaking English less than very-well as reported by the US Census Bureau. LEP populations have limited access to services, economic opportunities, and social processes due to the propensity of services, economic opportunity information, and civic process to only be provided or conducted in English.

Figure D-1: Concentrations of Minorities

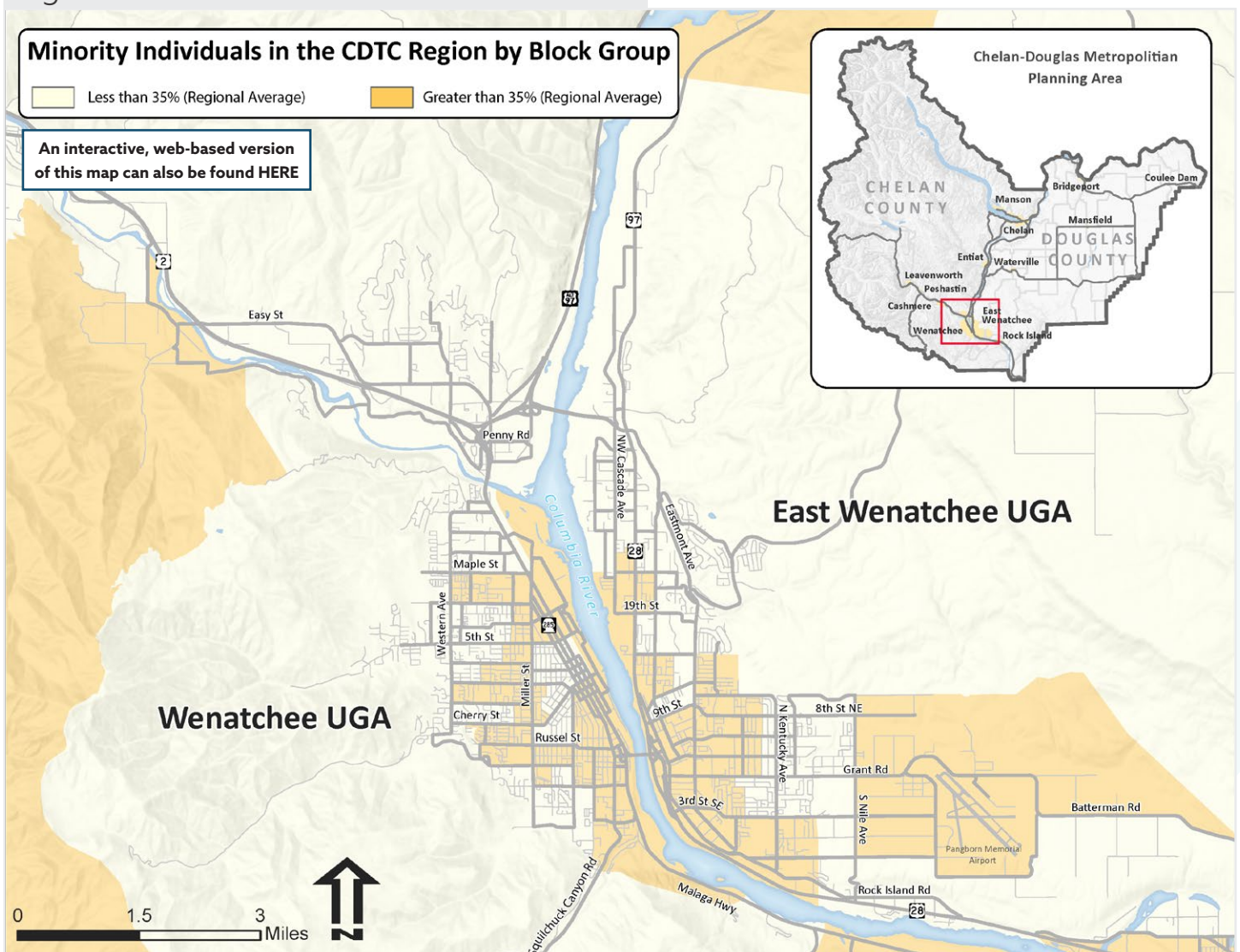


Figure D-2: Concentrations of Low-Income Individuals

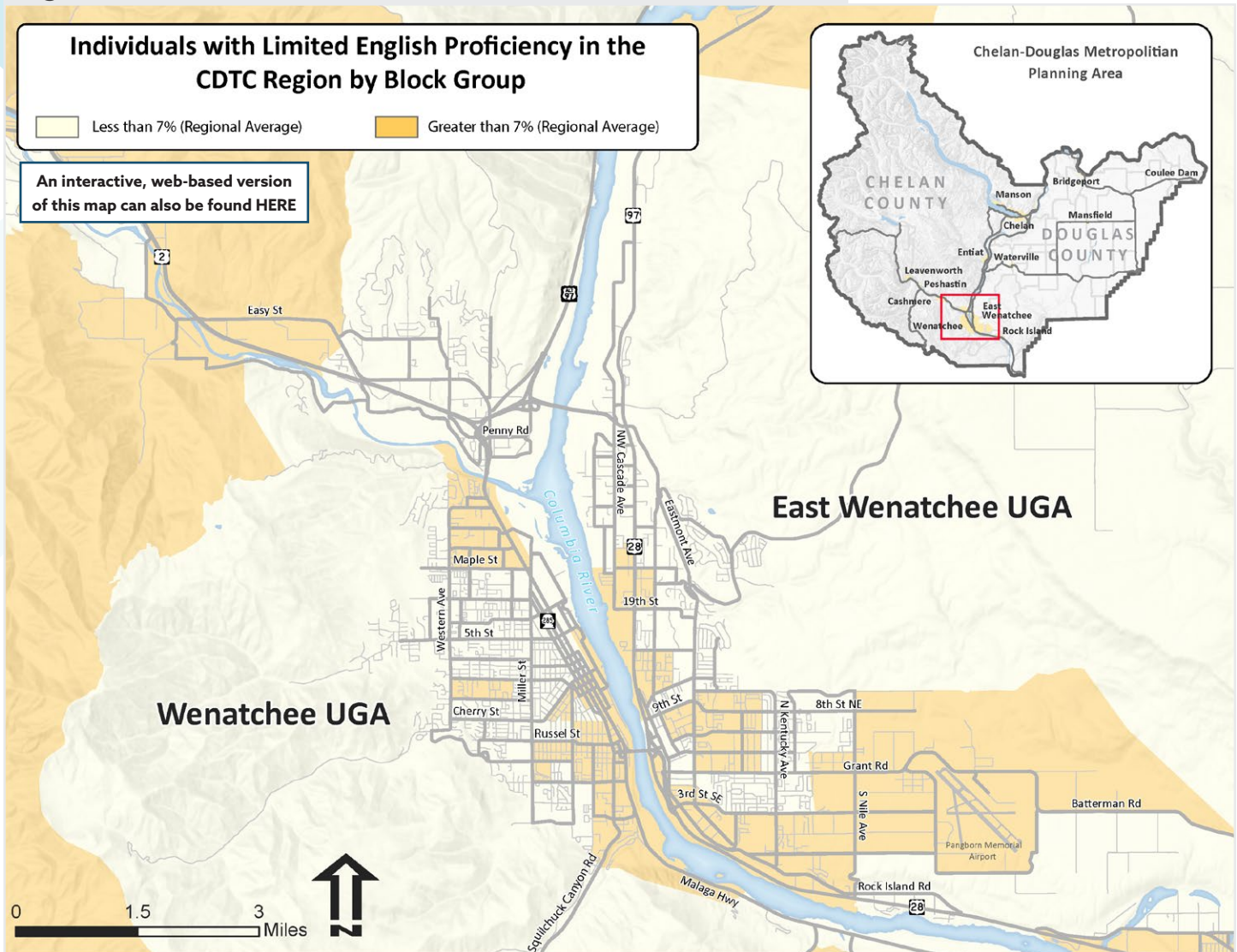


Figure D-3: Concentrations of Disabled Individuals

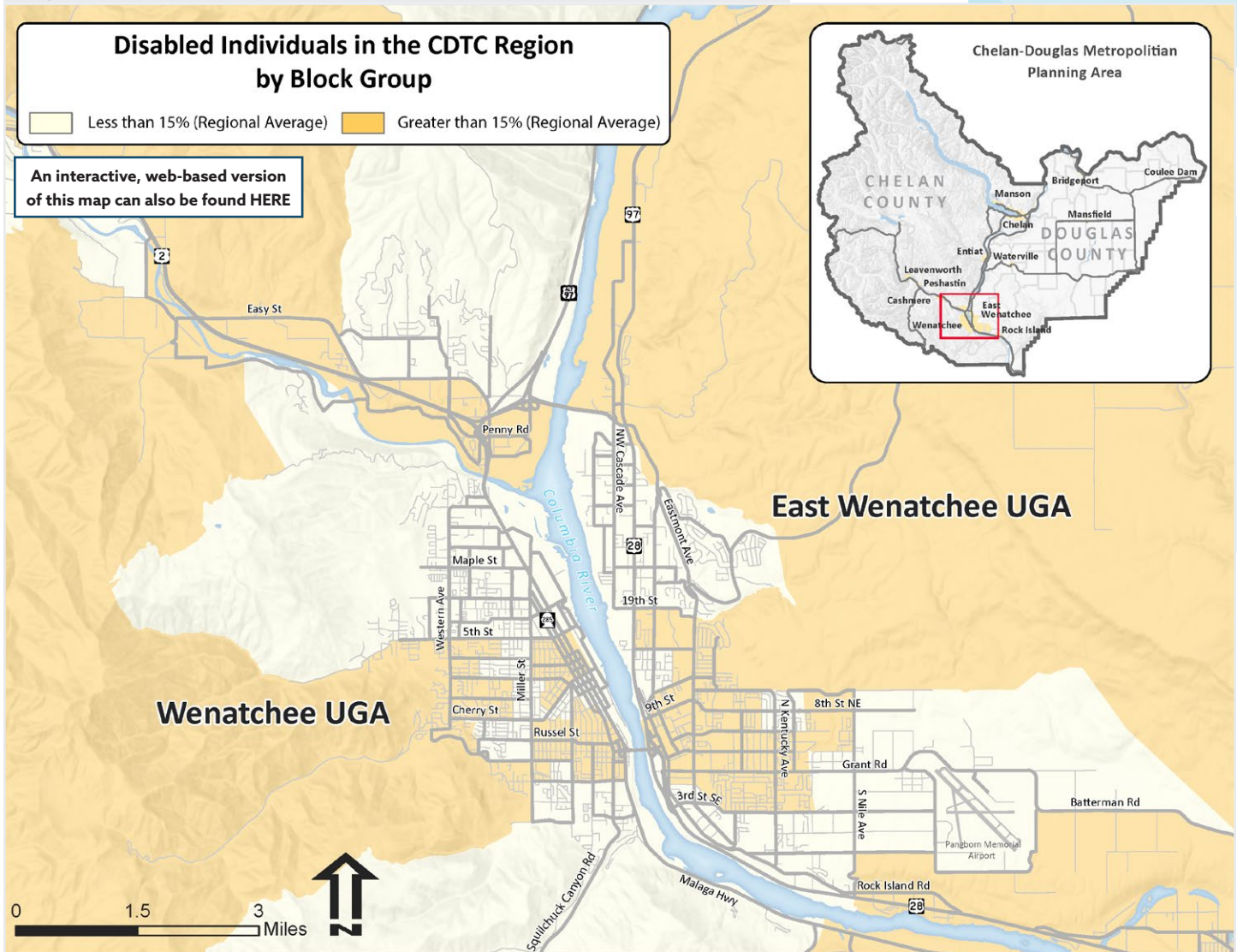


Figure D-4: Concentrations of LEP Individuals

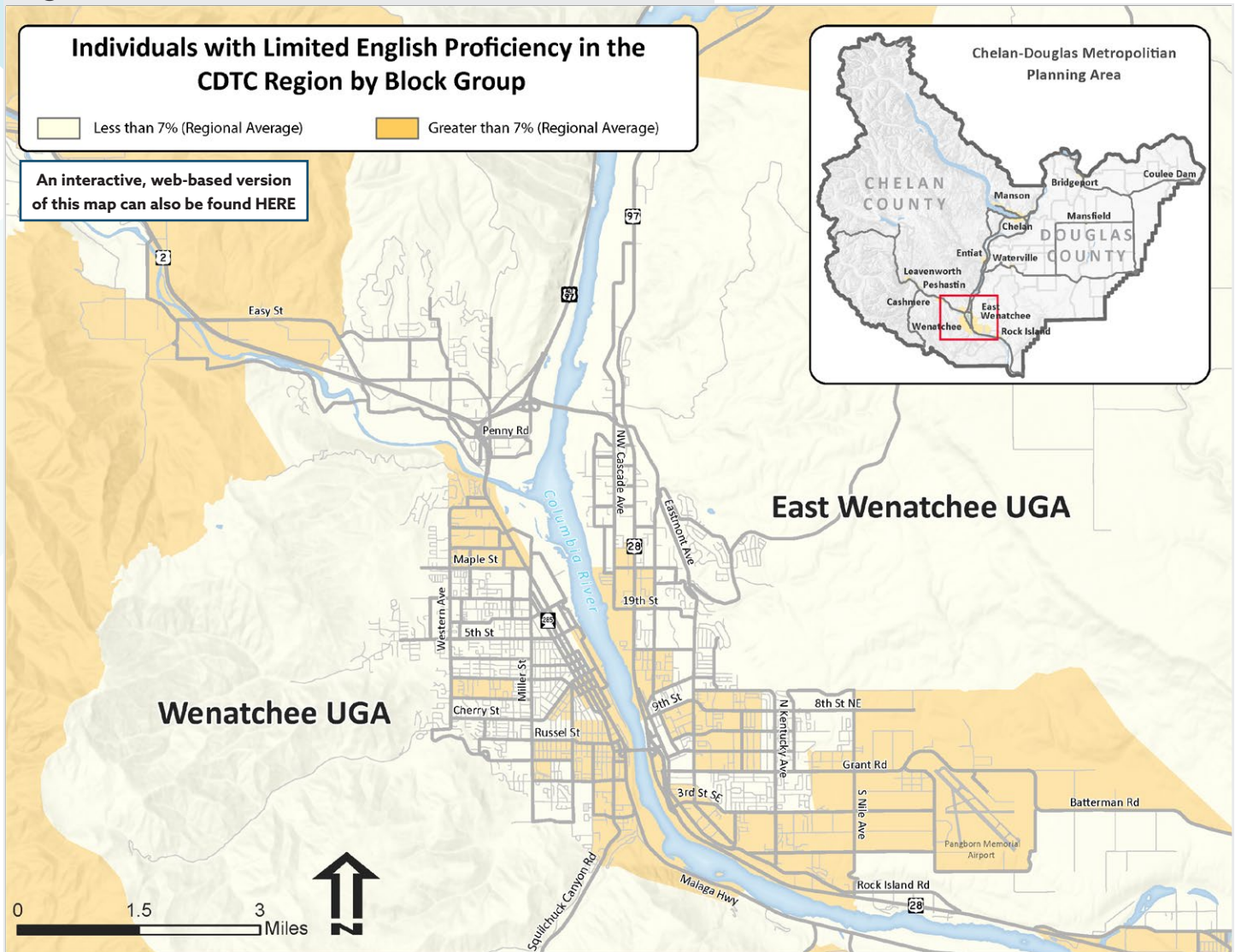
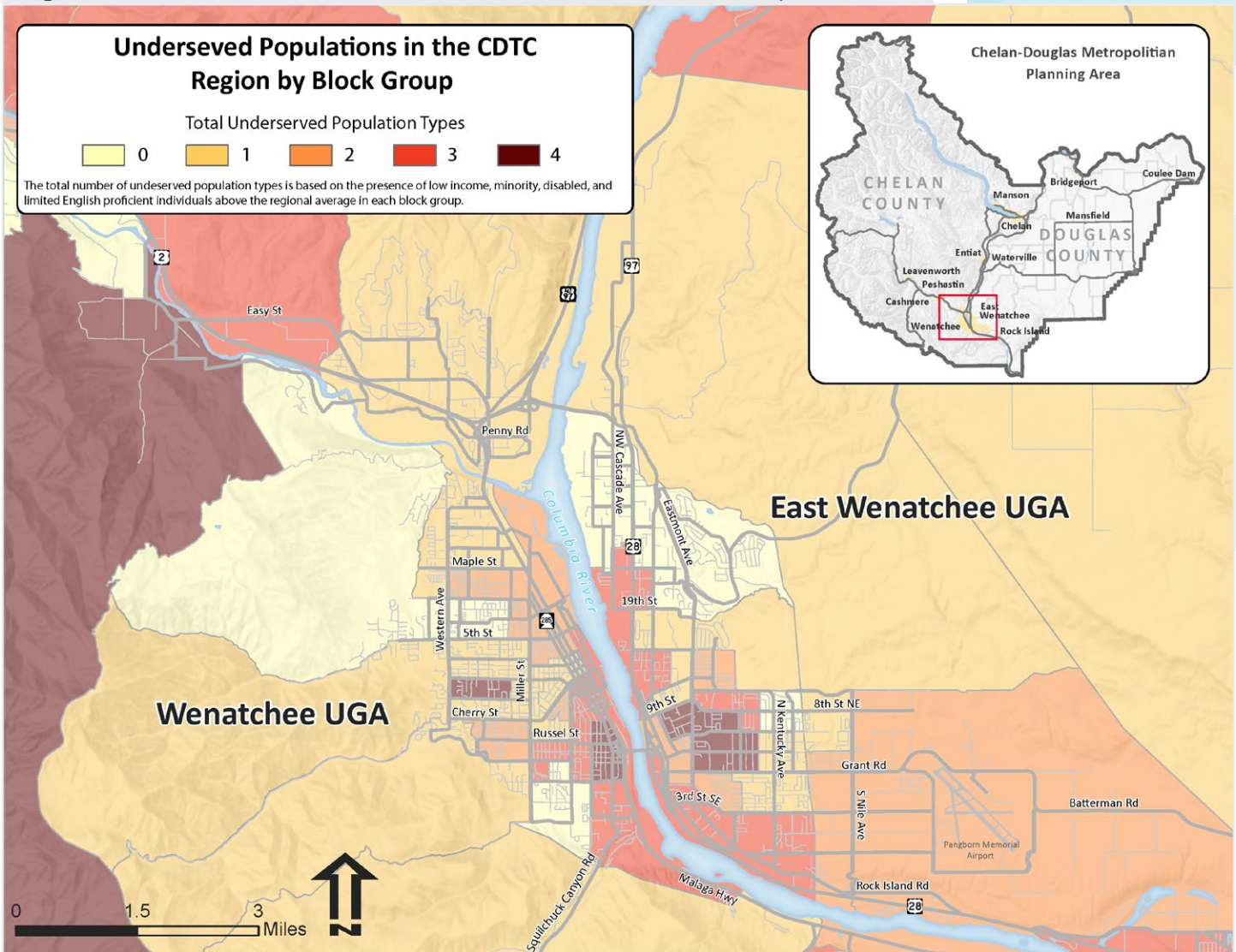


Figure D-5: Concentrations of all Underserved Populations



Benefits & Impacts Review and Evaluation

Following the identification of underserved populations, the plan's development process and policies are qualitatively reviewed to ensure equitable access and participation in the planning process and avoidance of disproportionate negative impacts or denial of benefits to underserved populations. Capital projects are evaluated quantitatively using a "Benefit/Impact Score" between 0.8 and 1.2 based on a determination of project benefits and impacts for each individual project, and then as a composite score that represents an average of all RTP projects, both of which must be greater than 1.0.

1.2: for projects mitigating impacts in disadvantaged communities

1.2: for projects directly benefitting disadvantaged communities

1.1: for project indirectly benefitting disadvantaged communities

1.0: for all automatic projects

1.0: for projects with region-wide benefits and no negative impacts

0.8: for projects limiting benefit to non-disadvantaged communities

0.8: for projects negatively impacting disadvantaged communities

Projects are automatically scored 1.0 in the following cases:

- » Safety improvements prioritized by data to ensure safety of all transportation system users and therefore a universal benefit
- » Highway and arterial capacity projects that improve public transit access to employment centers and regional medical centers.

Preservation investments are not identified at the project-level in the RTP but would automatically be scored 1.0 as preservation investments are prioritized by infrastructure condition data and therefore provide universal benefit.

Benefits and Impacts Finding

CDTC did not identify any task or initiative related to the RTP's development process that limits access to the planning process or results in disproportionate negative impacts or denial of benefits to underserved populations. Additionally, no capital projects identified in the RTP result in limited benefit to non-disadvantaged communities or disproportionately impact disadvantaged communities resulting in a composite equity score of 1.07. Each project's equity score can be found on the RTP's project needs web-based map.



E

EMERGING TRENDS



One of the core transportation planning activities is identifying and monitoring emerging trends that alter societal behaviors in a way that changes travel patterns, the state of the practice, and policy making. These trends can be driven by technology, changes to the natural environment, legislation, or economics. It's imperative that states, MPOs, and local agencies consider these trends and proactively understand them to make policy decisions that retain the efficiency, mobility, and accessibility of the transportation system.

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) improve transportation by integrating advanced information and communications-based technologies (ICT) into transportation infrastructure and vehicles. ITS refers to a system of technologies and operational advancements that, when combined and managed, improve the capabilities of the overall transportation system. An intelligent transportation system is one where traffic controls, transit, emergency response, private vehicles, and traveler information systems communicate with each other to optimize the transportation system for any given mode.

While implementing ITS can improve the ability of the system to efficiently move cars, goods and people, challenges do exist. The regional transportation system is composed of many different systems that are operated by multiple jurisdictions and agencies. These agencies must be able to effectively manage local mobility in their jurisdictions while operating within a larger regional ITS system that is optimizing the system for regional mobility. For this reason, inter-agency coordination must drive ITS programs and projects. A regional, joint programming body would be required for multi-agency ITS implementation. The United States Department of Transportation has established a framework for developing and implementing ITS for mainstream use. CDTC applies this framework to guide ITS planning (Table E-1).

Table E-1: ITS Framework

ITS Phase	Regional Joint Programming Body Role
Identify and Assess	In this opportunity- framing phase, the RJPB identifies and assesses potential technologies for their feasibility and applicability to the transportation system. The costs and public benefits of such technologies and the potential barriers to deployment may also be determined at this stage
Coordination, Research and Development	The RJPB cultivates partnerships to research and develop selected technologies for the public interest; it also identifies early adopters for initial demonstrations
Demonstrate Value	In this phase, prototyping and testing of technologies in controlled and real-world environments occurs, project data and lessons learned are gathered, and results are evaluated.
Support Implementation	After demonstrating the efficacy of technologies prototyped and tested in the demonstration phase to transportation, the RJPB advocates for proven technologies to the public and provides assistance to new deployers.
Maintain ITS Technologies	Scaling the adoption of ITS technologies to realize the full potential of benefits across any given surface transportation modes is the emphasis of this phase. Additionally, the RJPB maintains a focus on standards and interoperability in this phase.

A well-coordinated regional ITS system can be a high-value improvement to the transportation system at all scales, but requires significant, dedicated staff time and participation from all agencies affected by the ITS system. Traffic could be managed in each local jurisdiction using data collected at origins and destinations outside their boundaries to dynamically balance multi-modal traffic demand for system optimization.

Resilience

The National Infrastructure Advisory Council (NAIC) defines resilience as, “the ability to reduce the magnitude and/or duration of disruptive events. The effectiveness of a resilient infrastructure or enterprise depends upon its ability to anticipate, absorb, adapt to, and/or rapidly recover from a potentially disruptive event.” Resiliency planning in the context of transportation has focused on natural disruptive events such as fires, floods, and earthquakes. These events test the ability of the infrastructure to absorb periods of abnormally high demand and physical stress on the transportation infrastructure. Recently, this focus has expanded to include new disruptions that break down the economic infrastructure of transportation systems, namely the COVID-19 pandemic. The pandemic forced decision makers to consider policy implications of events that may cause lasting damage to not only physical, but also, social and economic infrastructure.

Natural Hazard Risks from Fire, Flood, and Earthquakes

The CDTC region is at a high risk of forest fire because of its dry forest and brushland vegetation. Chelan County and the Cities of Wenatchee, Chelan, and Manson are uniquely situated in this ecosystem; They can be considered geographic islands contained by water features and steep topography, with minimal evacuation routes. If a large fire were moving from west to east. This scenario represents worst-case conditions and is a major consideration in establishing investment priorities in this plan, as an element of traffic management and evacuation route redundancy. Strategies for transportation system fire preparedness should follow the Chelan County and Douglas County Hazard Mitigation Plans.

Though extremely unlikely, failure of any of the Columbia river dams would require immediate evacuation to high elevations. Most roads in and leading to higher elevations are either low volume asphalt or gravel roads. This type of event is likely to cause catastrophic impacts that will be unmanageable during the flooding period. Flooding would likely occur faster than the any emergency system mitigation efforts could be put in place. Therefore, resiliency should focus on how the system is managed for efficient emergency response.

There are multiple implications of earthquakes for the CDTC region. According to the United States Geological Survey (USGS), the Pacific Northwest has a 10% chance of a magnitude 8-9 earthquake on the Cascadia subduction zone. Although the region will be buffered from the most severe impacts experienced near the coast of Washington, the region’s transportation network including airfields, highways, and bridges will serve a supply chain network for state and federal disaster relief. Furthermore, refugees crossing the cascades into the region would add strain to the transportation system in both the short and long term. In addition, the region isn’t without its own risk of strong earthquakes. Most of the populated areas of the state have a 40–80% chance of having an earthquake in the next 50 years. High network redundancy will minimize the impacts of earthquakes with multiple network options for

trips. This is especially valuable for emergency response efforts. Strategies for transportation system earthquake preparedness should follow the Chelan County and Douglas County Hazard Mitigation Plans.

Economic and Social Disruptions

The COVID-19 pandemic had impacts beyond health. The temporary closure of business, schools, and offices created a sharp decline in travel and economic activity and the fuel and sales tax revenues that fund state transportation programs. At the regional level, gas tax revenue declined but has returned to pre-pandemic levels. Sales tax revenue increased in nearly all jurisdictions in contrast to the state trend and has increased at annual rates higher than pre-pandemic levels. Though the pandemic's fiscal impact was temporary, it did provide a unique glimpse into the resilience of funding mechanisms currently in use and may warrant a discussion on ensuring future resilience.

A lasting pandemic impact was the proliferation of remote work and a rethinking of the relationship linking homes, jobs, and travel demand. The RTP public opinion survey found that 1 in 4 respondents work from home at least two days a week. In communities where job centers are separated from homes, there is a prominent travel demand peak between 4 and 6 pm. In the Wenatchee Valley, that peak is flattened and covers 4 or 5 hours from midday to evening. There are likely other underlying factors that contribute to this travel pattern, but it is known that trip-making patterns in communities with high presence of teleworkers also include more trips throughout the day and a flattened peak travel curve. Moreover, the pm peak hour is used as the benchmark for determining whether the transportation system adequately provides vehicle mobility, but when the time of peak travel isn't confined to a single hour, perhaps mobility isn't being measured or defined. As the region grows and remote work becomes more prevalent, it may be prudent to rethink how mobility is defined and whether and instead use a more dynamic measure considers variable travel patterns.

Fish Passage Barrier Removal

In 2013, a federal injunction required Washington state to increase efforts for removing state-owned culverts that block the habitat for salmon and steelhead fish migration, mainly in counties west of the Cascade mountain range. The state legislature has expanded this effort to the entire state, requiring WSDOT, the Washington Department of Fish and Wildlife (WDFW), and local agencies to work in partnership to identify and complete projects to eliminate fish passage barriers caused by publicly owned roads and highways statewide (RCW 77.95.180; RCW 77.95.185). This requirement is a growing cost liability for transportation projects in the region.

There are an estimated 249 fish barriers in the region—56 on federal-aid eligible roads. The cost to remove barriers is highly variable and represents a high risk-factor for transportation projects. For example, two fish barrier projects on US 97 cost \$1 million and \$3.3 million respectively, demonstrating the variability of barrier removal. Most agencies don't have a programmatic estimate for fish barrier removal costs due to the nuance and complexity of each barrier and the required mitigation. WSDOT has identified and prioritized barriers and has a larger financial capacity than local agencies to plan for and absorb fish barrier removal costs but could still be at risk. A detailed assessment of the fish barrier removal needs in the region may be appropriate to fully realize the cost liabilities for local agencies.



F

SYSTEM PERFORMANCE REPORT

Introduction

The Federal Highway Administration (FHWA) defines Transportation Performance Management as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals. In short, Transportation Performance Management:

- Is systematically applied, a regular ongoing process
- Provides key information to help decision makers understand the consequences of investment decisions across transportation assets or modes
- Ensures targets and measures are developed in cooperative partnerships and based on data and objective information

The Federal Aid Highway Program as authorized by the Infrastructure Investment and Jobs Act (IIJA) appropriates \$567.5 billion through 2026 for highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, research, technology, and statistics programs that address deficiencies on the Federal-Aid Highway System, which includes the Interstate Highway System and all other state highways and primary local roads.

In 2015, using the Transportation Performance Management Framework, Congress established the following seven Federal Performance Goals (23 USC 150(B)) for the federal aid highway system:

1. **Safety** – Achieve significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure Conditions** – Maintain the highway infrastructure asset system in a state of good repair.
3. **Congestion Reduction** – Achieve a significant reduction in congestion on the National Highway System.
4. **System Reliability** – Improve the efficiency of the surface transportation system.
5. **Freight Movement and Economic Vitality** – Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Environmental Sustainability** – Enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. **Reduced Project Delivery Delays** – Reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

With direction from Congress, the U.S. Department of Transportation (USDOT) published rules in 2017 that identify specific processes and timetables for measuring and establishing targets for the performance of the National Highway System (NHS) in order to meet the seven federal performance goals. These rules help FHWA, state DOTs, and Metropolitan Planning Organizations (MPO) to plan, program, and invest in transportation where its most needed, while increasing the transparency and accountability of investment of federal dollars. CDTC has nearly \$115 million in federal dollars programmed through 2030 in its six-year Regional Transportation Improvement Program (RTIP).

Performance Measure Framework

USDOT developed a series of rules for national performance measures to be administered by the FHWA and FTA and reported by individual state DOTs, MPOs, and transit agencies. WSDOT coordinates with the MPOs to establish methods and targets at the Metropolitan Planning Area (MPA) level that work toward meeting state targets. CDTC is required to set and report on target attainment for the following performance measures:

1. Safety

- Number of fatalities on all roads
- Fatalities per 100 million vehicle miles traveled (VMT) on all roads
- Number of serious injuries on all roads
- Serious injuries per 100 million VMT on all roads
- Number of non-motorized fatalities and non-motorized serious injuries on all roads

2. Pavement Condition

- Percent of non-interstate pavement on the national highway system in good condition
- Percent of non-interstate pavement on the national highway system in poor condition

3. Bridge Condition

- Percent of national highway system bridges classified in good condition (weighted by deck area)
- Percent of national highway system bridges classified in poor condition (weighted by deck area)

4. Highway System Reliability

- Percent of person-miles traveled on the non-interstate national highway system that are reliable

5. Transit Asset Management

- Equipment: The percentage of non-revenue service vehicles (by type) that meets or exceeds the useful life benchmark (ULB)
- Rolling Stock: The percentage of revenue vehicles (by type) that meets or exceeds the ULB
- Facilities: The percentage of facilities (by group) that are rated less than 3.0 on the transit economic requirements model (TERM) Scale

6. Transit Safety

- Fatalities
- Fatalities per 100 thousand vehicle revenue miles (VRM)
- Injuries
- Injuries per 100 thousand VRM
- Accidents and incidents
- Accidents and incidents per 100 thousand VRM
- Mean vehicle revenue miles per system reliability failure
- On the job injuries

Safety

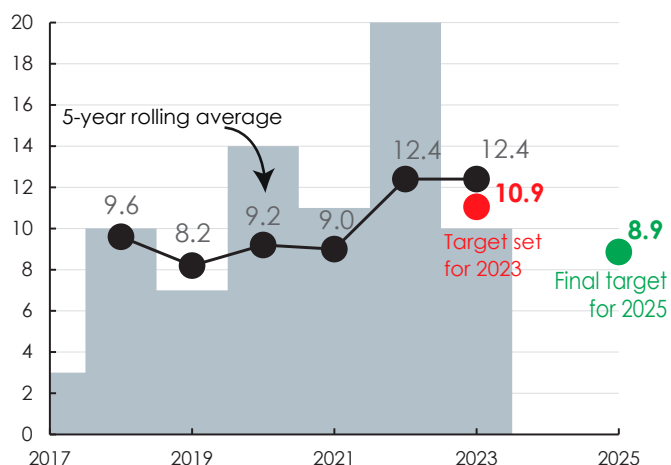
Target Zero, the Washington State Strategic Highway Safety Plan provides the framework for safety performance measures. The state and CDTC have adopted a goal to reduce traffic fatalities and serious injuries on Washington's roadways to zero by 2030. To achieve this goal, safety data is collected, analyzed, and distributed annually by WSDOT to aid MPO planning and programming for safety. WSDOT sets annual safety targets projecting a 5-year rolling average downward to zero by 2030 Using the past years' data. WSDOT provides region-specific shares of the annual target to CDTC and the other MPOs for collective planning and programming that move the entire state towards the Target Zero goal. CDTC's shares for achieving the statewide safety performance targets are provided in Figure 1. Safety targets are assessed for all roads in the region.

From 2022 to 2023, the number of fatalities as well as the fatality rate within the MPO dropped by nearly half. While this appears to be an improvement, the five-year rolling averages for these two safety measures have not decreased. To achieve the 2025 performance target for total fatalities, the region needs to reduce fatal crashes by 90%. Furthermore, the five-year rolling averages for serious injuries, the serious injury rate, and the combined number of non-motorist fatalities and serious injuries continue to trend in the wrong direction.

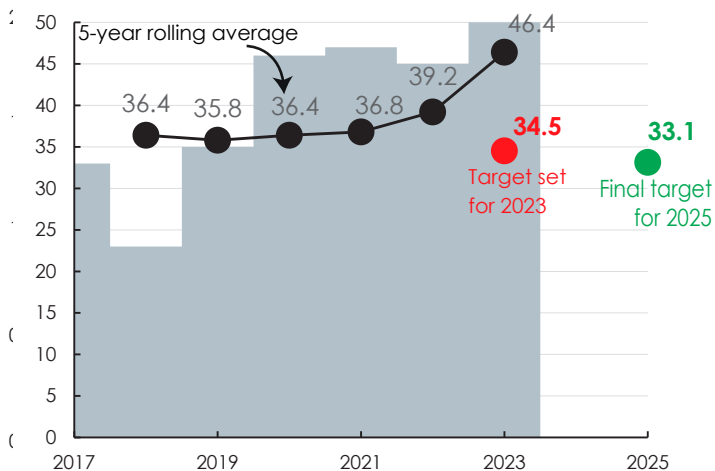
More than half (14 of 24) of the projects in CDTC's Regional Transportation Improvement Program (RTIP) explicitly improve the safety of the transportation system for drivers, bus riders, pedestrians, and bicyclists, demonstrating a continued commitment by WSDOT, CDTC, and local agencies to pursue funds and program projects addressing safety in the region. These 14 projects represent approximately \$34 million of the \$195 million program, or about 17% of total spending.

Figure 1: Safety Targets

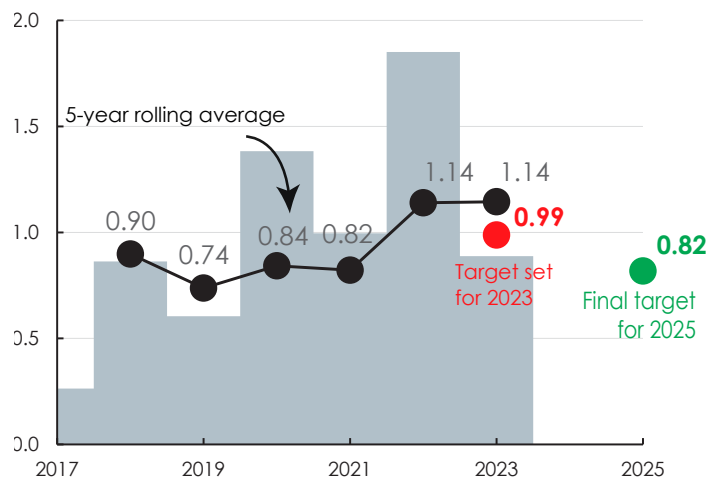
1.1 Total Fatalities



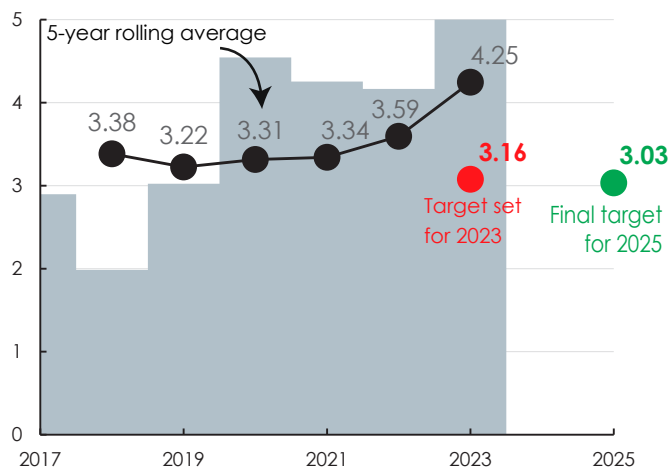
1.2 Total Serious Injuries



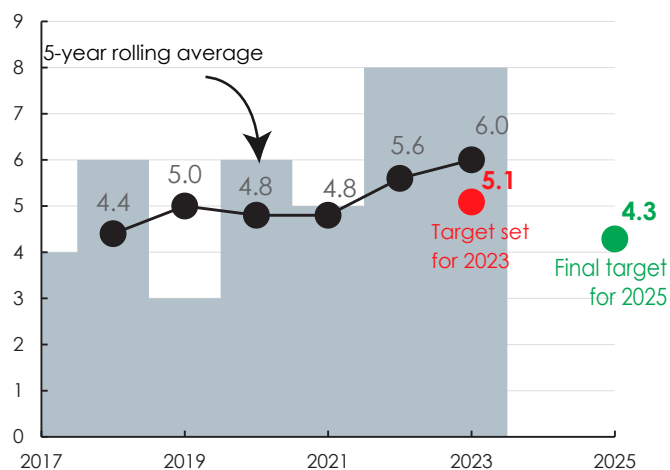
1.3 Fatalities Per 100 Million VMT



1.4 Serious Injuries Per 100 Million VMT



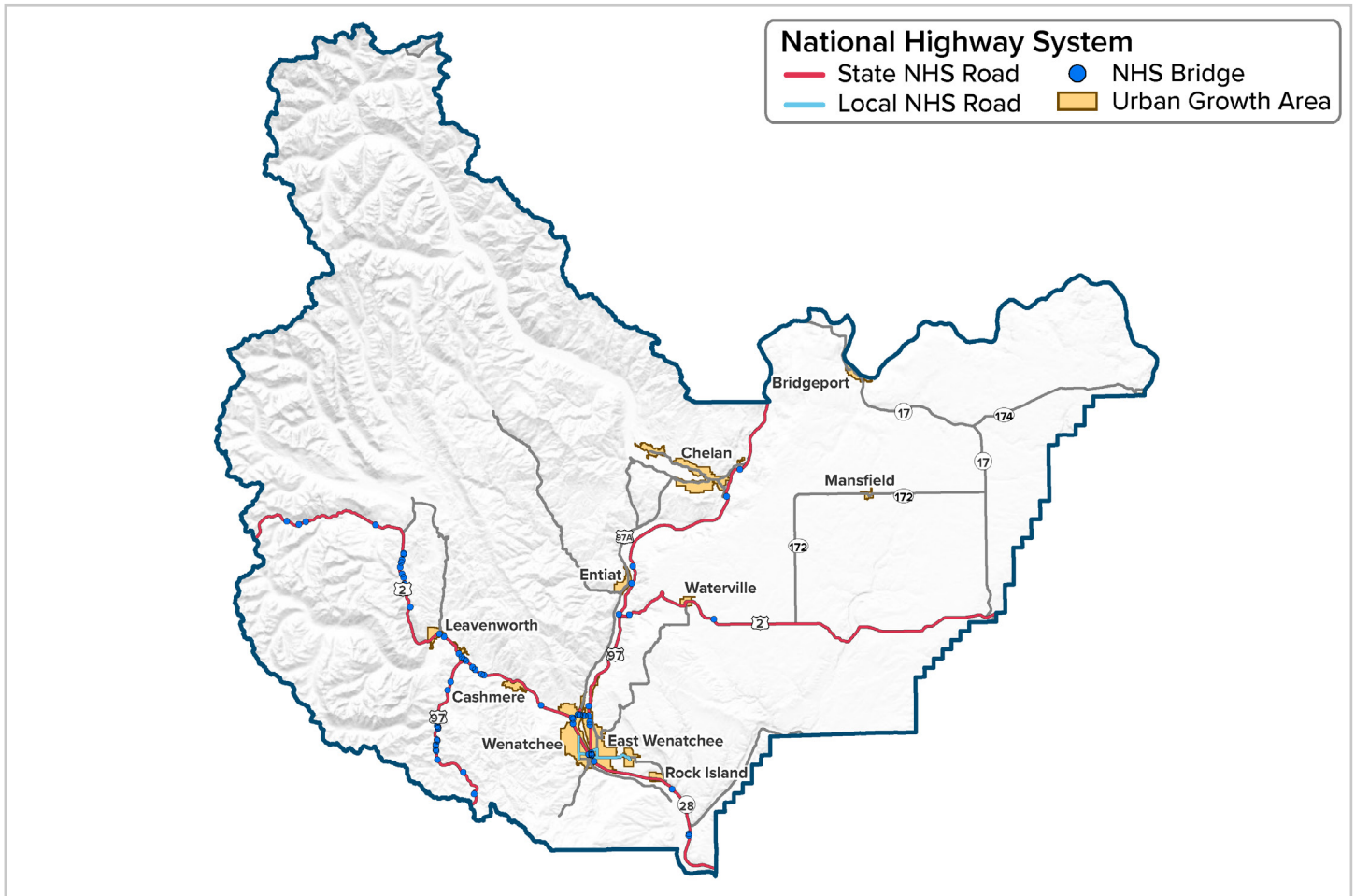
1.5 Total Non-Motorist Fatalities and Serious Injuries



Highway Infrastructure Condition

MAP-21 requires the state to measure the condition of both pavement and bridges on routes that make up the NHS. The NHS routes and bridges in the CDTC MPA are shown in Figure 2. Pavement performance is measured by assessing the percentage of pavement in both good and poor condition, while bridge performance is measured by assessing the percentage of bridge deck square footage in both good and poor condition. As described above, targets for infrastructure condition on the NHS are set by WSDOT for the entirety of the state. The Transportation Policy Goals found in RCW 47.04.285 and the Highway System Plan guide WSDOT decision making and investment prioritization for meeting the state's infrastructure condition targets.

Figure 2: National Highway System in CDTC MPA



Pavement Condition

Pavement condition refers to the percentage of pavement in good and poor condition on the NHS. Of the 14,755 NHS miles in Washington State, there are roughly 247 miles in Chelan and Douglas County—237 miles are under the jurisdiction of WSDOT, 4 miles are under the jurisdiction of the City of Wenatchee, 4 miles are under the jurisdiction of the City of East Wenatchee, and 2 miles are under the jurisdiction of Douglas County.

In December 2022, WSDOT submitted the first four-year performance report to FHWA and set new 4 and 2-year targets. WSDOT chose targets that are achievable based on current conditions and funding levels. The existing pavement condition and target for the statewide NHS are provided in Tables 1 and 2. The existing pavement condition and target for the CDTC region are provided for informational purposes only as CDTC establishes its regional performance targets consistent with the state.

Table 1: Percent of Non-Interstate Pavements Rated in **Good Condition**

Facility	2023 Performance	2024 Performance	2025 Target
Statewide NHS Roads	20.3%	46.8%	45% or more
State NHS Roads in CDTC MPA	59.0%	53.8%	45% or more
Local NHS Roads ¹ in CDTC MPA	74.0%	83.6%	45% or more

1: Represents only 0.3% of local roads region-wide and does not accurately reflect the ongoing challenges of keeping pavement in good condition.

Table 2: Percent of Non-Interstate Pavements Rated in **Poor Condition**

Facility	2023 Performance	2024 Performance	2025 Target
Statewide NHS Roads	4.2%	4.2%	5% or less
State NHS Roads in CDTC MPA	9.0%	8.8%	5% or less
Local NHS Roads ¹ in CDTC MPA	4.0%	6.4%	5% or less

1: Represents only 0.3% of local roads region-wide and does not accurately reflect the ongoing challenges of keeping pavement in good condition.

WSDOT is the lead agency for planning, programming, and tracking progress towards meeting pavement performance targets on the state-owned NHS. WSDOT allocates funding for pavement preservation on the NHS and distributes funding through the National Highway Performance Program (NHPP) grant program. CDTC regularly funds preservation projects through its Surface Transportation Block Grant Program (STBG) with an estimated \$15.9 million allocated to preservation projects since 2008. Local jurisdictions fund their preservation programs using a combination of state managed gas tax revenue allocations, grants, and local taxes and fees.

There is approximately \$101 million in federal funds programmed for preservation and maintenance projects in CDTC's RTIP through 2030, demonstrating a continuing commitment to keeping the transportation system in a state of good repair.

Bridge Condition

Bridge performance measures are related to bridge deck condition on the NHS; these measures apply state-wide and are not specific to the CDTC region. WSDOT provides bridge condition data for this performance measure (Table 3). There are 65 bridges on the NHS in the CDTC region, none of which are locally owned. Approximately \$50 million is programmed for bridge improvement through 2030 in the RTIP.

Table 3: Percent NHS Bridges Rated in **Good and **Poor** Condition**

Facility	2023 Performance	2024 Performance	2025 Target
NHS Bridges Statewide in good condition	32.8%	32.6%	30% or more
NHS Bridges Statewide in poor condition	7.6%	7.3%	10% or less
NHS Bridges in CDTC region in good condition	34.9%	34.4%	30% or more
NHS Bridges in CDTC region in poor condition	34.0%	32.1%	10% or less

Highway System Reliability

The highway system reliability performance measure describes how reliable a road segment is in terms of the time it takes to traverse a corridor during peak and off-peak traffic flow. The level of travel time reliability (LOTTR) metric ranks segments as reliable or not reliable using a ratio of the time it takes 80% (80th percentile) of drivers to traverse a segment, and the time it takes 50% of drivers (50th percentile) to traverse a segment. The ratio of the 80th percentile to the 50th percentile must fall below 1.5 to be considered reliable. Figure 3 shows the travel time reliability for the NHS network, where available, across the MPO. Figure 4 shows the travel time reliability for the NHS network in detail for the Wenatchee, East Wenatchee, and Rock Island urban growth areas. These areas see the highest traffic flows due to the concentration of jobs and housing. Additionally, Table 4 summarizes the percentage of person miles traveled on the NHS that are reliable. Targets for these measures apply to the NHS statewide; there is no CDTC specific target for highway system reliability.

In 2023 94.6% of person-miles traveled in the CDTC region were reliable, as table 4 shows. The segments rated unreliable are mostly at choke points, where traffic from multiple sub-areas converge on single facilities, such as the George Seller Bridge and the SR 285 and Miller Street junction. Additionally, certain rural highway segments, such as US 2 through Leavenworth, are rated as unreliable. Although the NHS within the region performed slightly worse than it did in 2022, it did perform better than the state as a whole.

Figure 3: Level of Travel Time Reliability - CDTC MPA

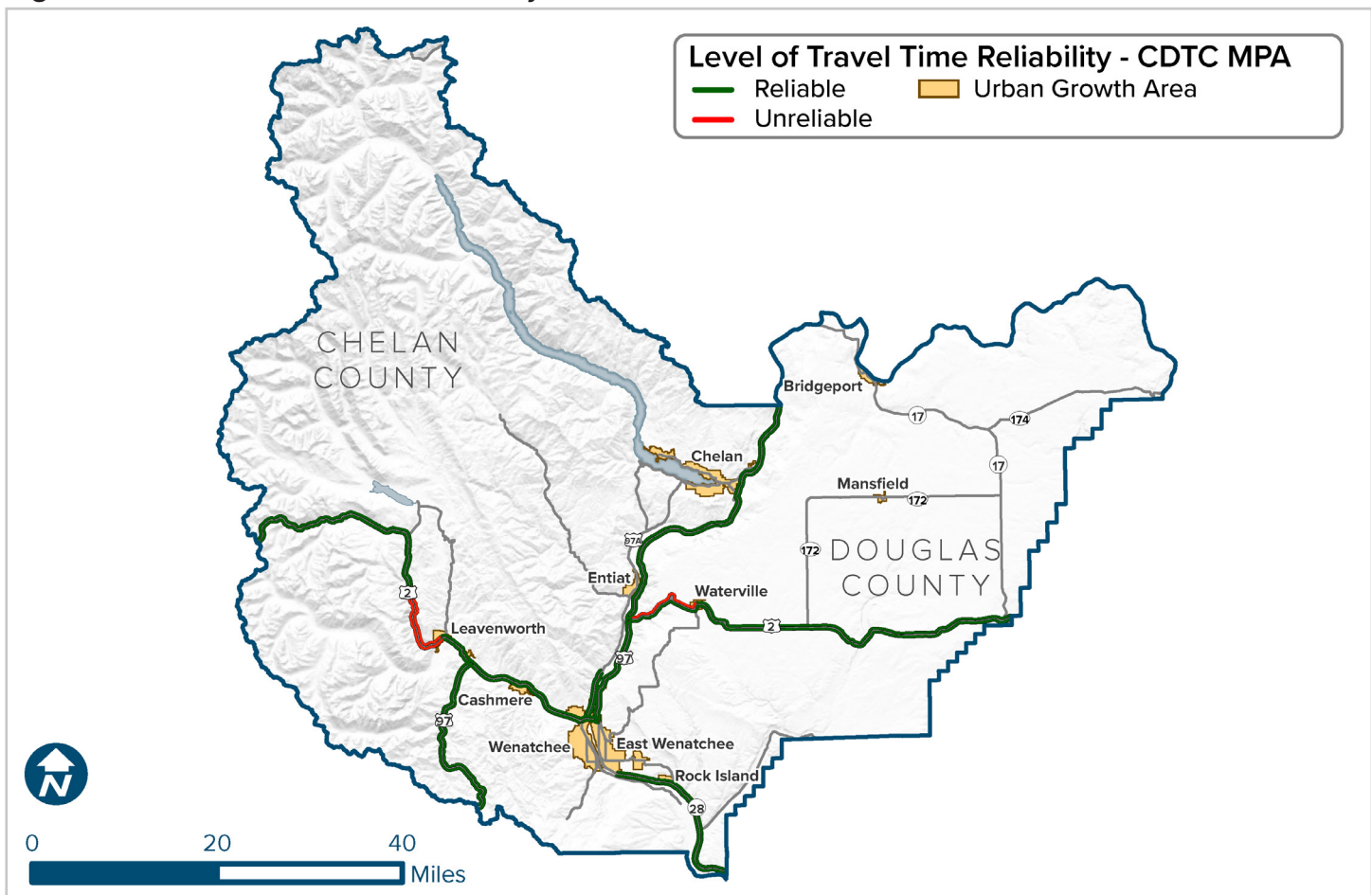


Figure 4: Level of Travel Time Reliability - UGA Detail

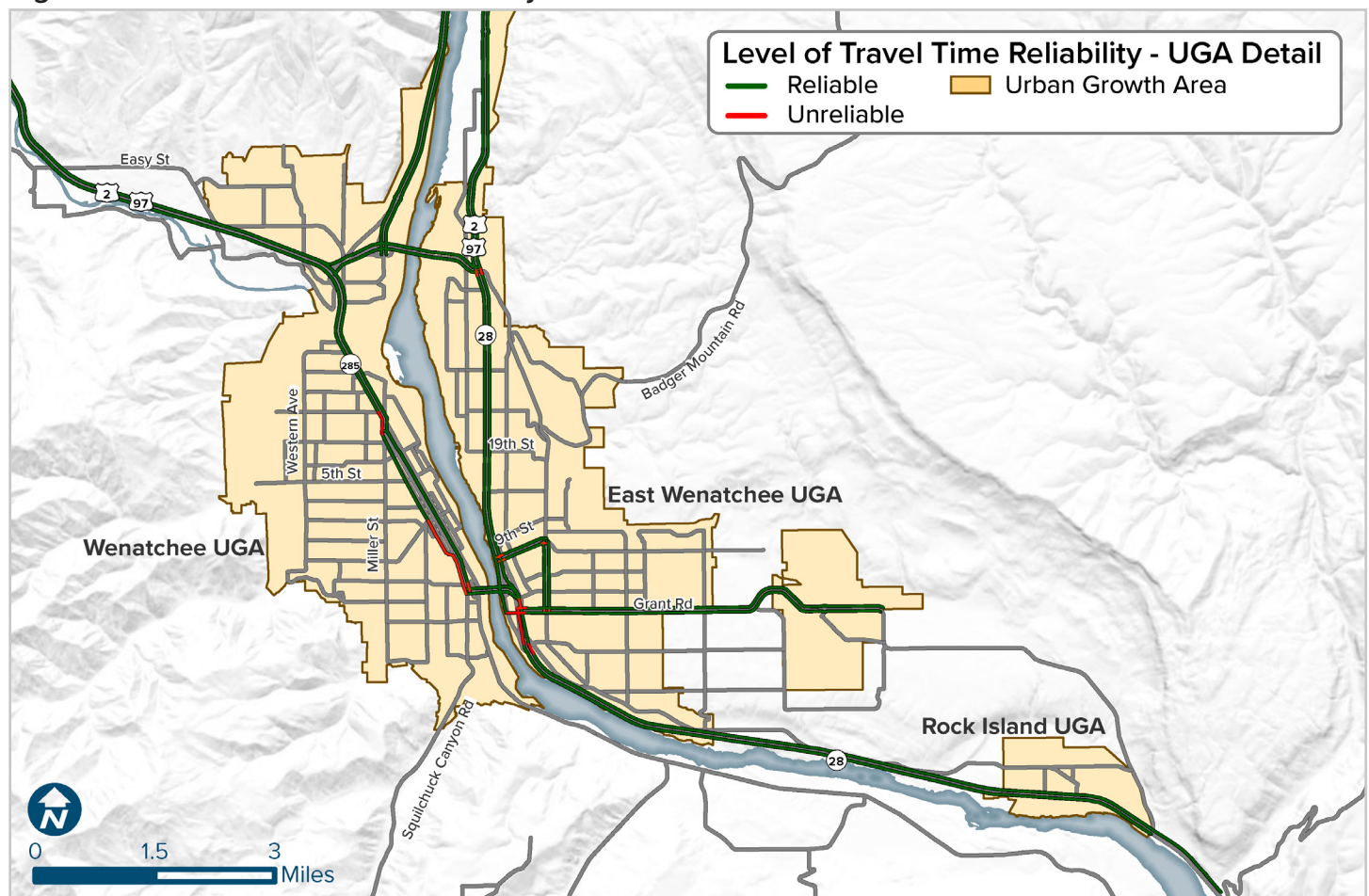


Table 4: Level of Travel Time Reliability

Facility	2022 Performance	2023 Performance	2025 Target
Percent Person Miles on Statewide NHS roads rated as reliable	87.4%	89.7%	88.4%
Percent Person Miles on NHS roads in CDTC region rated as reliable	91.9%	94.6%	n/a

In Washington State, many of the projects selected to address mobility on the NHS are prioritized through the legislative process. For this reason, it is essential that WSDOT, CDTC, and local agencies coordinate their transportation planning efforts to develop transportation priorities that contribute towards performance targets and can be shared with lawmakers. CDTC has also taken an approach with its local agencies and WSDOT to proactively plan and identify mobility projects on the NHS. In 2017 CDTC awarded nearly \$1.1 million for a project addressing mobility issues at the intersection of 9th St and Valley Mall Parkway. Additionally, there is a \$185 million dollar project designed to relieve congestion on SR 285 from Miller St to the Wenatchee River bridge.

Transit Asset Management

MPOs are required to adopt transit asset management targets based on targets set by transit agencies within their boundaries. LINK Transit is the only transit agency within the MPO boundary.

The Transit Asset Management (TAM) performance measures are set for equipment (non-revenue service vehicles), rolling stock, and facilities. Performance measures are linked to either the useful life benchmark (ULB) or the Transit Economic Requirements Model (TERM) condition rating.

- **Useful Life Benchmark (ULB)** is the expected lifecycle of a capital asset for a transit provider's operating environment, or the acceptable period of use in service for a transit provider's operating environment.
- **Transit Economic Requirements Model (TERM)** is a tool for estimating transit capital expenditure needs over a 20-year period. The TERM condition rating is separated into five levels ranging from "excellent" to "poor." The higher the rating, the better the condition rating.

Buses, cutaways, vans, non-revenue automobiles, and non-revenue service vehicles are assessed using the ULB; passenger/parking facilities and administrative/maintenance facilities are assessed on the TERM condition scale. The existing conditions and targets for LINK transit are shown in Tables 5 and 6.

Table 5: Percent of Vehicles that Have Met or Exceed their Useful Life Benefit

Asset	2023 Target	2024 Target
Buses	5.41%	0%
Cutaways	0%	0%
Non-revenue automobiles	0%	0%
Non-revenue service vehicles	21.05%	28.57%

Table 6: Percent of Facilities Rated Below 3 on the TERM Condition Scale

Asset	Current Performance	2024 Target
Passenger/parking facilities	0%	0%
Administrative/maintenance facilities	0%	0%

Transit Safety

In addition to Transit Asset Management Targets, MPOs are required to adopt transit safety targets found in the Public Transportation Agency Safety Plan (PTASP) of the transit agencies within their boundaries, as required by 49 CFR Part 673. Transit providers must establish seven safety performance targets (SPT) for each type of service provided. LINK Transit provides both fixed-route and demand-response service, requiring target setting for both (Table 7). Existing performance is not explicitly reported in the PTASP and is not provided here.

Table 7: LINK Transit Safety Measures

Mode	Fatalities	Fatalities (100K VRM) ¹	Injuries	Injuries (100K VRM)	Events (Accident/ Incidents)	Events (100K VRM)	SR Failure/ VRM	OJI ²
Fixed-Route	0	0	3	.15	15	.6	20,000	7
Demand-Response	0	0	2	.4	5	1.66	N/A	N/A

1: Calculation for Vehicle Revenue Miles (VRM): (# expected*100,000)/Revenue miles estimation. Estimated miles: 2,500,000

2: On the Job Injury

The steps for improving safety for LINK Transit's guests and employees are described in the PTASP, starting with the Safety Policy Statement:

Providing a safe working environment for our employees and safe reliable transportation to our guests is our primary objective, which is why the management of safety is our top priority. We will work towards this objective by: making sure the right resources are available to implement and continually improve our Safety Management System and leveraging front line employees' knowledge through the safety reporting program. Supporting and improving safety in the workplace is an organization wide commitment starting with the General Manager.

Additionally, LINK is committed to:

- Supporting an organizational culture that fosters safe operational practices and encourages safety reporting and communication.
- Allocating the necessary resources to implement the safety management plan and to continually improve our safety performance.
- Focusing on proactive approaches to recognize and mitigate hazards.
- Ensuring that no action will be taken against any employee who discloses safety concerns through the safety reporting program, unless the disclosure indicates beyond any reasonable doubt, an illegal act, gross negligence, or deliberate or willful disregard of regulations and procedures.
- Training all employees adequately on our safety management system to identify, analyze, and mitigate hazards for a safer workplace.
- Effective communication with all levels of the organization to ensure information is flowing up to executive management and down to field employees.
- Ensuring hazards are mitigated to as low as reasonably practical.

Prepared by
Chelan-Douglas Transportation Council

Additional copies of this document may be obtained by contacting:

Chelan-Douglas Transportation Council
37 S Wenatchee Ave, Suite C
Wenatchee, WA 98801
509-663-9059 | www.chelan-douglas.org