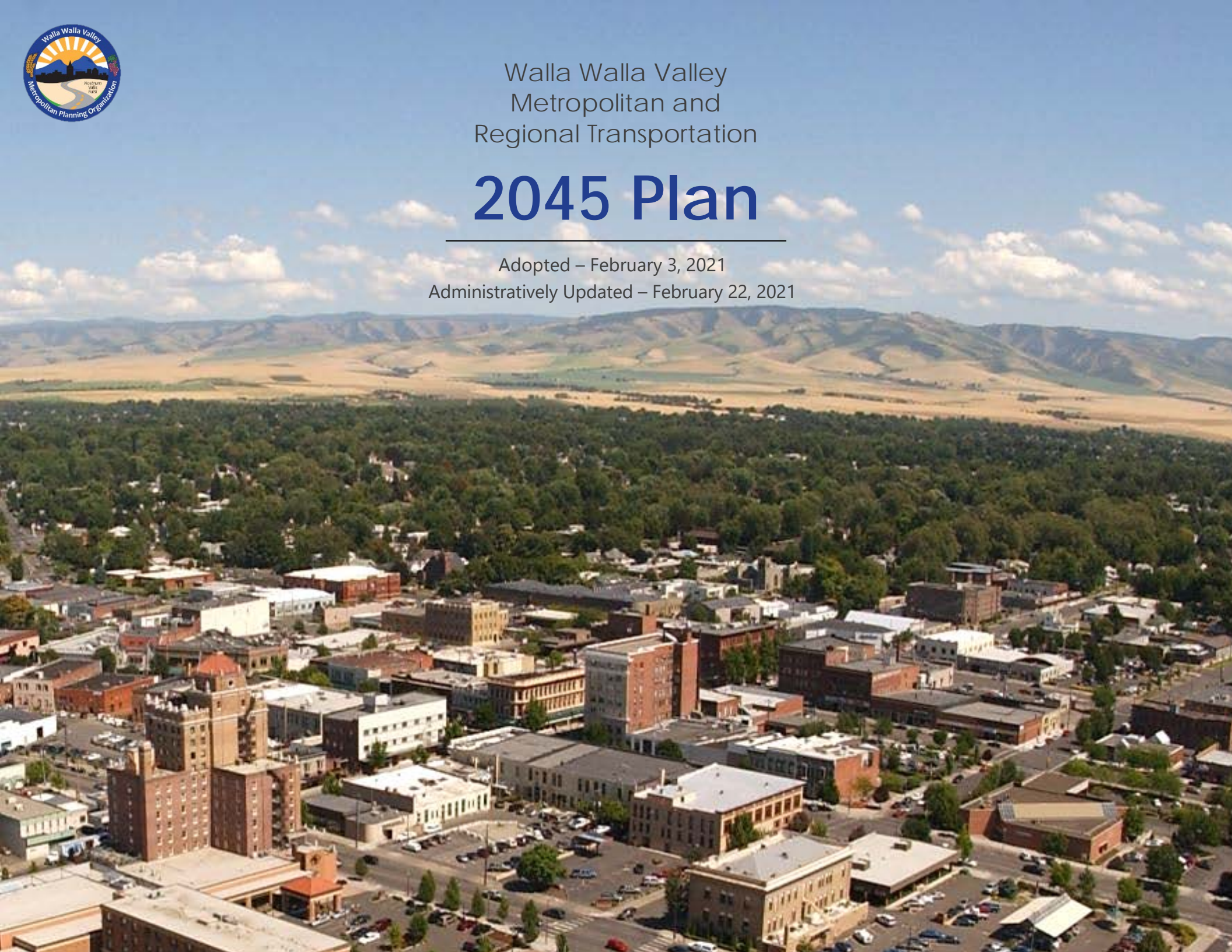




Walla Walla Valley Metropolitan and Regional Transportation

2045 Plan

Adopted – February 3, 2021
Administratively Updated – February 22, 2021



Walla Walla Valley Metropolitan Planning Organization and
Sub-Regional Transportation Planning Organization (WWVMPO/SRTPO)
A Resolution Adopting the 2045 Plan and Determining Air Quality Conformity

RESOLUTION NO. 01-2021

WHEREAS, the Walla Walla Valley Metropolitan Planning Organization and Sub-Regional Transportation Planning Organization (WWVMPO/SRTPO) is the federally designated Metropolitan Planning Organization as well as the state-designated Regional Transportation Planning Organization and as such has both the federal and state responsibility for developing and adopting a long-range transportation plan; and

WHEREAS, the Metropolitan Transportation Plan and the Regional Transportation Plan have been integrated into a single document titled the Walla Walla Valley Metropolitan and Regional Transportation – 2045 Plan (hereafter referred to as the “2045 Plan”); and

WHEREAS, the WWVMPO/SRTPO certifies that the 2045 Plan complies with the federal requirements for a Metropolitan Transportation Plan prescribed in 23 USC 134 and 49 USC 5303 and the Washington State requirements for a Regional Transportation Plan prescribed in RCW 47.80; and

WHEREAS, consistent with federal and state mandates, and with the WWVMPO/SRTPO Interlocal Agreement, Public Participation Plan, and other operating procedures, the WWVMPO/SRTPO has engaged with local, state, and federal jurisdictions and resource agencies in a continuing, cooperative, and comprehensive planning process; and

WHEREAS, the WWVMPO/SRTPO made draft documents available for public review and comment, conducted informational mailings, virtual open houses, and other efforts, and provided information related to the 2045 Plan activities on the agency’s website, so as to offer interested groups and individuals with the opportunity to be involved in the 2045 Plan development; and

WHEREAS, the 2045 Plan addresses regionally significant transportation deficiencies and opportunities, and recommends transportation policies and projects for the MPO and SRTPO planning areas; and

WHEREAS, local jurisdictions, transit agencies, and the Oregon and Washington State Departments of Transportation (ODOT and WSDOT) proposed projects for inclusion in the 2045 Plan, which are based on reasonably available financial resources; and

WHEREAS, proposed 2045 Plan projects were selected through a performance-driven, outcome-based approach that focuses on progress towards identified regional goals and national performance targets; and

WHEREAS, the 1990 Clean Air Act Amendments (42 USC 7401 et seq.) require local and state compliance with the National Ambient Air Quality Standards for air quality pollutants, including particulate matter with a diameter of ten microns or less (PM₁₀); and

WHEREAS, the Rule on Conformity to State or Federal Implementation Plans outlined in 40 CFR 93 prescribes that federally funded transportation plans, programs, and projects are subject to air quality conformity determination; and

WHEREAS, the WWVMPO/SRTPO must certify that the 2045 Plan complies with federal and state air quality conformity determination requirements and will not cause or contribute to any new violation of the federal air quality standards for PM₁₀; and

WHEREAS, the WWVMPO/SRTPO Technical Advisory Committee (TAC) recommends adoption of the 2045 Plan for the Walla Walla Valley region.

NOW, THEREFORE, BE IT RESOLVED BY THE WWVMPO/SRTPO POLICY BOARD,

THAT the 2045 Plan is adopted as the integrated Metropolitan and Regional Transportation Plan for the Walla Walla Valley region in order to guide regionally significant transportation decisions; and

THAT the 2045 Plan is found to be in conformity with the federal and state Clear Air Acts and the Wallula Site PM₁₀ Maintenance Plan; and

THAT the 2045 Plan is submitted to the Oregon and Washington State Departments of Transportation, the Federal Highway Administration, and the Federal Transit Administration; and

THAT the 2045 Plan will be reviewed and amended as necessary to maintain its currency.

PASSED AND APPROVED this 3rd of February, 2021.

Signed:

Randy Hinchliffe

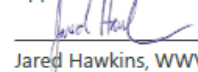
Randy Hinchliffe, Chair
WWVMPO/SRTPO Policy Board

Attested:



Andrea Weckmueller-Behringer, Executive Director
WWVMPO/SRTPO

Approved as to Form:


Jared Hawkins, WWVMPO/SRTPO Legal Counsel



U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION
WASHINGTON DIVISION
SUITE 501, EVERGREEN PLAZA
711 CAPITOL WAY SOUTH
OLYMPIA, WA 98501

FEDERAL TRANSIT ADMINISTRATION
915 SECOND AVENUE, SUITE 3142
SEATTLE, WA 98174

February 22, 2021

HPP-WA.1/730.38

Ms. Andrea Weckmueller-Behringer
Executive Director
Walla Walla Valley Metropolitan Planning Organization
107 South Third Avenue
Walla Walla, WA 99362

Air Quality Conformity Determination
Walla Walla Valley Metropolitan Planning Organization
2021-2026 Transportation Improvement Program (TIP)
2045 Metropolitan Transportation Plan (MTP)

Dear Ms. Weckmueller-Behringer:

According to the Clean Air Act (CAA) of 1990, transportation plans, programs, and projects cannot create new National Ambient Air Quality Standards (NAAQS) violations, increase the frequency or severity of existing NAAQS violations, or delay attainment of the NAAQS. As such, the Metropolitan Planning Organization (MPO) and the U.S. Department of Transportation (FHWA/FTA) are required to make transportation air quality conformity determinations for both the MPO Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP) in non-attainment or maintenance areas. Transportation conformity ensures that Federal funding supports transportation activities that are consistent with air quality goals, and do not worsen air quality or interfere with the purpose of the State Implementation Plan (SIP).

On February 3, 2021, the Walla Walla Valley Metropolitan Planning Organization (WVVMPO) approved and made a formal conformity determination on the 2021-2026 TIP and the 2045 MTP.

Based on our review of the WVVMPO air quality conformity determination, as concurred with the Washington State Department of Transportation, Washington State Department of Ecology, and U.S. Environmental Protection Agency, FHWA and FTA find that the 2021-2026 TIP and 2045 MTP conforms with the SIP to reduce the severity and number of NAAQS violations.

Please contact Matt Kunic, FHWA Washington Division, at 360-753-9487, or Ned Conroy, FTA Region 10, at 206-220-4318, if you have any questions.

DANIEL M
MATHIS

Digitally signed by
DANIEL M MATHIS
Date: 2021.02.22
13:10:11 -08'00'

Daniel M. Mathis, P.E.
Washington Division Administrator
Federal Highway Administration

LINDA M
GEHRKE

Digitally signed by
LINDA M GEHRKE
Date: 2021.02.22
12:40:15 -08'00'

Linda M. Gehrke
Regional Administrator
Federal Transit Administration

cc: Karl Pepple, U.S. Environmental Protection Agency - Region 10
Adam Clark, U.S. Environmental Protection Agency - Region 10
Mike Boyer, Washington State Department of Ecology
Gabriel Phillips, Washington State Department of Transportation
Cliff Hall, Washington State Department of Transportation
Karin Landsberg, Washington State Department of Transportation

Acknowledgements

This report is the product of a study financed in part by the U.S. Department of Transportation (Federal Highway Administration and Federal Transit Administration), the Oregon and Washington State Departments of Transportation, and local government contributions.

The contents of this report reflect the views of the Walla Walla Valley Metropolitan Planning Organization/Sub-Regional Transportation Planning Organization (WWVMPO/SRTPO), which is responsible for the facts and the accuracy of the data presented herein.

The contents do not necessarily reflect official views or policy of the U.S. Department of Transportation. Approval of the report by federal or state agencies constitutes acceptance of the report as evidence of work performed, but does not imply endorsement of the report's findings or recommendations. This report does not constitute a standard, specification, or regulation.

Title VI Assurance

The WWVMPO/SRTPO hereby gives public notice that it is the organization's policy 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 shall, on the grounds of race, color, sex, or national origin be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any Federal Aid Highway program or other activity for which the WWVMPO/SRTPO receives Federal financial assistance.

Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has the right to file a formal complaint with the WWVMPO/SRTPO. Any such complaint must be in writing and filed with the WWVMPO/SRTPO Title VI Coordinator, Andrea Weckmueller-Behringer, within one hundred, eighty (180) days following the date of the alleged discriminatory occurrence. Title VI Discrimination Complaint Forms may be obtained from the WWVMPO/SRTPO Office, the website at <https://wwwmpo.org/plans--programs.html>, by calling (509) 876-8002, or by faxing to (509) 876-8003.



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Walla Walla Valley Metropolitan Planning Organization/Sub-Regional Transportation Planning Organization (WWVMPO/SRTPO) Membership and Committee Roster

WWVMPO Member Agencies

City of College Place (WA) • City of Milton-Freewater (OR) • City of Prescott (WA) • City of Waitsburg (WA) • City of Walla Walla (WA) • Umatilla County (OR) • Walla Walla County (WA) • Port of Walla Walla (WA) • Valley Transit (WA) • Oregon Department of Transportation • Washington State Department of Transportation

SRTPO Member Agencies

City of College Place (WA) • City of Prescott (WA) • City of Waitsburg (WA) • City of Walla Walla (WA) • Port of Walla Walla (WA) • Valley Transit (WA) • Walla Walla County (WA) • Washington State Department of Transportation

WWVMPO/SRTPO Policy Board

Voting

Mike Rizzitiello, City Administrator, City of College Place
Linda Hall, City Manager, City of Milton-Freewater
Steve Heimbigner, Mayor, City of Prescott
Randy Hinchliffe, City Administrator, City of Waitsburg (*Chair*)
Riley Clubb, Council Member, City of Walla Walla (*Vice Chair*)
Dan Dorran, County Commissioner, Umatilla County
Todd Kimball, County Commissioner, Walla Walla County
Ron Dunning, Commissioner, Port of Walla Walla
Angie Peters, General Manager, Valley Transit
Craig Sipp, Region Manager, ODOT Region 5
Todd Trepanier, Regional Administrator, WSDOT South Central Region

Ex Officio

Washington State District 16: Senator Perry Dozier and Representatives Mark Klicker and Skyler Rude
U.S. Districts 4/5: Senators Maria Cantwell and Patty Murray and Representatives Cathy McMorris Rodgers and Dan Newhouse

WWVMPO/SRTPO Technical Advisory Committee

In Memoriam - Robert Gordon, City Engineer, City of College Place
Laurel Sweeney, City Planner, City of Milton-Freewater
Steve Heimbigner, Mayor, City of Prescott
Randy Hinchliffe, City Administrator, City of Waitsburg
Neal Chavre, City Engineer, City of Walla Walla (*Vice Chair*)
Robert (Bob) Waldher, Planning Director, Umatilla County
Tony Garcia, Public Works Director, Walla Walla County (*Chair*)
J.D. Tovey, Planning Director, Confederated Tribes of the Umatilla Indian Reservation
Meagan Blair, Governmental Affairs/Community Outreach Specialist, Port of Walla Walla
Jesse Kinney, Deputy General Manager, Valley Transit
Teresa Penninger, Planning and Program Manager, ODOT
Paul Gonseth, Planning Engineer, WSDOT

Bi-State Coordination Workgroup

Matthew Kunic, Federal Highway Administration
Ned Conroy, Federal Transit Administration
Teresa Penninger, Planning & Program Manager, ODOT
Paul Gonseth, Planning Engineer, WSDOT
Anna Ragaza-Bourassa, Tribal & Regional Coordination Liaison, WSDOT
Linda Howell, Public Transportation Liaison, WSDOT

WWVMPO/SRTPO Staff

Andrea Weckmueller-Behringer, Executive Director
Timothy J. Barrett, Assistant Planner





Executive Summary

The Walla Walla Valley Metropolitan Planning Organization and Sub-Regional Transportation Planning Organization (WWVMPO/SRTPO) is the federally designated and state-recognized agency responsible for coordinating transportation planning activities and investments in accordance with federal surface transportation law and state statutes on growth management. Straddling the Oregon and Washington state line, the area encompasses 1,300 square miles, including the Walla Walla - College Place - Milton-Freewater urbanized area, the cities of Prescott and Waitsburg, and other more rural parts of Umatilla and Walla Walla Counties.

As people and goods travel through the Walla Walla Valley, the transportation network appears seamless. While this is the intent, creating this complex system is based on the close coordination among all entities that maintain the individual network segments.

In general, the purpose of MPOs and RTPOs is to provide a platform for collective definition of regional goals and for cooperative decision-making on transportation investments. In order to capture the regional goals, vision, and values, as well as the results of need and resource assessments, MPOs and RTPOs document the planning process and outcomes in a long-range planning document.

Such plans become the blueprint that guides strategic investments into the multi-modal transportation network which address mobility concerns, support continued growth, and work towards achieving community goals.

2045 PLAN VISION

ENHANCE THE SAFETY, CONNECTIVITY, AND CONDITION OF OUR
TRANSPORTATION SYSTEM, AND PROVIDE MOBILITY FOR ALL USERS -
TO ENRICH QUALITY OF LIFE AND TO BE CONSISTENT WITH COMMUNITY CHARACTER.

In close collaboration with its member entities comprised of states, counties, cities, port authority, and transit providers, and guided by stakeholder and public feedback, the WWVMPO/SRTPO developed this **METROPOLITAN AND REGIONAL TRANSPORTATION - 2045 PLAN**. The plan ensures that federal, state, and local investments into pedestrian, bicycle, public transit, roadway, and freight transportation will enhance the movement of all people and goods efficiently and safely.

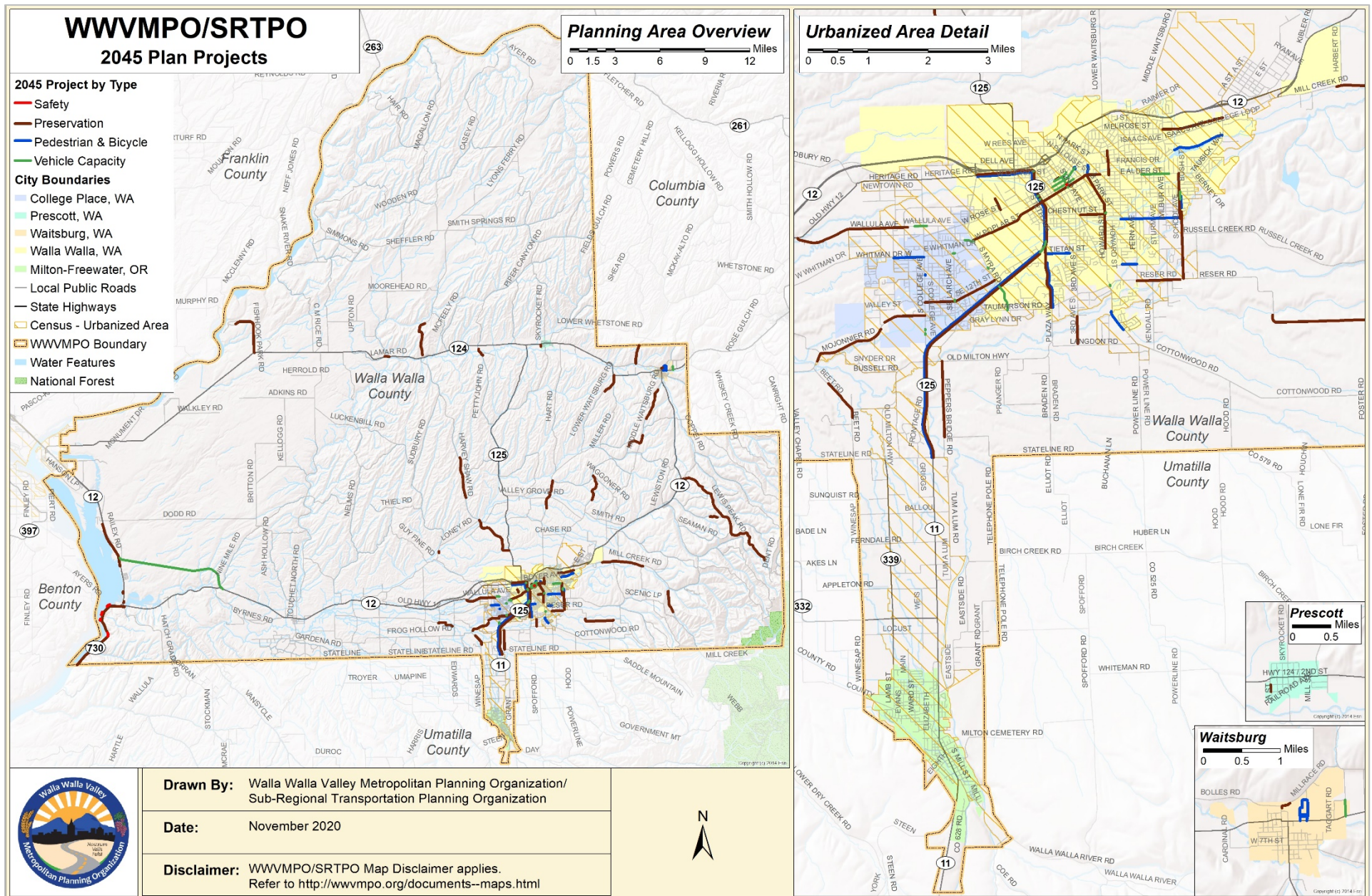
Prioritized Investment

Since limited funding is available for implementation, a prioritization and selection process has been established to ensure that projects proposed for inclusion in the 2045 Plan offer the highest benefit to the region.

\$501.2 million for infrastructure investments are estimated to be available through the year 2045, which include funding for the basic maintenance and preservation of existing infrastructure, as well as the implementation of 106 pedestrian, bicycle, roadway projects. Also forecasted are **\$218.5 million** for public transit operations and improvements.

Unmet Funding Needs

Of the 218 projects submitted for evaluation, more than half (112) remain unfunded. Furthermore, a 60% increase in preservation funding is needed to implement a 50-year pavement update cycle, whereas a 200% increase over current levels would allow for reconstruction of all regionally significant roadways – once every 50 years.



This map shows the locations of the locally and state-sponsored safety, preservation, pedestrian, bicycle, and roadway infrastructure projects for which funding is anticipated to be available over the next 25 years.



Transportation Planning Where/Who/What/Why/How

Region, Members, and Agency

The Walla Walla Valley is nestled north and west of the Blue Mountains in southeast Washington and northeast Oregon, and is bordered by the Snake River to the north and the Columbia River to the west. The region is made up of portions of Walla Walla County and Umatilla County, covers almost 1,300 square miles, and is currently home to more than 69,100 people.

Walla Walla Valley's economic and cultural center is the urbanized metropolitan area, encompassing 36 square miles which include the cities of College Place, Milton-

Freewater, and Walla Walla. Rural activity centers are located within the cities of Prescott and Waitsburg, and a small number of unincorporated communities, such as Burbank, Dixie, Lowden, Touchet, and Wallula provide additional residential or commercial activity centers. Close economic ties connect the region to the Tri-Cities area of Kennewick, Pasco, and Richland, where transportation planning is undertaken by the [Benton-Franklin Council of Governments \(BFCG\)](#). The eastern portion of the Walla Walla Valley also has economic ties to Dayton, which is located in neighboring Columbia County, where transportation planning activities are carried out by the [Palouse Regional Transportation Planning Organization \(PRTPO\)](#).

Established in 2013, the WWVMPO/SRTPO is the federally designated and state-recognized transportation planning agency for the Walla Walla Valley region. The agency brings together the Oregon and Washington State Departments of Transportation (ODOT and WSDOT), its local city and county members, the Port of Walla Walla, and the public transportation providers Valley Transit and Milton-Freewater Public Transportation. The WWVMPO/SRTPO and its member entities are responsible for the coordination of transportation planning and investment

decisions, affecting regional transportation infrastructure and safety, including:

- ◆ Pedestrian, bicycle, and multi-use active transportation pathways
- ◆ Valley Transit and Milton-Freewater Public Transportation facilities and services
- ◆ Navigable rivers, railroads, intermodal passenger and freight hubs, and surface access to public airports
- ◆ All classified federal-aid arterial and collector roadways

Transportation is most often a means to an end - "to get us somewhere" or "to get us something." All is well, as long as we can go, safely and conveniently, when and where we need to go. However, transportation may become a major stumbling block when it creates a barrier that prevents anyone's access to goods, services, and opportunities.



Need for Planning

Predicting the future is never certain, but the next 25 years have the potential to significantly alter our transportation landscape. In just the last ten years, we have seen significant growth in electric vehicles, rideshare applications, bikeshare systems, and we have witnessed the introduction of both drones and automated vehicles. Many of these new modes are evolving quickly, making it difficult to assess what their usage will be in the future. However, we know that the transportation future will be more multi-modal and technological than ever before.

Transportation is also at an incredible crossroads. Climate change impacts are being felt more and more, multi-generational income disparities and racial inequalities are rising to the surface of society, a global pandemic has rapidly reshaped our perceptions and behaviors, and the implementations of both green energy and artificial intelligence/autonomous technology is coming to fruition. These conditions make travel demand and need forecasting a greater challenge than in times past, but it also makes it more important.

Faced with decreasing fiscal resources, increasing environmental pressures, and the fundamental need for equity and sustainability, the 2045 Plan aims to create the strategic framework for meeting the

region's current and future transportation needs. It also serves as the link between local transportation plans, the region's [Coordinated Public Transit - Human Services Transportation Plan](#), and the [Oregon](#) and [Washington](#) Transportation Plans, thereby ensuring that all are coordinated and mutually supportive.

Statutes and Policies

Federal Level

In accordance with [23 U.S. Code \(USC\) 134](#) and [23 Code of Federal Regulations \(CFR\) 450 Subpart C](#), the WWVMPO/SRTPO has been designated to carry out the federal **continuing, cooperative, and comprehensive performance-based and multi-modal** transportation planning process that encourages and promotes the safe and efficient management, operation, and development of the surface transportation systems. These systems must serve the mobility needs of people and freight, foster economic growth and development, and consider resiliency needs, while minimizing transportation-related fuel consumption and air pollution.

The most recent surface transportation law, [Fixing America's Surface Transportation \(FAST\)](#), was signed into law on December 4, 2015. Having initiated subtle but important changes to both the federal statutes and regulations, this five-year bill provided

funding for transportation improvements and guided the growth and development of vital transportation infrastructure. Through a continuing resolution, the FAST Act has been extended to provide more time to promulgate the next surface transportation law.

Federal law ([23 USC 134\(h\)](#) and [23 CFR 450.306\(b\)](#)) prescribes that the transportation planning process evaluate and implement projects, strategies, and services that consider these federal planning factors:

- ◆ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency 
- ◆ Increase the **safety** of the transportation system for motorized and non-motorized users 
- ◆ Increase the **security** of the transportation system for motorized and non-motorized users 
- ◆ Increase **accessibility and mobility** of people and freight 
- ◆ 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 


- ◆ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight



- ◆ Promote **efficient system** management and operation



- ◆ Emphasize the **preservation** of the existing transportation system



- ◆ Improve the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation



- ◆ Enhance **travel and tourism**



The transportation planning must also use a performance-based approach in support of the national goals: ([23 USC 150](#))

- ◆ Safety -
To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- ◆ Infrastructure condition -
To maintain the highway infrastructure asset system in a state of good repair
- ◆ Congestion reduction -
To achieve a significant reduction in congestion on the National Highway System
- ◆ System reliability -
To improve the efficiency of the surface transportation system

- ◆ Freight movement and economic vitality -
To improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- ◆ Environmental sustainability -
To enhance the performance of the transportation system while protecting and enhancing the natural environment
- ◆ Reduced project delivery delays -
To 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



Additionally, the transportation planning process must support transit development and revitalization: ([49 USC 5301](#))

- ◆ Provide funding to support public transportation
- ◆ Improve the development and delivery of capital projects
- ◆ Establish standards for the state of good repair of public transportation infrastructure and vehicles
- ◆ Promote continuing, cooperative, and comprehensive planning that improves the performance of the transportation network
- ◆ Establish a technical assistance program to assist recipients under this chapter to provide more effective and efficient public transportation service
- ◆ Continue Federal support for public transportation providers to deliver high quality service to all users, including individuals with disabilities, seniors, and individuals who depend on public transportation
- ◆ Support research, development, demonstration, and deployment projects dedicated to assisting in the delivery of efficient and effective public transportation service
- ◆ Promote the development of the public transportation workforce

State Level

Through an interlocal agreement with BFCG, the WWVMPO/SRTPO has been designated to fulfill Washington's Growth Management Act (GMA) mandates for regional transportation planning, which are codified in the



Revised Code of Washington (RCW) 47.80.

These RTPO requirements call for transportation planning, at all levels of jurisdictions, to be **coordinated with local comprehensive plans** to achieve both statewide, regional, and local transportation goals.

Within the Oregon Administrative Rule (OAR) 660-012, Oregon has similar statutes, tying transportation, urban and rural development, and land use planning together.



Even though the WWVMPO/SRTPO has been specifically exempted from OAR 660-012 due to its bi-state structure, the agency has been, and will continue, working closely with its Oregon members to achieve a high level of **consistency with existing local transportation system plans**.

Washington Transportation System Policy Goals

-  ♦ (a) Economic vitality: To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy
-  ♦ (b) Preservation: To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services
-  ♦ (c) Safety: To provide for and improve the safety and security of transportation customers and the transportation system
-  ♦ (d) Mobility: To improve the predictable movement of goods and people throughout Washington state, including congestion relief and improved freight mobility
-  ♦ (e) Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment
-  ♦ (f) Stewardship: To continuously improve the quality, effectiveness, and efficiency of the transportation system

Oregon Planning Goal 12 Transportation

-  ♦ (a) Promote the development of transportation systems adequate to serve statewide, regional and local transportation needs and the mobility needs of the transportation disadvantaged
-  ♦ (b) Encourage and support the availability of a variety of transportation choices for moving people that balance vehicular use with other transportation modes, including walking, bicycling and transit in order to avoid principal reliance upon any one mode of transportation
-  ♦ (c) Provide for safe and convenient vehicular, transit, pedestrian, and bicycle access and circulation
-  ♦ (d) Facilitate the safe, efficient and economic flow of freight and other goods and services within regions and throughout the state through a variety of modes including road, air, rail and marine transportation
-  ♦ (e) Protect existing and planned transportation facilities, corridors and sites for their identified functions
-  ♦ (f) Provide for the construction and implementation of transportation facilities, improvements and services necessary to support acknowledged comprehensive plans
-  ♦ (g) Identify how transportation facilities are provided on rural lands consistent with the goals
-  ♦ (h) Ensure coordination among affected local governments and transportation service providers and consistency between state, regional and local transportation plans
-  ♦ (i) Ensure that changes to comprehensive plans are supported by adequate planned transportation facilities

The 2045 Plan was developed in collaboration with ODOT, WSDOT, the local government agencies, transit operators, resource agencies, stakeholders, and the public.

- ◆ Address no less than a 20-year horizon
- ◆ Undergo an update every four years
- ◆ Consider the federal planning factors
- ◆ Include cooperative development with the State and transit operators
- ◆ Inventory existing and proposed transportation facilities and services and emphasize those that have national and regional transportation functions
- ◆ Include pedestrian walkway and bicycle transportation infrastructure and, as appropriate, transit enhancements and intercity bus activities
- ◆ Analyze current and projected transportation demand for persons and goods based on the latest assumptions for population, employment, land use, economic activity, travel, and congestion
- ◆ Describe performance measures and targets and evaluate system condition and performance achievements
- ◆ Develop long-range and short-range strategies to develop an integrated multi-modal transportation system
- ◆ Consider and reduce the vulnerability of infrastructure to natural disasters



- ◆ Establish operational and management strategies to improve system performance, relieve congestion, and maximize safety and mobility
- ◆ Assess capital investments and other strategies to preserve the existing system and increase multi-modal capacity based on priorities and needs
- ◆ Provide for consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies
- ◆ Discuss potential environmental impacts and mitigation activities
- ◆ Integrate State Highway Safety Plan and Public Transportation Agency Safety Plan goals, priorities, and strategies

- Washington State law** ([RCW 47.80.030](#)) requirements for the 2045 Plan are largely covered by the federal directives, with the exception of the need to:

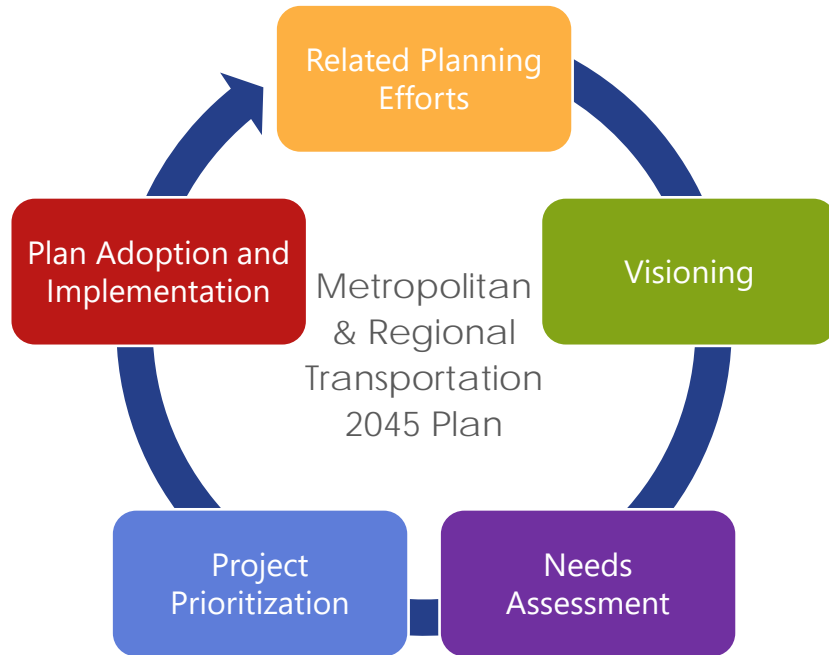
- ◆ Base the plan on least cost planning methodology to identify the most cost-effective facility, service, or program
- ◆ Establish a level of service standard for select state highway routes
- ◆ Define a regional approach to address concurrency (which calls for transportation improvements to be made in parallel with local development, if levels of service are expected to fall below a stated threshold)
- ◆ Undertake a currency review of the plan every two years

2045 Plan | 5

Plan Development

Process Overview

The WWVMPO/SRTPO and its member entities, employed a multi-step continuous, comprehensive, and cooperative transportation planning process to guide the development of the 2045 Plan:



- ◆ Related Planning Efforts – The 2045 Plan complements and builds on interrelated planning efforts of WWVMPO/SRTPO member entities
- ◆ Visioning – The Walla Walla Valley has a regional vision that integrates the community-desired transportation outcomes and is sufficiently detailed to support the definition of goals and objectives
- ◆ Needs Assessment – The 2045 Plan considers existing and future resources and needs, and includes a comprehensive assessment
- ◆ Project Prioritization – The 2045 Plan weighs community goals and limited resources to balance investments among competing priorities
- ◆ Plan Adoption and Implementation – Public feedback, stakeholder engagement, and member input are critical to the 2045 Plan’s ability to formulate agreed-on strategies that will also impact local efforts

The 2045 Plan essentially links statewide, regional, and local activities, and therefore, builds on efforts put forth in the Washington, Oregon, and local agency transportation plans.

Washington’s Transportation Plan - 2040 and Beyond

Consistent with the Growth Management Act and supportive of the six statewide transportation goals, 2040 and Beyond was adopted in 2018 as the State’s transportation policy plan. The plan outlines technology innovations, system resiliency, and funding as cross-cutting topics and formulates policies and strategy recommendations, of which the following are of particular importance to the Walla Walla Valley:

- ◆ Pursue innovative strategies to maintain the economic viability of rural regional, community, local, and general use airports
- ◆ Increase revenue dedicated to all aspects of maintenance and preservation of the transportation system statewide
- ◆ Reduce unnecessary permitting delays, especially on preservation and maintenance projects where the potential for environmental impact is minimal
- ◆ Increase revenues dedicated to transportation system safety education and enforcement activities
- ◆ Ensure those involved in the siting of schools and other public facilities explicitly include transit, walk, and bike access in their decision-making process
- ◆ Develop a Transportation Equity Analysis toolkit for use in evaluating the benefits and impacts of transportation policies and investments on historically marginalized populations in Washington
- ◆ Address the growing backlog of maintenance and preservation at state and local levels, prioritizing investments in the existing system before allocating funds to make it larger
- ◆ Remove the ten-year sunset clause associated with the voter-approved local option sales tax authorized for Transportation Benefit Districts (TBD)
- ◆ Create and account for emergency relief funds that cities and counties can quickly access to repair and rebuild infrastructure damage

2040 and Beyond also calls out those subjects that present persisting issues “bigger than any one transportation agency can address.” One of the tough topics that resonates particularly with the Walla Walla Valley is the need for “improving inter-regional public transportation.”



Oregon's Transportation Plan

The [Oregon Transportation Plan](#) was adopted in September 2006. Anticipating a population growth of 41% and a freight growth of 80% over the life of the plan, it is a 25-year plan that comprehensively assesses state, regional, local, public, and private transportation facilities and services. Functioning as the State's transportation policy plan, it establishes the vision, goals, and objectives for needed investments:

- ◆ Mobility & Accessibility – Provide balanced, efficient, and integrated transportation systems that are reliable, accessible, and cost-effective
- ◆ Management of the System – Improve efficiency by optimizing operations and management, extending asset life, and reducing maintenance costs
- ◆ Economic Vitality – Expand and diversify Oregon's economy through the provision of safe, energy-efficient, and environmentally sound transportation of people and goods
- ◆ Sustainability – Encourage conservation and integrate land use and transportation choices, in order to meet present needs without compromising the needs of future generations
- ◆ Safety and Security – Build, operate, and maintain the transportation system that is safe and secure for all users
- ◆ Funding the Transportation System – Expand ways to fund a viable transportation system in a fair and fiscally responsible manner
- ◆ Coordination, Communication and Cooperation – Help transportation users and providers build an integrated system, align interests, remove barriers, and offer innovative, equitable solutions

The Oregon Transportation Plan is supported by many [modal and topic plans](#) that guide the state, regional, and local investment decisions for the modes of transportation and the parts of the system they address.

Local Agency Comprehensive/Transportation Plans

Local counties and cities prepare and regularly update their Comprehensive Plans, all of which include transportation elements or transportation system plans. Local priorities and investment strategies to address existing and future transportation needs are identified in these planning documents. The primary focus is on arterials and collector streets within each jurisdiction. Additionally, needs within the designated Urban Growth Area/Boundary (UGA/UGB) and important connections to other jurisdictions are also described.

Most of the local comprehensive plans for member entities in Washington were updated in 2018 and 2019. All of them were reviewed to provide consistency between the regional plan and the local planning documents. The local plans also assisted in the identification of potential transportation policies and projects for integration into the 2045 Plan.





Outreach Considerations

Involving the public in the development of the 2045 Plan is about more than just fulfilling federal and state requirements.

Public outreach is integral to good planning.

Without meaningful public participation, there is a risk of making far-reaching decisions that do not match the needs or vision of the communities this plan is set to serve. Public engagement activities conducted for the 2045 Plan coincided with major decision points. However, their design was heavily impacted by the current COVID-19 pandemic, which restricted in-person gatherings, such as workshops and public meetings. The WWVMPO/SRTPO quickly obtained user-friendly, online outreach platforms and retooled previous engagement techniques to work within the prescribed digital and virtual environment. Designed to gather the information needed to make a lasting contribution to the quality

of life in the Walla Walla Valley, the 2045 Plan outreach was also conducted in compliance with the WWVMPO/SRTPO [Public Participation Plan](#) objectives, its [Title VI Policy](#), and with consideration of individuals with Limited English Proficiency.

Public Participation Plan

The WWVMPO/SRTPO is responsible for seeking the active involvement of all affected parties in a **collaborative process** that provides meaningful **opportunities to influence transportation decisions**.

Developed in consultation with interested parties, the [Public Participation Plan](#) (P3) includes strategies for conducting targeted outreach, employing visualization techniques, using electronic media, holding public meetings, and responding to public input. The P3 complies with the federal rules that establish the following goals: ([23 CFR 450.316](#))

- ◆ Maintain a proactive involvement process
- ◆ Support early and continuing involvement of the public in developing plans
- ◆ Provide complete information, timely public notice, and full access to key decisions
- ◆ Consider and respond to public input received during the planning process
- ◆ Seek out and consider the needs of those traditionally underserved, including low-income and minority households
- ◆ Provide all interested parties with reasonable opportunities to comment on the contents of the plan

Title VI Policy

As a recipient of federal transportation funds, the WWVMPO/SRTPO complies with the [non-discrimination requirements](#) outlined in Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and all associated orders. Through its [Title VI Policy](#) statement and the implementation of its [Title VI Plan](#), the agency provides assurance that no person shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any agency-sponsored program or activity, whether federally funded or not.

Limited English Proficiency

In compliance with federal guidance, the WWVMPO/SRTPO also takes reasonable steps to provide access to planning information for individuals with Limited English Proficiency, for whom English is not the primary language and who have a limited ability to read, speak, write, or understand English.

The [Four-Factor Analysis](#) conducted as part of the P3 development, revealed that 20% of the population in Umatilla and Walla Walla Counties speaks a language other than English at home and more than 9% speak English less than “very well.” The number of Spanish speakers in both counties is significant, and the agency provides document summaries as well as public meeting notices and materials in both English and Spanish.

Public Involvement Activities

In lieu of conducting an in-person workshop, all related activities were transcribed and included in an online survey as well as a virtual forum to assist with the development of the regional vision and goals. Two identical forums took place on July 29 and August 6, whereas the web survey opened on July 20 and accepted responses through August 10, 2020.

The bilingual invitations announcing the dual language survey and the forums were disseminated through public notices in local newspapers and distributed via a coordinated email blast supported by member entities and planning partners.

The invitations reached several thousand direct recipients and, through a social media broadcast, spread even further throughout the region.

Plan 2045 del Valle de Walla Walla - Foro Virtual

Walla Walla Valley 2045 Plan - Virtual Forum

During this first round of outreach, website traffic increased significantly following the initial email push and again after the reminder emails. In all, the WWVMPO/SRTPO website had more than 1,200 unique visitors who viewed various pages on the agency's site 6,500 times. Of the website visitors who continued on to the 2045 Vision Survey, 86 completed all the questions.

Noteworthy is that, according to the data provided by the respondents, the survey participation was proportionate with the size of the communities and closely matched demographic characteristics across the region. However, population in the group "under the age of 24" were under-represented and the virtual forums had a very small pool of attendees.

After closing the first round of outreach, the [material](#) and [recording](#) of one of the virtual forums as well as the [survey summary](#) were uploaded to the agency's website.

Transporte en el Valle de Walla Walla

Encuesta de la Visión 2045

¡Bienvenidos a la Encuesta Visión 2045 para el área del Valle de Walla Walla!

Cada 5 años la región. Su las mejora también lo agradecen

Transportation in the Walla Walla Valley

2045 Vision Survey

Welcome to the 2045 Vision Survey for the Walla Walla Valley Area!

Every 5 years, the Walla Walla Valley Metropolitan Planning Organization updates the region's long-range transportation plan. Your feedback provides us with a greater understanding of how you travel and what transportation improvements you would like to see in the future.

Your input is very valuable to us and so is your privacy. All responses will be kept anonymous. Please consider giving us 5 minutes of your time.

4 de 6: In

¿Cómo equilibraría usted las inversiones con presupuestos limitados de transporte?

4 of 6: Future Transportation Investments

How would you balance investments given limited transportation budgets?

Preservación...
... de la infraestructura. Mantener una "condición justa" es hasta 10 veces menos costoso que reconstruir!

\$

Bicicleta...

1 2 3 4 5

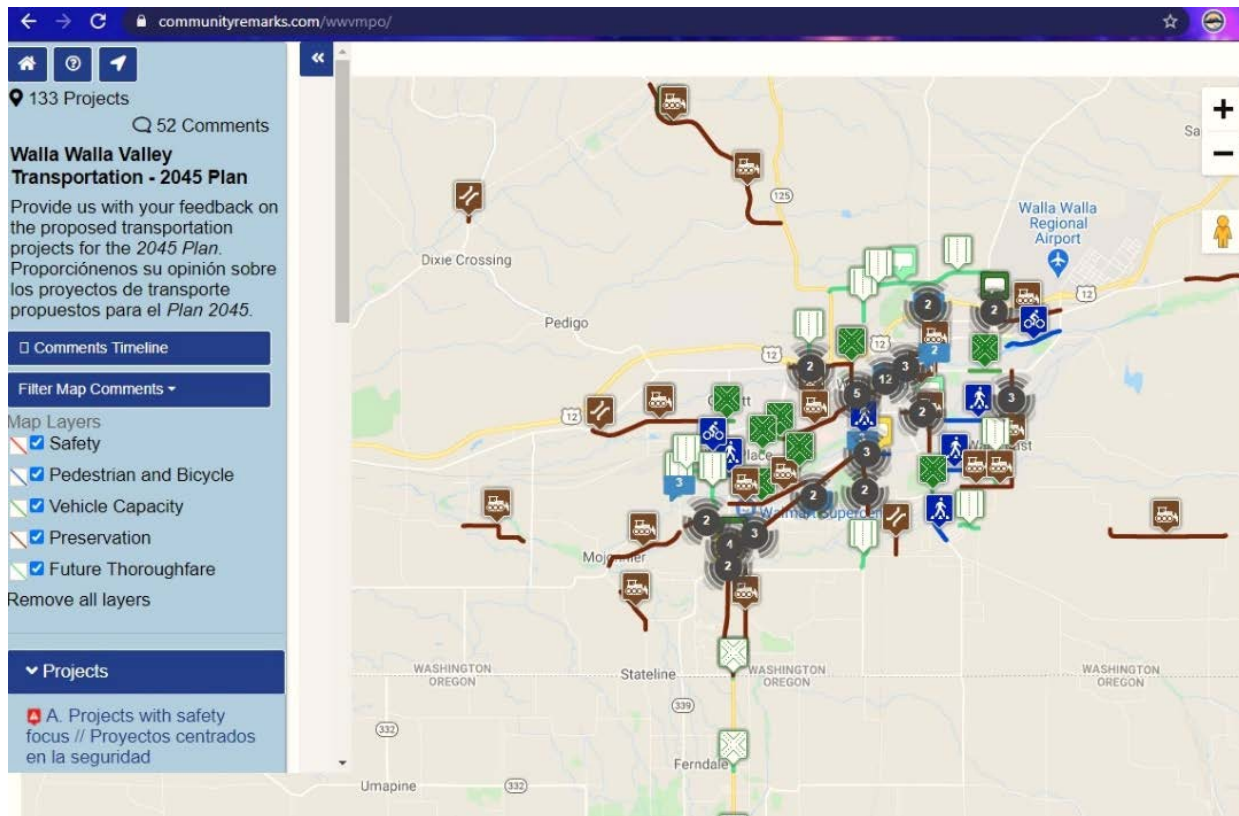
\$ \$\$\$\$\$

Bicycle...

The second round of public involvement was timed to coincide with the review of the projects that were proposed for inclusion in the 2045 Plan. The public was invited to an [online map forum](#) that provided access to list-based and map-based data, which grouped projects according to their primary infrastructure improvement type.

The online format had the look and feel of Google Maps and allowed the user to pan, zoom, and drop individual comments that could then be viewed and voted on by other visitors to the site.

As with the first round of outreach, public notices, email notifications, and subsequent social media sharing were used to distribute information about this public involvement opportunity. The online map was viewed more than 650 times by over 400 unique visitors. Less than 12% of the website traffic was driven by social media shares and most click-throughs originated from the WWVMPO/SRTPO website, which showed a marked increase in views (4,100) and unique visitors (750) during the comment period from September 30 to October 19, 2020.



Review of Draft 2045 Plan

From December 10, 2020 to January 10, 2021, a digital copy of the draft 2045 Plan was made available on the [public participation](#) webpage of the WWVMPO/SRTPO website.

As COVID-19-related restrictions remained in place, hard copies of the draft document were not offered (which would otherwise have been available for review at the WWVMPO/SRTPO office, the Milton-Freewater Library, Waitsburg City Hall, and the Walla Walla Library).

The public was invited to review the draft document and provide comments. All submitted comments were analyzed and received a response, as appropriate. The final list of comments and dispositions is included in [Appendix A](#) of the 2045 Plan.

The WWVMPO/SRTPO Policy Board adopted the 2045 Plan at its regular meeting on February 3, 2021.

Goal-Oriented and Performance-Driven

All policies, actions, and investments identified in this plan are designed to address existing transportation gaps and the region's future needs.

- ◆ Exactly what kind of future system the Walla Walla Valley region would like to have is captured in the collaboratively developed vision, goals, and objectives.
- ◆ Precisely how this system is expected to perform is guided by data-driven targets that give direction to strategy and project decisions.



Vision, Goals, and Objectives

Collectively, WWVMPO/SRTPO member entities, stakeholders, and the public defined the community's vision, goals, and objectives, which guide all transportation policy and investment decisions in the region.

Vision

With the 2045 Plan, the Walla Walla Valley seeks to create "**Mobility for All Users**," through its simple, yet encompassing vision:

ENHANCE THE SAFETY, CONNECTIVITY, AND
CONDITION OF OUR TRANSPORTATION SYSTEM,
AND PROVIDE MOBILITY FOR ALL USERS –
TO ENRICH QUALITY OF LIFE AND TO BE
CONSISTENT WITH COMMUNITY CHARACTER.

Goals

Traditionally, the foundation of metropolitan and regional transportation is based on the planning factors stipulated in the federal surface transportation law. In a similar fashion, the Walla Walla Valley 2045 Plan is built on ten goals, which were adapted from the planning factors outlined in [23 USC 134\(h\)\(1\)](#) and [23 CFR 450.306](#).

Shaping the direction that the transportation planning process takes moving forward, the regional goals influence the projects, strategies, and services that are chosen to improve

transportation in the Walla Walla Valley over the next 25 years. Focused public outreach and interviews with key stakeholders helped determine the relative importance of each one of the goals, which are shown from highest to lowest in relative importance:

Safety – Protect all transportation users from unintentional harm.

Preservation and Infrastructure Condition – Preserve and improve transportation infrastructure conditions.

Accessibility and Mobility – Add walking and rolling options, improve equitable access, and foster a livable community.

Integration and Connectivity – Support and connect all transportation modes.

Resiliency and Reliability – Improve travel reliability and reduce natural disaster impacts.

Economic Vitality – Support freight and economic growth.

Stewardship – Conserve energy, protect environment, and improve the quality of life.

Security – Protect all transportation users from intentional harm.

Efficient System Management and Operations – Promote and increase transportation system efficiency.

Travel and Tourism – Focus on regional benefits and integrate transportation across jurisdictions.

Objectives

Goals alone are aspirational, but not substantial enough to truly direct planning, policy, and investment efforts. Thus, the goals were translated into achievable actions that have measurable results. This process helped adapt the nationally inspired goals to truly represent and reflect the values of the communities within the Walla Walla Valley.

Several objectives for each goal were originally posited by WWVMPO/SRTPO staff and, subsequently, added to or revised with input from the public, local stakeholders, and the WWVMPO/SRTPO member entities. All objectives identify actions that can be taken while also providing a basis for measuring results and progress.

In light of their importance to the region's project selection process, the adopted objectives and corresponding 2045 Plan goals are shown in a table located in the "[Selection of Projects](#)" section of the "Recommended Investments" chapter.

Performance Targets



With the set of measurable actions for each goal area in place, performance changes – anticipated as a result of proposed policies, actions, or investments – must be gauged against the desired system performance outcomes. The sought-after transportation performance is expressed in the

form of quantifiable targets which, based on the national performance goals outlined in [23 USC 150](#), are spread across the following seven key areas:

- ◆ Safety ([23 CFR 490.207](#))
 - ◆ Number of fatalities
 - ◆ Rate of fatalities per vehicle miles traveled (VMT)
 - ◆ Number of serious injuries
 - ◆ Rate of serious injuries per VMT
 - ◆ Number of combined non-motorized fatalities and serious injuries
- ◆ Infrastructure Condition ([23 CFR 490.307](#) and [23 CFR 490.407](#))
 - ◆ Condition of pavement on the National Highway System (NHS), including both Interstates and non-Interstate elements
 - ◆ Condition of NHS bridges
- ◆ Congestion Reduction ([23 CFR 490.707](#))
[not applicable to area with <200,000 population]
 - ◆ Annual Hours of Peak Hour Excessive Delay per Capita
 - ◆ Percent of Non-SOV Travel
- ◆ System Reliability ([23 CFR 490.507](#))
 - ◆ Percent of person-miles traveled that are reliable on both Interstates and non-Interstate NHS elements
- ◆ Freight Movement and Economic Vitality ([23 CFR 490.607](#)) *[not applicable due to lack of Interstate facility]*
 - ◆ Truck Travel Time Reliability Index on the Interstate system

- ◆ Environmental Sustainability ([23 CFR 490.807](#)) *[not applicable due to lack of Congestion Mitigation Air Quality-funded projects]*
 - ◆ Total Emissions Reduction

- ◆ Reduced Project Delivery Delays

In general, performance targets for each identified area are first established by the State and MPO-specific targets must then be declared within the following 180 days.

Since the WWVMPO/SRTPO is a bi-state MPO, the agency has coordinated closely with both Oregon and Washington State Departments of Transportation on the establishment of the initial state targets and, subsequently, has chosen to support each state's targets rather than declaring MPO-specific performance targets for any of the specified performance areas.

In addition to the already listed performance areas and metrics identified by the Federal Highway Administration, the Federal Transit Administration has also declared performance areas and metrics ([49 USC 5326](#) and [49 USC 5329](#)) which govern public transit provider performance:

- ◆ Public transportation agency safety plan (PTASP) ([49 CFR 673](#))
- ◆ Transit asset management ([49 CFR 625](#)) outlining a state of good repair (SGR) for all assets including buses, vans, equipment, facilities, and infrastructure

Public transit agencies set targets for both agency safety and SGR performance. As with the DOT targets before, the WWVMPO/SRTPO has chosen to support the targets set by its public transit providers, rather than declare MPO-specific targets.

Baseline data across all performance areas, current targets, and a discussion of progress achieved is included in [Appendix B](#).

Furthermore, the Public Transportation Agency Safety Plans developed by the two Walla Walla Valley public transit providers are described in the “[Safety and Security](#)” section of the “Stewardship and Sustainability” chapter.

Moving the Needle



The system of 2045 Plan goals and objectives, as well as performance measures and targets, are

in place to help gauge progress towards desired transportation system outcomes.

Federal guidelines ([23 CFR 450.306\(d\)](#)) stipulate that decisions on transportation planning and project programming must be data-driven and performance-based. Current conditions and performance targets help inform which objectives to focus on. Within the structure of the project selection criteria, a proposed investment is scored based on how well it addresses each goal and the corresponding objectives. The

resulting list of prioritized projects can be found in the latter part of the “Recommended Investments” chapter. Given the region’s limited funding, not all transportation proposals advanced. Nevertheless, each of the selected 2045 Plan projects will result in incremental changes that together create visible system benefits over the life of the 2045 Plan and beyond.



What the Future May Bring

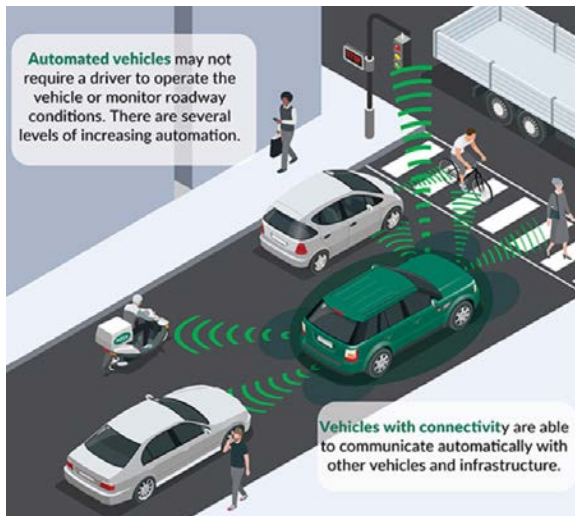
Predicting the future is never certain, but the next 25 years have the potential to significantly alter our transportation landscape. In just the last ten years, there has been significant growth for electric vehicles, rideshare applications, bikeshare systems, and the introduction of automated vehicles, e-bikes, and e-scooters. Many of these new modes are still in their infancy, making it difficult to assess what their usage may be in the future. However, early research shows that our transportation future will be more multi-modal and technological than ever before.

Transportation is at an incredible crossroads. Climate change impacts are being felt more and more, centuries of income disparities and racial inequalities are rising to the surface of society, a global pandemic has rapidly reshaped our perceptions, and the implementation of green energy, artificial intelligence, and autonomous technology is coming to light. These conditions make forecasting a greater challenge than in the past, but it also makes it more important.

As we envision our future world, we break from the normative way of past thinking, and ready ourselves to embrace change.

Demographics

Ever-changing demographics add complexity to our transportation needs. The population of the United States is growing steadily, but it is also aging and urbanizing.¹ By 2045, the number of adults over 65 years of age will increase by 77%.² Between 10 and 14% of the population currently have some kind of mobility impairment.^{3 4} Income inequality is on the rise, driven by economic volatility and the recent effects of COVID-19. With 21% of U.S. households making less than \$25,000 a year and 9% of all households not having an automobile, there are populations whose transportation needs are underserved.⁵ If economic recovery measures are not effective enough, these figures will increase.



Source: WSDOT - <https://wsdot.wa.gov/travel/automated-connected/home>

Autonomous Vehicles

Of all the transportation trends, none captivate our imagination quite like Autonomous Vehicles (AV). In an AV, driving actions are performed using onboard and continuously connected computers. While select cars already have some AV features, no commercially available vehicles have reached the highest level of full automation where the car performs all operations without any driver input. Testing of fully autonomous vehicles is taking place in several large cities.⁶ Automakers are making large investments in this area and nearly all new vehicles have at least one advanced driver-assistance system feature.⁷

Predictions vary widely for when fully autonomous vehicles will become commercially available. Industry experts

estimate a five- to six-year timeframe before fully autonomous transit, taxi, and delivery services are available, with another 15 years before AVs hold a 10% market share.⁸ More skeptical sources cite fully autonomous vehicles becoming commercially available in the 2030's and making up about 50% of all vehicles sold in 2050.⁹ AVs hold a particular interest to freight and logistics industries as a solution to the lack of available drivers and related labor expenses.^{10 11}

A major claim of AVs is that, because 90% of vehicle crashes are caused by human error, removing the human element will eliminate these crashes.^{12 13} However, tied to current predictive algorithms, AVs have shown some difficulty in handling the movement patterns of cyclists and pedestrians, although related data is sparse.¹⁴ Furthermore, many studies show that AV adoption will coincide with an approximately 25% increase in VMT due to lower user costs, better accessibility for underserved populations, and ease of use.^{15 16 17} VMT increases may be offset by a better vehicle utilization than at present, so long as AV adoption focuses on being shared, not private.^{18 19} In addition, the claims of safety do not seem to account for the likely prolonged period where AVs and conventional vehicles have to operate alongside one another.

A typical AV is expected to generate over five terabytes (5,000 gigabytes) of data per

hour of use, with one million AVs generating as much data as three billion people.²⁰ Current 4G technology has near ubiquitous coverage but lacks adequate data capacity.²¹ Full implementation of a 5G mobile data network is required to support these data needs.^{22 23} The additional technology in each vehicle will also increase the per unit cost significantly.²⁴ Similarly, for AVs to yield an effective environmental benefit, they will need to be electrified and charged from a green-energy-fueled power grid, as the necessary computing functions require significant energy.²⁵



Electric Vehicles

Electric vehicles (EVs) and hybrid electric vehicles (HEVs) are nothing new, but concerns over climate change and a decrease in battery cost have increased their adoption over the last decade. EVs and HEVs make up 2.3% of the vehicles in the United States.²⁶ Advances in battery technology have led to greater energy densities and efficiencies,

causing lithium-ion battery prices to decrease by 89% from 2010 to 2020.^{27 28} U.S. households are buying EVs aggressively, with sales having increased by more than 80% from 2017 to 2018.²⁹ This growth in sales might have been even higher if not for a lag in the proliferation of charging facilities.^{30 31 32} Large vehicle fleets, like those of transit agencies, schools, or logistics corporations, are also pursuing EVs. The U.S. transit bus fleet added 29% more electric buses from 2017 to 2018, though the overall total (1%) is still low.³³ As vehicle fleet efficiency continues to increase, the gas tax revenue decreases, underscoring the need for new funding mechanisms to support our road networks.^{34 35}

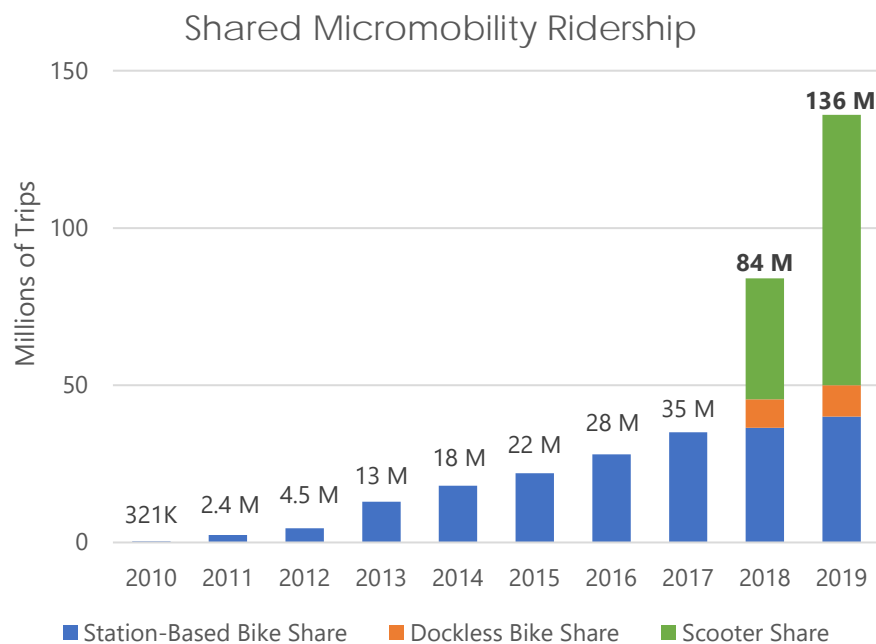
Shared Mobility

Shared mobility is on the rise in the U.S., thanks largely in part to shared micromobility programs involving bicycles, e-bikes, and e-scooters.^{36 37} The past decade has seen strong growth in shared micromobility, with 342 million trips since 2010 and a 60% increase between 2018 and 2019.^{38 39 40} E-scooters, a recent arrival to the shared micromobility scene, have seen a huge spike in use.⁴¹



Carpooling has been in decline since the 1980's, but AVs are likely to reverse it, with as much as 26% of car miles being shared by 2030 (up from just 4% in 2015).⁴²

Another study predicts that 25% of miles will be driven in shared AVs by 2030.⁴³ In



Source: <https://nacto.org/wp-content/uploads/2020/08/2020bikesharesnapshot.pdf>

general, good consensus regarding the assumptions of scale exists.

Shared micromobility providers have seen a great deal of volatility since their introduction, with providers becoming rapidly established in a new community or abandoning their services overnight.⁴⁴

Overall, demand for micromobility has grown. However, regulations have stifled program deployment or continuation in some regions.^{45 46} Introducing more non-motorized users into a motor vehicle-dominant market has also led to concerns over safety issues and, while overall safety has improved, helmet use remains negligible.⁴⁷ Requiring helmets would increase safety but likely decrease ridership.⁴⁸ E-bikes and e-scooters have proven much more popular than pedal or push versions. E-cycling contributes to meeting physical activity requirements and can increase physical fitness.⁴⁹

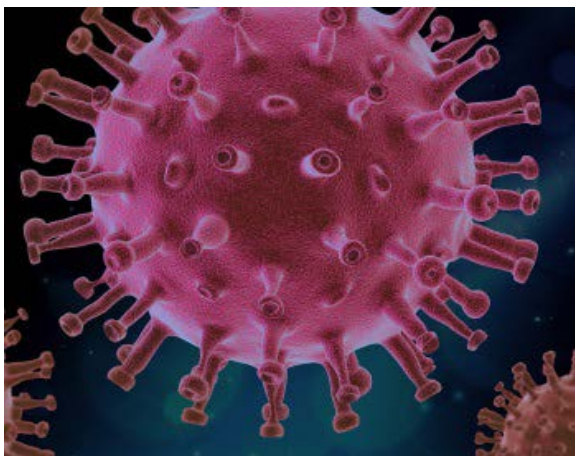
COVID-19

When it comes to predicting transportation patterns, COVID-19 is essentially a prism that refracts our future into a much wider range of possibilities. Early signs and research have shown an increase in private vehicle sales due to concerns over shared transportation modes.⁵⁰ Both micromobility and shared mobility uses have decreased.⁵¹ The contracting economy has also reduced

railroad freight volumes by 22% from last year.⁵² During the initial stages of widespread shutdowns, fewer people commuting has led to both less congestion and less air pollution, albeit also higher average speeds.^{53 54 55}

Probably the most significant impact of COVID-19 has been the increase in people working from home. The pandemic forced nearly two-thirds of U.S. workers to work from home.⁵⁶ Studies estimate that 37% of jobs can be done remotely and this transition may have long-lasting implications on how work is done in the future.⁵⁷ However, it is important to note that about 60% of U.S. jobs cannot be done remotely, with a large portion of these being lower-wage positions.⁵⁸

COVID-19 has also underscored the importance of having strong broadband networks, particularly in more rural areas of the country.⁵⁹



Drones

Drone-based transportation methods include airborne Unmanned Aircraft (or Aerial) Systems (UASs) and terrestrial Unmanned Ground Vehicles (UGVs). These are currently being explored to handle the delivery of goods via a remote or automated pilot.⁶⁰ The Federal Aviation Administration (FAA) is altering their legal framework to support testing of aerial devices.⁶¹ Drone-based transportation could also be used to assist with agricultural spraying, emergency search and rescue, infrastructure inspection, photo/video collection (for marketing, research, news, etc.), mapping, and congestion monitoring.⁶² These new technologies have the potential to decrease the number of freight vehicles on our roads.⁶³ Softening legal protections for drone use exposes new risks and concerns. Aerial drones have already been shown to cause issues for passenger air travel and there are also strong concerns about privacy, noise, crashes, terrorism, and more.^{64 65}

Other Trends

The Future of Public Transit

There is a great deal of turmoil currently facing public transportation providers. Ahead of the pandemic, passenger VMT had increased by 25% since 2000, with the number of public transit trips increasing by 16%.⁶⁶ However, COVID-19 has slashed public transit passenger volumes and this shared mobility mode may likely struggle to bounce back after the pandemic.⁶⁷

Autonomous vehicles might allow public transit service to run more efficiently and effectively in the future, although AV use needs to be shared for this to occur.⁶⁸

Transportation Network Companies

Made increasingly popular through the use of application-based ride-sourcing, Transportation Network Companies (TNCs) such as Uber and Lyft have now been around for a little more than a decade. Lyft predicted that their services, and those of their competitors, would end private car ownership by 2025.⁶⁹ However, there has actually been an increase in automobile ownership in cities where rideshare is used the most, resulting in greater congestion and undercutting public transit.^{70 71} Initially, it was thought that TNCs would help close the first-mile/last-mile gaps and increase public transit use, but instead, people are just using TNCs and skipping public transit altogether.⁷²

These companies have aggressively poured large amounts of funding into the research and development of autonomous vehicles, as TNCs see AVs as a solution to their labor dispute problems.⁷³ AV taxis or micro-transit may begin to appear between 2030 and 2040.⁷⁴



E-Commerce

In 2019, online shopping made up over 11% of the retail market share, up from just 4% a decade before.⁷⁵ In 2015, 80% of the U.S. population made a purchase online.⁷⁶ Between 2010 and 2020, individual freight deliveries doubled and are expected to double again by 2023.⁷⁷ Greater use of the internet for activities such as virtual medical consultations, remote education, and online entertainment may reduce attributed trip volumes, whereas proliferation of online shopping will shift trips towards freight deliveries.⁷⁸



Alternative Fuel Vehicles

Supported by the U.S. Department of Energy's Clean Cities Program, alternative fuels like

hydrogen fuel cells or compressed natural gas have been explored as possible low-cost replacements for petroleum-based fuels.⁷⁹

Although the research and supportive case studies have matured over the past two decades, two main factors still limit the widespread adoption of these promising technologies.

First, vehicles are still being prototyped and until mass production begins to decrease the cost, these vehicles will not be affordable.⁸⁰

Second, there is an extreme lack of proper fueling infrastructure supporting these vehicles which, just like the slow spread of EVs, limits the potential adoption rate of the technologies.⁸¹



Cannabis Legalization and Traffic Safety

Both Oregon and Washington State have legalized the recreational use of cannabis. Since that time, several studies have been conducted to assess the impact those laws have had on traffic safety. Using insurance collision claims, an early study found cannabis use responsible for crash increases of 4.5% in Oregon and 6.2% in Washington.⁸² A follow-up study was done using police reports which found the crash rate to have increased by 4.1%, along with a decrease of 1% in their selected control states.⁸³ These studies are complicated by the fact that cannabis use is difficult to test for and use does not necessarily imply inebriation.⁸⁴ Cannabis use is also not limited to states with legalization. Furthermore, another study found that cannabis legalization reduced the number of opioid- and alcohol-impaired drivers, which may have offset directly related fatalities.⁸⁵

Who and What is Moving Now and in the Future

The majority of WWVMPO/SRTPO local member entities have adopted “Complete Streets” ordinances or policies, pledging to consider the needs of all transportation users.



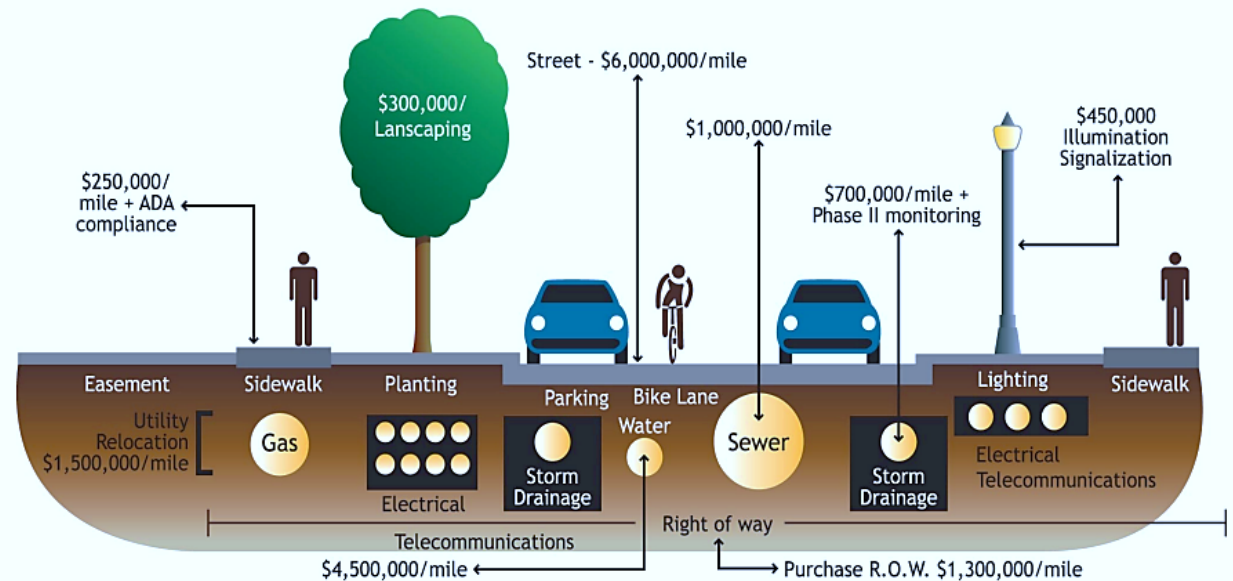
In general, Walla Walla Valley “Complete Streets” are built on the following premise:

To the maximum extent practical and economically feasible, a city/county/DOT shall plan, design, construct, operate, and maintain appropriate and integrated transportation facilities to provide safe access for pedestrians, bicyclists, persons with disabilities, transit vehicles and riders, motorists, emergency responders, freight haulers, and residents of all ages and abilities in all new construction, retrofits, or reconstruction projects.

Typical City Infrastructure Costs

City streets are more than pavement.

Est. \$16 Million per mile based on 2008 Bid Specs.



Source: WSDOT - [https://wsdot.wa.gov/sites/default/files/2015/02/24/ATP Complete-Streets-Typical-Costs.pdf](https://wsdot.wa.gov/sites/default/files/2015/02/24/ATP%20Complete-Streets-Typical-Costs.pdf)

It is an integral part of the 2045 Plan Vision to provide **mobility for all users** - with the intent to **explicitly explore all user needs within the given community context**.

However, considering all transportation needs is not the same as providing for them all in every location. There is not enough funding to do so. Case in point, in 2015, WSDOT estimated that a “Complete Street” within a city environment would require an investment of \$16 million per mile. Albeit, right-of-way (ROW) purchase costs within the Walla Walla Valley region are lower than shown, particularly for reconstruction projects.

In addition, projects may not require all above- and below-ground components. Nonetheless, roadway construction, even though location-dependent, is very expensive.

In order to allow the Walla Walla Valley region to make sound investment decisions, the next few sections describe existing **2019 base** conditions, important gaps and challenges, and anticipated **2045 horizon year** needs.

THE 2045 PLAN WAS WRITTEN DURING A TIME OF GREAT UNCERTAINTY DUE THE **COVID-19** PANDEMIC. WE WILL REVISIT FINDINGS AS NEEDED.

People, Employment, Growth, and Travel Patterns

The composition and distribution of residents, jobs, shops, schools, and other activity centers dictate the way the transportation system is used. The WWVMPO/SRTPO gathered current data on the region's network, land use, population, and employment. With the help of its member entities, the agency estimated where housing and job growth are likely to occur over the next 25 years.

Between 2019 and 2045, the Walla Walla Valley is forecasted to grow:

- ◆ ... by 9 people every week, from 69,100 to 81,380 **residents**, a 17.8% overall and 0.63% annual increase
- ◆ ... by 5 homes every week from 25,427 to 32,118 **households**, a 26.3% increase
- ◆ ... 29,300 to 32,480 **jobs**, a 10.8% increase
- ◆ ... and from 232,860 to 274,260 **daily trips**, an increase of 41,400 per day, which includes travel for work, school, shopping errands, recreation, deliveries, and other purposes



Knowledge of the current trip patterns and existing infrastructure enables the WWVMPO/SRTPO to forecast future travel demand on the region's multi-modal transportation system:

- ◆ 312 miles of **sidewalks**
- ◆ 144 miles of cycle tracks, **bike** lanes, and shared routes
- ◆ 82 miles of in-region **transit** routes with two local providers and four additional routes with **intercity** transit providers
- ◆ One regional airport with **flights** to Seattle-Tacoma International Airport
- ◆ 154 miles of state routes and 1,199 miles of local **roadways**, of which 538 miles are regionally significant (functionally classified)
- ◆ 189 miles of **railroad** tracks and 71 miles on two navigable **rivers**

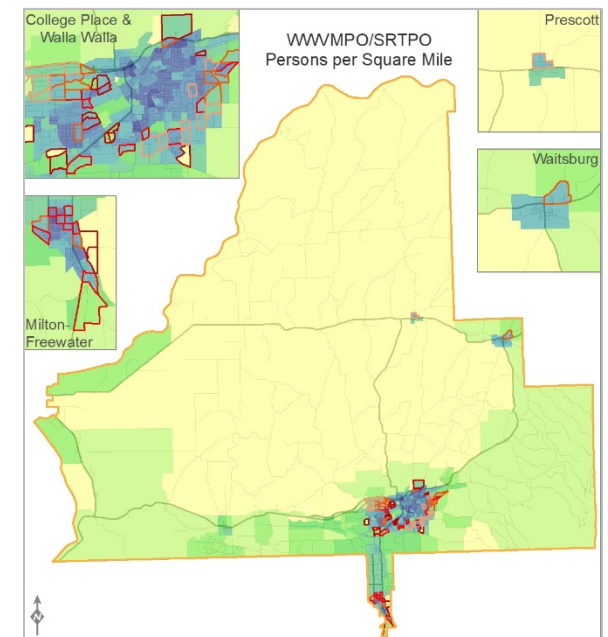
In the past, 82% of daily trips were made in an automobile – with more than eight out of ten drivers being the only person in the vehicle.^a

Residential Changes

The Walla Walla Valley region has grown slowly but steadily over the past decades according to 2000, 2010, and 2014-2018 U.S. Census data, as well as official 2019 estimates for Oregon and Washington State communities from the [Portland State University \(PSU\)](#) and the [Office of Financial Management \(OFM\)](#), respectively.

Since 2000, the population has on average increased by just under 0.7% annually. This rate of growth is expected to continue.

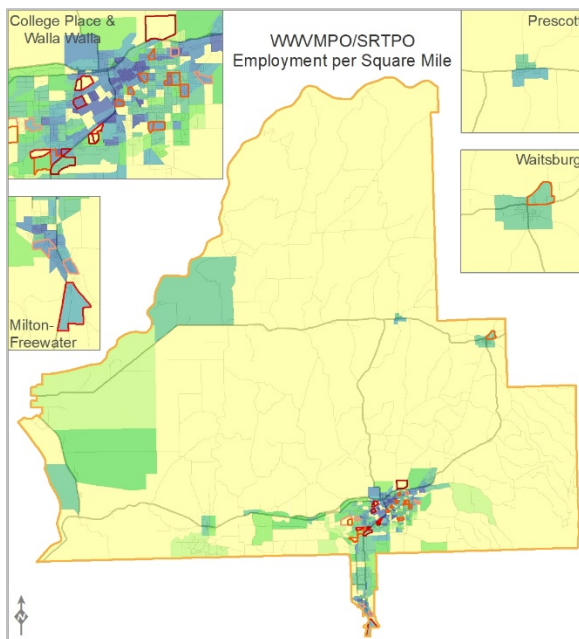
Based on these long-term projections, the Walla Walla Valley population is expected to reach 81,380 by the year 2045. Areas of particular growth are highlighted in this map.



^a Census Transportation Planning Package (CTPP) 2012-2016 - <http://data5.ctpp.transportation.org/ctpp1216>

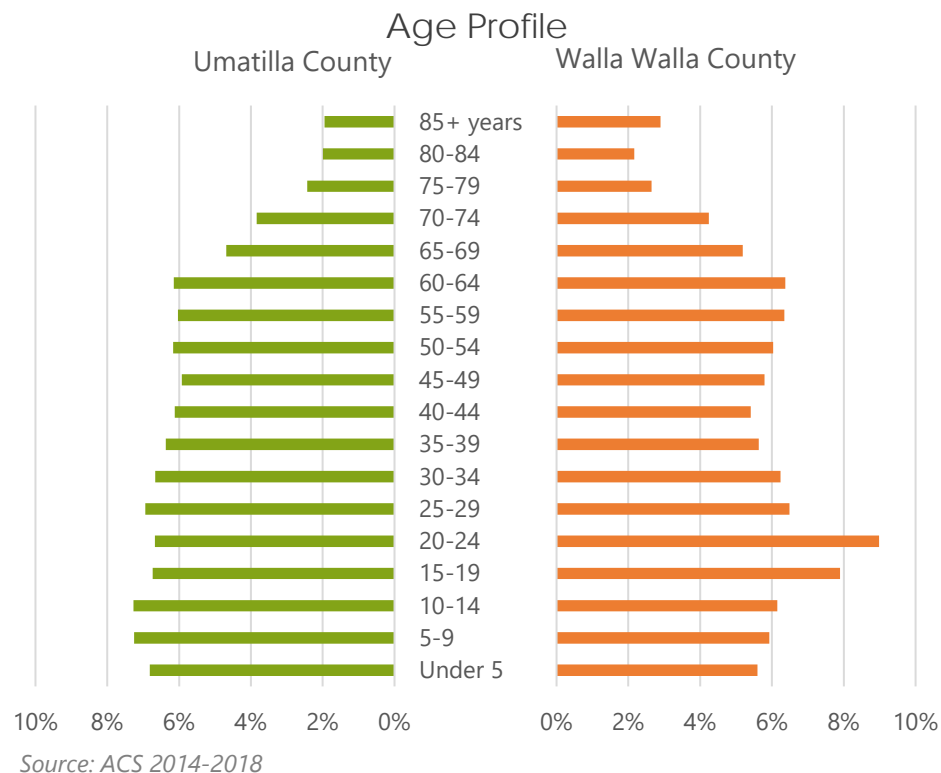
Unique to the Walla Walla Valley region, the current household size of 2.72 persons is higher than Oregon (2.56), Washington State (2.60), and the national (2.63) average. With the anticipated increase in residential and commercial development activity and a major generational shift unfolding, it is forecasted that the region's household size will markedly shrink over the next 25 years. "Millennials" (those born between 1981 and 1996) are now the biggest generational cohort^b and are expected to first, become empty nesters and then, reach retirement age in 2046, just one year after the horizon year of the 2045 Plan.

Age profiles^c for both Walla Walla and Umatilla Counties clearly show the "Baby Boomer" and the "Millennial" cohorts. Interestingly, the average age in both counties is well below their respective States' average. In Walla Walla County, the unusually high number of young adults (20 to 24 years of age) can be explained by the presence of three higher education facilities.



Job Growth

In tandem with regional population growth, employment has also grown between 2000 and now. Albeit, the 2008 recession stifled growth, which only fully recovered by 2019. Based on U.S. Census^d and locally sourced data, Walla Walla Valley employers currently provide 29,300 jobs, most of which are in education and healthcare, government, manufacturing, retail, leisure and hospitality, natural resources and agriculture, as well as the trade, transport and warehousing sector.



"Eastern" region projections provided by the Oregon Employment Department and the Washington State Employment Security Department call for a 0.6% and 1.1% annual increase over the course of 10 years. However, based on much lower historical growth rates and locally sourced information on anticipated commercial developments, the region's job market is anticipated to grow by a modest 0.4% annually to 32,480 in 2045. As with population growth earlier, the areas of particular growth are highlighted in the map.

^b Richard Fry, April 28, 2020, Millennials overtake Baby Boomers... - <https://www.pewresearch.org/fact-tank/2020/04/28/millennials-overtake-baby-boomers-as-americas-largest-generation>

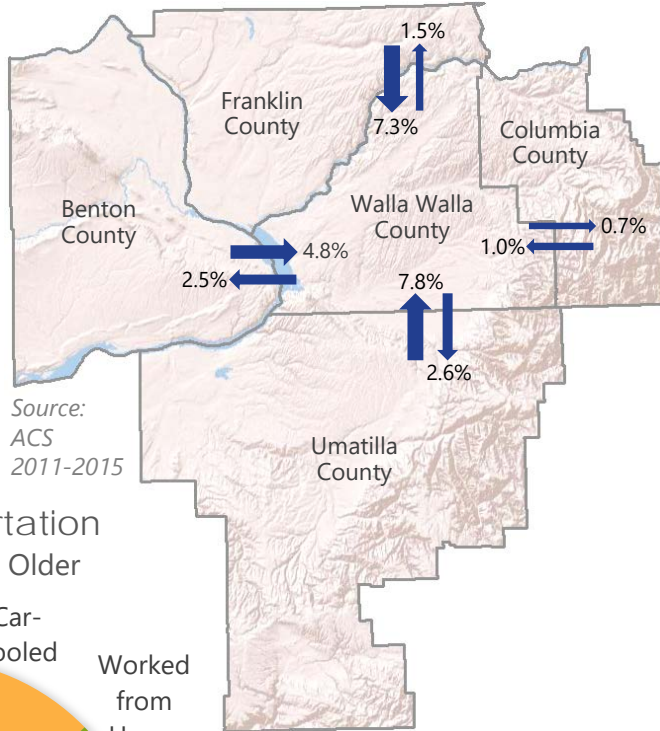
^c American Community Survey (ACS) 2014-2018 data - <https://data.census.gov/cedsci>

^d Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) On the Map (OTM) 2017 data - <https://lehd.ces.census.gov/data/#lodes>

Work Travel

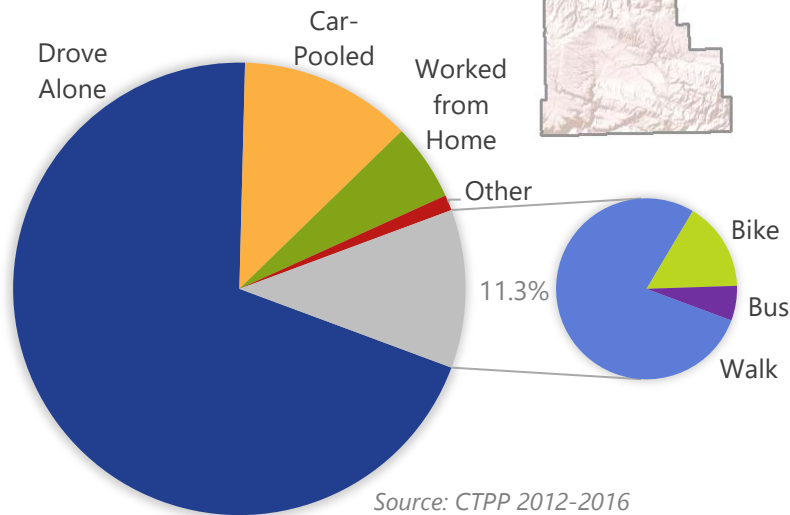
Within the Walla Walla Valley region, 29,300 jobs and 25,427 households create a highly desirable employment-to-housing ratio. This is also evident in the recent data^e that shows 92% of residents live and work in Walla Walla County. The fact that the majority of the region's labor force can stay close to home helps explain why 78% of workers have a commute of under 20 minutes and, on average, only travel between 5 to 15 minutes.

This short commute is also supportive of the high share of walk and bike trips.



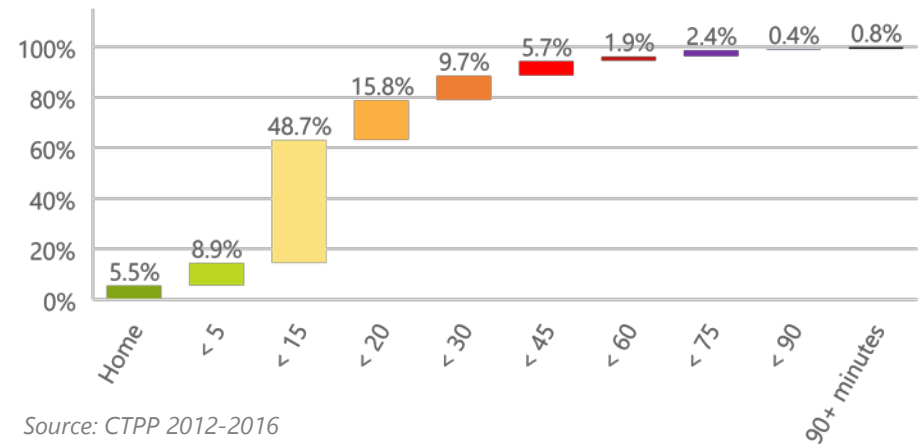
Source: ACS 2011-2015

Means of Transportation Workers 16 Years and Older



Source: CTPP 2012-2016

Travel Time to Work Workers 16 Years or Older



Source: CTPP 2012-2016

By comparison, the median U.S. commute takes 26 minutes and only 3.4% of workers choose to either walk or bike to their job site.

The linkage between land use, housing, employment, commerce, and transportation infrastructure and services is highly complex. In general, separating daily activities – live, work, shop, learn, play – requires more trips, which in dispersed and low-density developments relies heavily on automobile travel. More compact and mixed-use environments support shorter trips and a variety of additional options.

The WWVMPO/SRTPO collaborated closely with its member entity public works and planning staff to collect relevant transportation infrastructure data, base and future year population and employment records, as well as land use information for the Walla Walla Valley region.

Having this locally vetted overview of what constitutes both the supply and demand side of the transportation network is particularly important to understanding current usage, identifying the existing gaps, and anticipating future mobility needs.

^e ACS 2011-2015 Commute Flows - <https://www.census.gov/topics/employment/commuting/guidance/flows.html>

Transportation System, Gaps, and Needs

As with its predecessor, context-sensitive investments are a high priority for the 2045 Plan. Undeniably, the region looks to all modes of transportation to meet its many mobility needs and support the Walla Walla Valley's economic vitality as much as its quality of life. With that in mind, each of the modes brings with it advantages and drawbacks as well as material and societal cost.

"Our past and current paradigm of transportation investment has created a transportation system that is focused on road building and the private auto." ^f The resulting system provides immense individual mobility, but not all population groups derive the same level of access.

Ahead of the discussion of each one of the modes of transportation, it is important to highlight how access and mobility may be different for a variety of population groups represented in our region.

Universal Considerations

Travel patterns and accessibility needs are highly influenced by age, presence of a disability, income levels, and language abilities.

- ♦ **Children and youth under the age of 18** comprise a significant portion of the region's overall population. It is important to



recognize that mobility options for children are, in most cases, limited to rides from parents, public transit, or a school bus, as well as walking or biking. Some of these options may be unavailable, unreliable or, in certain areas, deemed unsafe.

- ♦ "Baby Boomers" (those born between 1946 and 1964; now 56 to 74 years of age) are retiring, and their commuting habits will drastically change. Due to the size of that particular generation, **older adults** will, for some time, comprise a significant portion of



the region's population. Although "Baby Boomers" may remain more active and have a higher degree of mobility than previous generations, they too will become less willing or capable to drive themselves, or can no longer afford to own a car on a fixed income.

- ♦ Similarly, **individuals with a disability** may experience mobility challenges that affect, or even impede, their access to education, employment opportunities, and particularly to essential services. Although the Americans with Disabilities Act (ADA) has been in place for decades, certain ADA requirements present only a minimum threshold. Conversion or new construction of compliant infrastructure is costly and accomplished slowly. As a result, the gaps in accessibility remain omnipresent.



- ♦ Another concern is that wealth and poverty are not equally distributed throughout the Walla Walla Valley. In general, the



biggest draw on household finances, right after housing, is the cost of transportation. This puts a tremendous strain on budgets of **low-income households**, for whom vehicle ownership may therefore be completely out of reach.

- ♦ In addition to special transportation needs tied to age, disabilities, or income, **individuals with Limited English Proficiency** (LEP) may face difficulties in gaining access to information and resources. This can prevent them from utilizing existing transportation options, which in turn likely affects their ability to access to education, employment, and essential services.

We need age-, ability-, income-, and user-friendly transportation options.

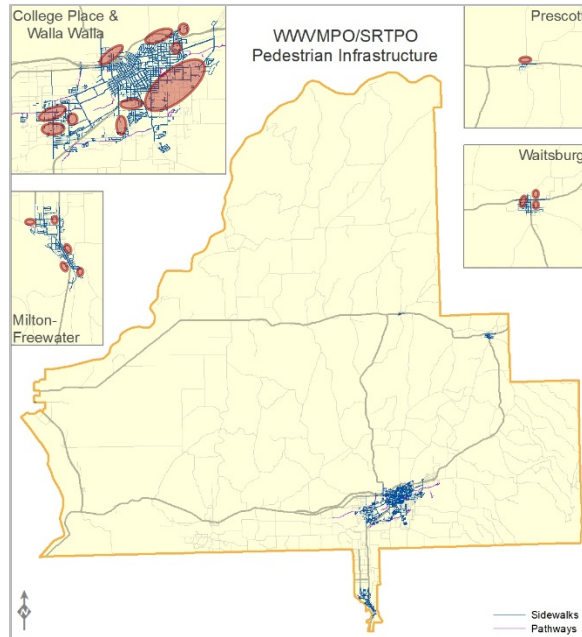
^f American Public Health Association (2010), The Hidden Health Costs... - https://www.apha.org/-/media/files/pdf/factsheets/hidden_health_costs_transportation_background.ashx

Walk, Bike, and Roll

Active transportation modes – including walking, biking, and rolling (e.g., scooter, skateboard, wheelchair) – are indispensable parts of Walla Walla Valley's transportation system. These modes provide mobility options that are beneficial to individual, community, and environmental health, in a time when society at large is struggling with climate change and increased mortality due to sedentary lifestyles.

Walking represents the **first and last segment** of every trip for every transportation user, and sidewalks and paved pathways are the primary pedestrian facilities in Walla Walla Valley communities:

- ◆ Since 2016, an additional 2 miles of sidewalks were built for a total of 312 miles.
- ◆ Walla Walla Valley communities still lack sidewalks along many miles of city roads. Select areas with substantial gaps are highlighted in the map.

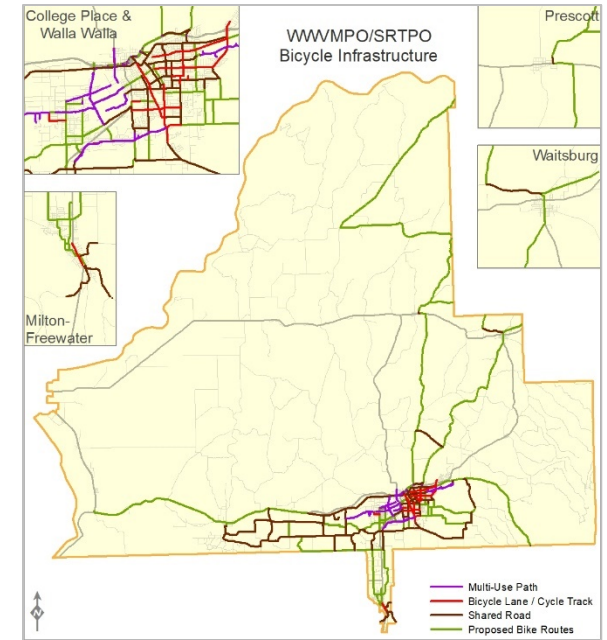


The region has also completed a location inventory of its sidewalks and pathways, partly building on work done by the City of Walla Walla, and partly accomplished through the [Blue Mountain Region Trails](#) (BMRT) planning effort. Although the location of all pedestrian elements is now catalogued, for a large number of facilities the condition is still unknown.

It is important to remember that a single missing ADA curb ramp is an insurmountable barrier for someone who depends on a wheelchair.

In the Walla Walla Valley, three different types of bicycle infrastructure play a prominent role – off-road multi-use pathways, dedicated bike lanes or cycle tracks, and routes shared with traffic.

- ◆ Since 2016, 2.8 miles of new bike lanes and 2.1 miles of new multi-use pathways have been built for a total of 41 miles in addition to the 103 miles of shared bike routes.
- ◆ As part of the BMRT effort, important inter-community connections, accounting for an additional 275 miles, have been identified. These higher-level regional connections are highlighted in the map.

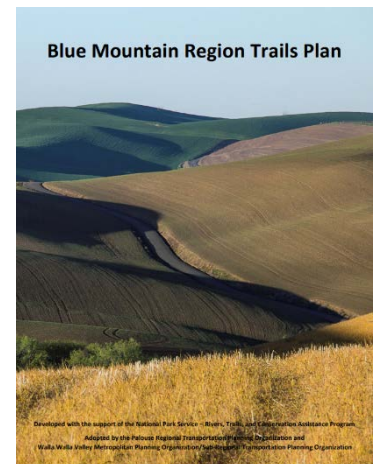


The majority of BMRT walking and biking, regional community connections do not have dedicated funding, and local entities must pursue grant opportunities to move the implementation forward.

Challenges and Opportunities

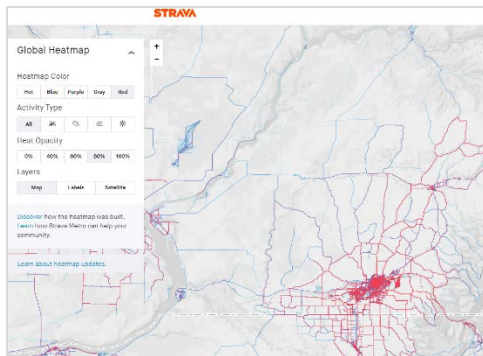
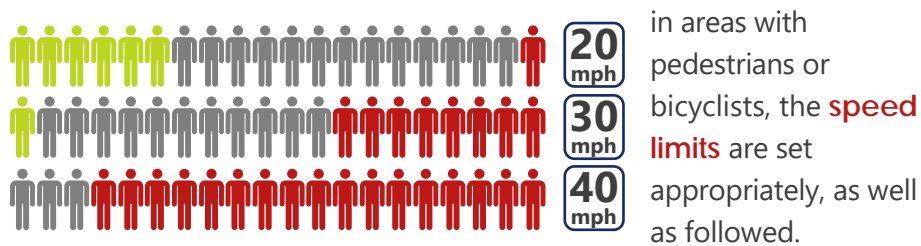
Pedestrians and bicyclists are considered vulnerable transportation users and accounted for 8 of the 26 fatalities during the most recent five-year period.

During that timeframe, 67 crashes involved pedestrians and resulted in 60 injuries and 6 fatalities; 55 crashes involved bicyclists and



resulted in 49 injuries and 2 fatalities. Based on those Walla Walla Valley-specific records, the fatality risk for bicyclists and pedestrians involved in a **traffic crash** is 10 and 24 times higher, respectively, than the risk for drivers.

Motor vehicle speeds are a contributing factor to the severe outcomes for pedestrians and bicyclists. National research⁹ has shown that if a pedestrian is hit by a vehicle traveling 20 mph, the person has a 5% likelihood of being killed and a 65% chance of an injury; at 40 mph the fatality rate rises to 85%. Even at lower speeds, older adults, aged 65 years or more, have a fatality risk almost twice as high as the rate for a person aged 25 to 44. Literally, lives can be saved by making sure that



The Walla Walla Valley has very limited **coverage of active transportation counts**. To address the lack of data, the WWVMPO/SRTPO has recently become a local government partner with **Strava|Metro**, a ride/run/walk-tracking application provider,

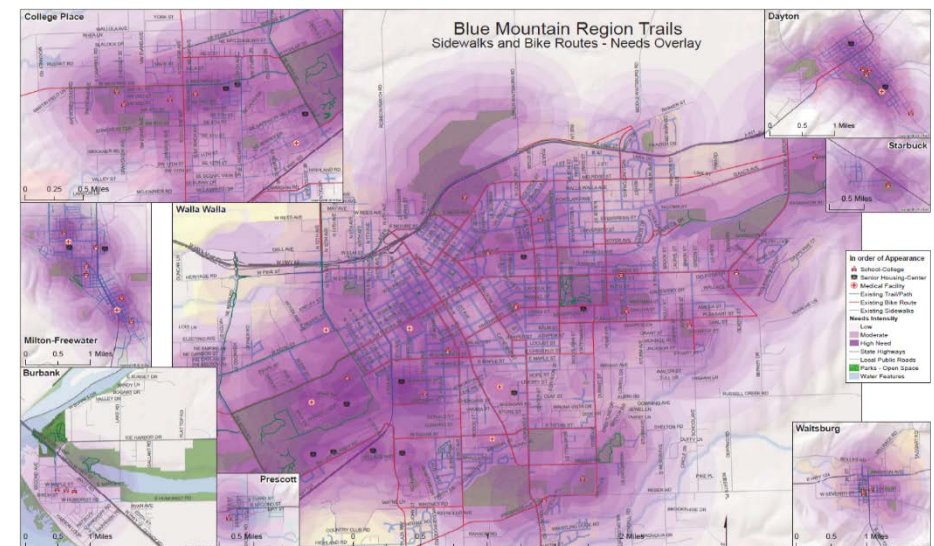
who collects human-powered transport information, aggregates, de-identifies, and contextualizes the data, and then shares it with local governments for planning purposes. The image above is an example of a Strava "Heatmap", showing pedestrian and bicyclist activity.

Active transportation facilities that are accessible, direct, and connected have been shown to improve safety for everyone using the roadway system, enhance economic vitality, and boost overall quality of life.

Walking, biking, or rolling is not necessarily stopped, but may be deterred by poor or missing infrastructure. Gaps in the existing network and a lack of connectivity result in longer, indirect travel between destinations, or lead to potentially unsafe situations.

Knowing of the considerable gaps in the active transportation network, the region developed a **location-based needs** assessment that takes into account overlapping proximity to senior housing, medical facilities, schools and higher education facilities, parks and green spaces, trails, "Main Streets" and downtown areas, public transit, and income.

In order to help differentiate the many needs, BMRT public workshop participants completed a prioritization exercise and collectively ranked **proximity to trails** as the highest priority, followed by a very close grouping of **schools, main streets, and parks**.



⁹ FHWA (2010), Pedestrian Safety Strategic Plan: Background Report - https://safety.fhwa.dot.gov/ped_bike/pssp/background/psafety.cfm and National Highway Traffic Safety Administration (NHTSA) (1999), Literature Review on Vehicle... - <https://one.nhtsa.gov/people/injury/research/pub/hs809012.html>

The WWVMPO/SRTPO suggests that the assessment of active transportation elements also account for **condition- and context-based** level of service (LOS) indicators:

Sidewalk LOS Metrics

- ◆ Width and ADA compliance
- ◆ Route directness to activity centers
- ◆ Quality
 - ◆ Surface conditions and drainage
 - ◆ Vertical clearance
 - ◆ Horizontal clearance
 - ◆ Obstructions, permanent or temporary
- ◆ Safety and Security
 - ◆ Lighting
 - ◆ Activity levels
 - ◆ Window coverage
 - ◆ Bike racks
 - ◆ Driveway or alley access conflicts
- ◆ Roadway crossings
 - ◆ Quality and frequency
 - ◆ Crossing width and angle
 - ◆ Signal wait time, detection, or activation
 - ◆ Length of clearance interval
 - ◆ Sight distance and visibility
 - ◆ Location of crossing in relation to intersection
 - ◆ "Right on Red" policies
- ◆ Railroad Crossing
 - ◆ Crossing angle and surface
 - ◆ Warning signage
 - ◆ Flange opening or rubber filler

- ◆ Traffic stress
 - ◆ Lack of or insufficient width of buffer
 - ◆ Traffic speed
 - ◆ Traffic volume
 - ◆ Traffic mix, presence of freight trucks
 - ◆ Pinch points on bridges
- ◆ Comfort features
 - ◆ Street calming and bulb-outs
 - ◆ Aesthetics, comfort, and rest areas
 - ◆ Wayfinding signage
 - ◆ Transit access

PLUS... Additional Metrics for Multi-Use Off-Road Pathways

- ◆ Degree of separation from roadway
- ◆ Quality
 - ◆ Gentle grade
 - ◆ Modal mix (walk, bike, roll)
 - ◆ Width in line with modal mix
 - ◆ Design speed in line with modal mix
- ◆ Safety
 - ◆ Horizontal clear zone, curve radii, and sight distance
 - ◆ Lane markings to indicate direction

LOS Metrics for Bike Lanes

- ◆ Lane width and position
- ◆ Route directness to activity centers
- ◆ Quality
 - ◆ Surface condition
 - ◆ Obstructions
 - ◆ Lane markings
 - ◆ Lighting

- ◆ Safety
 - ◆ On-street parking turnover and orientation
 - ◆ Driveway or alley access conflicts
- ◆ Intersections
 - ◆ Quality and frequency
 - ◆ Cycle box, detection, and signal
 - ◆ Crossing width and clearance interval
 - ◆ Sight distance and visibility
- ◆ Railroad Crossing
 - ◆ Crossing angle and surface
 - ◆ Warning signage
 - ◆ Flange opening or rubber filler
- ◆ Traffic stress
 - ◆ Lack of or insufficient width of buffer
 - ◆ Traffic speed
 - ◆ Traffic volume
 - ◆ Traffic mix, presence of freight trucks
 - ◆ Pinch points on bridges
- ◆ Comfort features
 - ◆ Advisory signage for drivers
 - ◆ Wayfinding signage



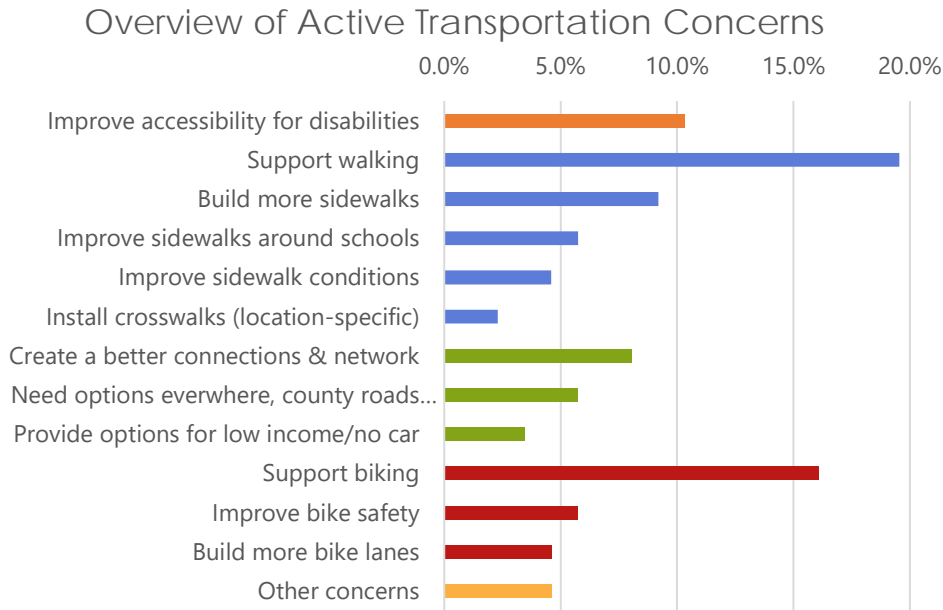
PLUS... Additional Metrics for Shared Bike Routes Specifically

- ◆ Shoulder width, surface quality, and clear zone



As previously mentioned, this assessment data has not yet been collected for the entire region. However, integrated with the location inventory, a complete understanding of the condition and context for all elements of active transportation will allow the WWVMPO/SRTPO and its member entities to better formulate needed investments, for which much-needed funding will have to be pursued.

The need for such investments was also clearly articulated by the public during the 2045 Plan outreach, where primary active transportation concerns accounted for well over 40% of all comments:



Public Transit

The critical mobility needs of older adults, children and youth, persons with disabilities, minority populations, and low-income residents or those without a private automobile must often be met by public transit services. As a very important component of the overall transportation system, these services focus on improving accessibility and provide vital mobility options for the Walla Walla Valley and its residents.

In 2019, a wide variety of traditional and expanded public transit services were offered within the region.

- ◆ Traditional **fixed-route** transit service is operated with fully accessible vehicles along a prescribed route and according to a fixed schedule. Most of us will associate buses with this type of service.



- ◆ Alongside fixed-route service, providers also offer **Dial-a-Ride** or paratransit (a demand-response service), which uses lift-equipped mini-buses or taxis to transport people with mobility limitations, if these limitations prevent them from using the regular fixed-route service.



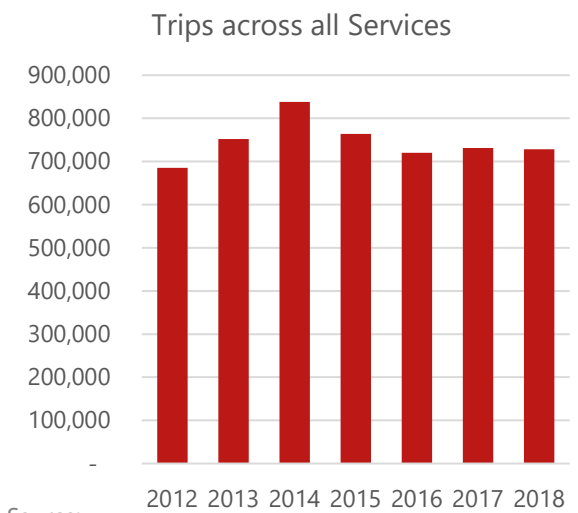
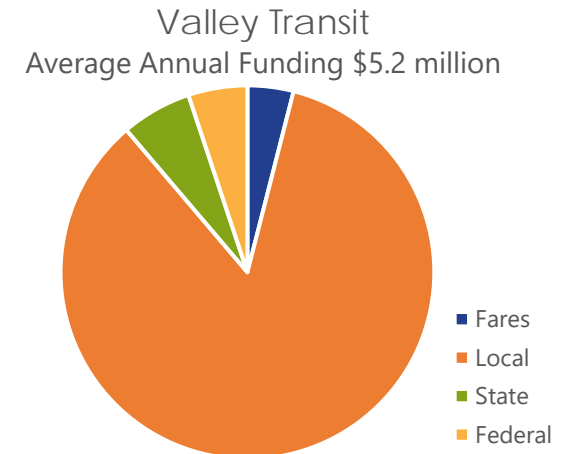
Demand-response service encompasses a wide variety of public transit offerings, where transportation is provided in response to a request from passengers. Not operated along a fixed route, transit vehicles are dispatched on request to pick up passengers and take them to their desired destination.

- ◆ **Vanpools** (also a demand-response service) are designed for people who need to go longer distances and are interested in sharing a ride with others. A public transit provider may lease a passenger van to a rideshare group, as long as the commute either begins or ends in the provider's service area.
- ◆ Similar but distinct from vanpools, ride-sharing commuters may use their own vehicles as part of a **carpool**. The initial carpool formation may, or may not, be facilitated by a public transit provider.
- ◆ **Route deviation**, flex routes, or deviated fixed routes have a regular route, but may deviate on request or by prior reservation, which is useful in rural areas or during off-peak hours.

Within the Walla Walla Valley region, a meaningful variety of these public transit

services is provided by Valley Transit and Milton-Freewater Public Transportation.

- ◆ **Valley Transit** is a board-governed, municipal corporation and its services are funded through state and federal grants, as well as a local sales tax tied to its Public Transportation Benefit Area.

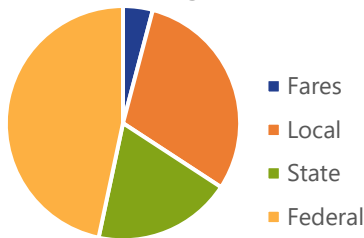


Source:
NTD 2014-2018

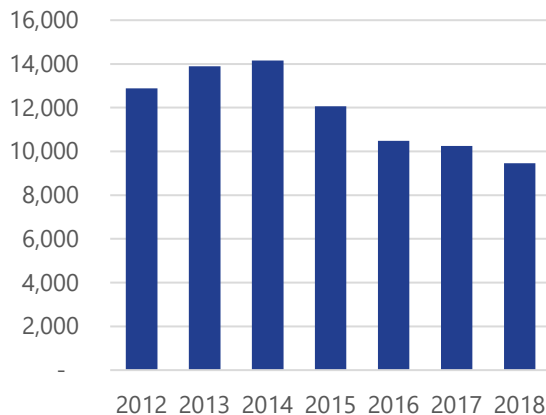


- ◆ **Milton-Freewater Public Transportation** is a contracted service, paid for by the City of Milton-Freewater and funded through a local option tax, as well as a variety of state and federal sources.

Milton Freewater
Public Transportation
Average Annual Funding \$0.2 million



Trips across all Services



Source:
NTD 2014-2018

Several additional public transit providers headquartered outside of the Walla Walla Valley make frequent trips to the region and, through shared transfer locations, allow public transit riders to connect between local and regional intercity routes and systems. Both local and intercity transit providers participate in the [itransitNW](#) online, real-time bus info and trip planning tool, which assists patrons in finding available transit options.

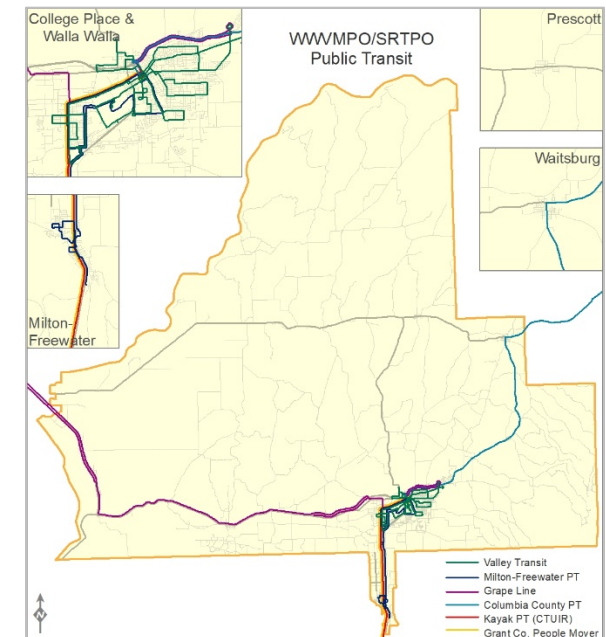
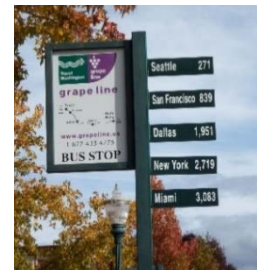


- ◆ The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) operates **Kayak Public Transit**, which offers several fare-free commuter routes in northeast Oregon and one in southeast Washington.
- ◆ Based in the neighboring City of Dayton, **Columbia County Public Transportation** provides demand-response service to all Columbia County residents, as well as Waitsburg and Dixie passengers in route to Walla Walla.
- ◆ Located in John Day, Oregon, the **Grant County People Mover** offers demand-response service, which also includes a once-weekly round-trip between Prairie City, Monument, and Walla Walla.
- ◆ The **Grape Line** is a contracted service managed by WSDOT. In response to the

shutdown of Greyhound's direct route to Walla Walla, the Grape Line connects the region to the Tri-Cities' Ben Franklin Transit, Airport, Amtrak, and Greyhound services.



Once a connection has been made to a regional intercity system, passengers have access to additional transportation service providers, such as Amtrak and Greyhound, which offer nationwide destinations.



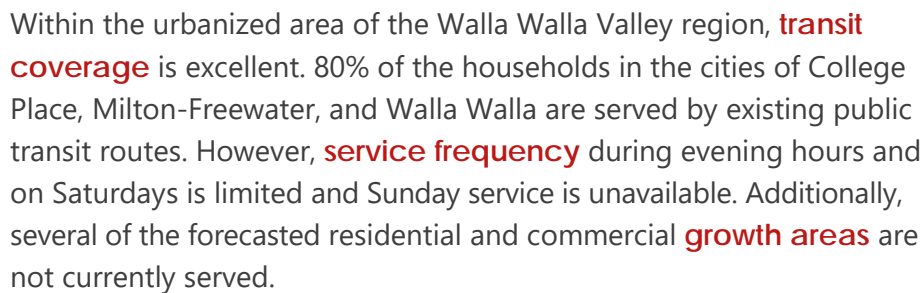
The following table offers an overview of all services provided to Walla Walla Valley residents by both in- and out-of-region public transit providers:

<i>Agency & Service Area</i>	<i>Service Type</i>	<i>Service Days</i>	<i>Service Hours</i>	<i>Trips</i>	<i>Vehicle Miles</i>	<i>Vehicle Hours</i>	<i>Vehicles at Max. Service</i>	<i>Operating Budget</i>
Valley Transit <i>Walla Walla College Place</i>	Local Fixed-Route	Weekday	6:15 am - 5:45 pm	676,789	344,498	28,118	11	\$3,572,650
	Flex Routes & Connector Shuttle	Weekday	5:50 pm - 9:10 pm	44,100	141,394	13,584	8	\$1,577,646
		Saturday	10:45 am - 6:10 pm					
	Dial-a-Ride	Weekdays	6:15 am - 5:45 pm					
	Job Access	Daily	5:00 am - 11:30 pm	7,545	63,320	1,477	3	\$147,866
	Vanpool	Daily	Varies					
Milton-Freewater Public Transportation <i>Milton-Freewater College Place Walla Walla</i>	Intercity Fixed-Route	Weekday	7:50 am - 2:40 pm	4,926	21,662	1,536	1	\$123,393
	Demand Response Taxi	Weekday	7:00 am - 6:00 pm	4,532	7,666	539	1	\$101,709
		Saturday	6:00 pm					
Kayak Public Transit <i>Morrow, Umatilla, and Union Counties Walla Walla</i>	Local Fixed-Route	Weekday	7:00 am - 6:05 pm	24,485	92,832	5,256	3	\$450,702
	Intercity Fixed-Route	Weekday Saturday	4:30 am - 8:40 pm	48,486	326,123	9,762	5	\$964,637
Columbia County Public Transportation <i>Columbia County Walla Walla</i>	Demand Response	Weekday	7:00 am - 7:00 pm	44,471	218,910	9,843	11	\$1,282,815
	Vanpool	Weekday	Varies	9,359	76,881	1,900	5	\$38,682
Grant County People Mover <i>Grant and Umatilla Counties Walla Walla</i>	Demand Response	Weekdays	7:00 am - 6:00 pm	31,788	140,836	8,269	6	\$309,028
		Saturdays	9:00 am - 4:00 pm					
Grape Line <i>Walla Walla Valley and Tri-Cities Area</i>	Intercity Fixed-Route	Every Day	6:15 am - 10:25 pm	5,964	119,130	n/a	1	\$317,152

Source: WWVMPO/SRTPO CPT-HSTP transit provider data; National Transit Database (NTD) 2018 data - <https://www.transit.dot.gov/ntd/transit-agency-profiles>; and WSDOT 2018 data

One service not included in the table, but serving a particularly important need – specifically, Non-Emergency Medical Transport (NEMT) – is provided by People for People, headquartered in Yakima. Walla Walla County falls within their 12-county area for NEMT services.

There is a marked need for investments in transportation alternatives that do not require private vehicles, so as to bolster **universal access to essential services** as well as to promote **mobility** for children and youth, older adults, persons with disabilities, and individuals whose income does not support car ownership. Public transit services are a particularly suitable alternative.



Who and What is Moving

In addition to the concerns already raised, the various outreach activities with transportation service providers, stakeholders, and the public in support of the 2019 development of the Coordinated Public Transit - Human Services Transportation Plan and the Rural Mobility Strategic Plan also brought to light the following additional issues:



- ◆ There is significant need for increased **coordination** among current public transit services in order to reduce duplication and maximize timing and integration on shared routes.
- ◆ Substantial **efficiencies** for both public transit providers and their patrons may be achieved through seamless transfers, fare integration, coordinated service planning and, particularly, collective marketing.

Valley Transit is currently undertaking a **Comprehensive Operational Analysis**, which will study all of Valley Transit services and intermodal linkages. The recent changes in Valley Transit's service area are attributed to community growth, the relocation of existing ride-generators, and new major ride-generators, all of which have placed a greater emphasis on improving the provider's operational efficiency and effectiveness through informed system redesign.

Milton-Freewater Public Transportation is considering a similar type of assessment.



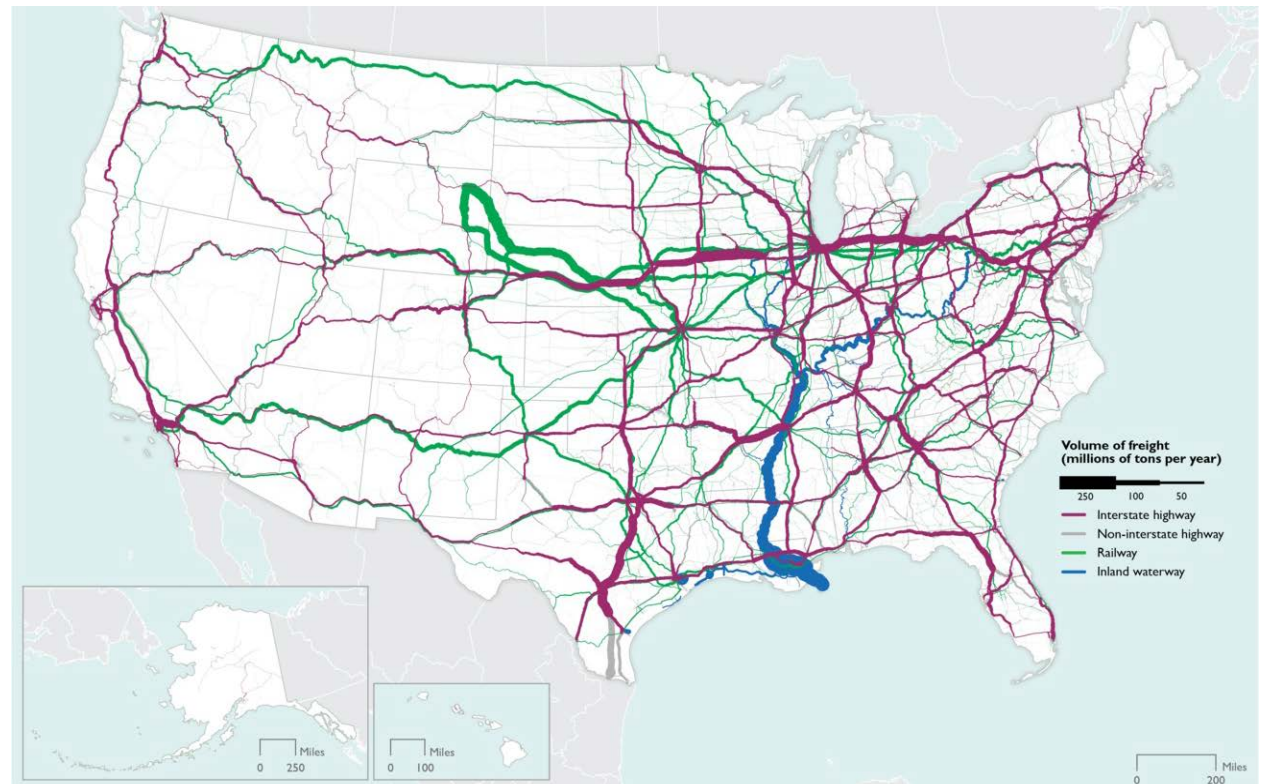
Freight and Interregional Passenger Transport

The Walla Walla Valley's connection to inter-regional, national, and international markets, as well as materials, is essential to the economic vitality of the region. Through the movement of freight – by air, pipeline, rail, truck, or barge – the region can export locally grown and manufactured goods, and import those items which are not produced nearby. Similarly, passenger movements to and from the Walla Walla Valley to interregional, national, or international destinations are also facilitated by a variety of modes.

The adequacy and connectivity of the multi-modal freight and passenger transportation networks significantly impacts the cost and speed of those movements.

Intermodal Freight

Freight movements affecting the Walla Walla Valley are not analyzed in a vacuum, as the larger statewide and national context directly impacts the number of trucks and trains on local roadways and tracks. The WWMPO/SRTPO uses the Freight Analysis Framework (FAF), now in its fourth iteration, since the nationwide information augments the limited local freight data and visualizes



Source: Bureau of Transportation Statistics (BTS) - <https://www.bts.gov/freight-flows-highway-railway-and-waterway-2017>

how the region is connected to the much larger network. The FAF data captures **inbound, outbound, and intraregional freight, as well as through movements** – shipments which neither start nor end within the Walla Walla Valley, but still affect the region's infrastructure capacity and condition.

The U.S. growth in population, households, employment, and commerce drives freight movements, and projected growth will result in even greater demand. Between 2010 and 2019, the U.S. population grew by just under 6%, while the U.S. economy, measured through its gross domestic product (GDP), increased by 20%. Employment has also recovered from the recession in the prior decade and, although foreign trade no longer seems to expand at the high rate shown previously, it is still outpacing the overall economy, having grown by 27.4%.

In line with this recent growth in population, GDP, and foreign trade, the FAF forecasts that

	U.S. Growth	2000	2010	2019	2000-2010 Growth/ Year	2010-2019 Growth/ Year
Population (thousands)		281,422	309,322	328,240	0.9%	0.7%
Households (thousands)		104,705	117,538	128,579	1.2%	1.0%
Median Household Income (2019 \$)		62,512	57,904	68,703	-0.8%	1.9%
Civilian Labor Force (thousands)		142,583	153,889	163,359	0.8%	0.7%
Employed (thousands)		136,891	139,064	157,538	0.2%	1.4%
Business Establishments (thousands)		7,070	7,397	7,912*	0.5%	0.8%
Gross Domestic Product millions, chained 2012 \$)		13,130,987	15,598,753	19,091,662	1.7%	2.3%
Foreign Trade (millions, \$)		2,535,613	4,247,727	5,633,389	5.3%	3.2%

Source: BTS - <https://www.bts.gov/economic-and-social-characteristics-us>; * denotes 2018 data

Bureau of Economic Analysis (BEA) - <https://www.bea.gov/data/intl-trade-investment/international-trade-goods-and-services>

Freight Tonnage	(⁰⁰⁰)	Truck	Pipeline	Rail	Water	Air (truck/air)	Multiple (mail)	Other / Unknown	Total
Oregon	2018	181,387	34,045	24,194	5,606	110	9,622	120	255,083
	2045	235,523	60,078	34,688	4,373	306	13,811	135	348,913
	Growth	29.8%	76.5%	43.4%	-22.0%	178.2%	43.5%	12.7%	36.8%
Washington	2018	287,834	56,148	57,525	15,034	192	25,731	1,517	443,981
	2045	464,071	61,672	68,440	33,094	3,947	39,033	12,029	682,285
	Growth	61.2%	9.8%	19.0%	120.1%	1951.6%	51.7%	693.2%	53.7%

Source: FAF 2018 and 2045 data - <https://faf.ornl.gov/fafweb/FUT.aspx>

domestic, imported, and exported tonnage will annually grow by 0.8, 2.5, and 2.7%, respectively between 2018 and 2045.^h

Based on the same FAF data, state-specific freight tonnage for Oregon and Washington is predicted to grow by 1.2 and 1.6% per year through 2045, resulting in 36.8% more freight for Oregon and 53.7% more for Washington.

^h FAF - <https://ops.fhwa.dot.gov/publications/fhwahop16043/fhwahop16043.pdf>

Even though statewide truck freight will not grow at the highest rate through 2045, this mode will nonetheless retain its top spot – with a share of 68% of all tonnage moved in either state. The largest growth rate is forecast for air (truck/air) shipments; albeit, they account for less than 0.4% across both states, although their proportion of freight value is estimated to grow to 12.2%.

More localized freight data is sparse and the WWVMPO/SRTPO relies on its member entities to share what information may be available. In taking a closer look at **major employers** and **freight generators** within the region, the mix of commodities moved to market becomes much more apparent.

According to the latest data compiled by the Port of Walla Walla, some of the largest employers in the region are found in agriculture and manufacturing.

- ◆ Broetje Orchards – 2,500 employees
- ◆ Tyson Fresh Meats – 1,460
- ◆ Packing Corporation of America – 456
- ◆ Key Technology – 405
- ◆ Nelson Irrigation – 190
- ◆ J. R. Simplot Company – 142

Agricultural products play a significant role, as Umatilla and Walla Walla Counties combined have over 2,600 farms, which annually produce crops and livestock worth \$901 million.⁸⁶ Nearby food processing



includes apple production, custom meat facilities, and wineries, all of which provide additional annual sales worth billions. While the Walla Walla Valley agriculture is chiefly identified with wheat, wine, onions, and fruit orchards, the region also produces a significant amount of alfalfa and alfalfa seeds.

Truck, rail, barge, and air transportation is readily available to deliver local produce and products to U.S. and international markets.

Route	Segment	2019		
		Tonnage/Year	Trucks/Day	Truck %
US 12	Franklin Co. line to US 730	15,760,000	2,700	17.9%
US 730	Oregon State Line to US 12 (Wallula)	10,590,000	1,600	49.0%
Myra Rd	SR 125 Spur to SR 125	6,404,750	1,802	(n/a)
US 12	US 730 to SR 125 Spur	6,020,000	1,200	14.3%
SR 125	Oregon State Line to Myra Rd	3,960,000	820	5.1%
Pine St	SR 125 to 2nd Ave	3,651,000	1,237	(n/a)
SR 125	Myra Rd to SR 125 Spur	3,350,000	710	5.2%
US 12	SR 125 Spur to Columbia Co. line	2,880,000	560	16.5%
SR 124	US 12 (Burbank) to US 12 (Waitsburg)	2,430,000	460	17.8%
730 Spur	Wallula Spur	1,970,000	320	26.1%

Source: WSDOT - <https://wsdot.wa.gov/sites/default/files/2006/02/13/washington-freight-and-goods-transportation-system-2019.pdf>

As expected, in the Walla Walla Valley a large portion of freight transportation is accomplished by **truck**, which is consistent with statewide data. As can be seen in the table, several state highways and local thoroughfares carry a significant amount of annual tonnage and the commercial vehicles represent a considerable portion of daily traffic.





Rail service in the region is provided through a combination of **Class I and Short Line** railroads. The Union Pacific Railroad (UPRR) owns and operates tracks that connect Burbank to Lyons Ferry, and tie into the nationwide UPRR network beyond. From the Attalia junction near Wallula, the Burlington Northern Santa Fe (BNSF) railroad offers connectivity to the Tri-Cities area and the remainder of the nationwide BNSF network. On tracks owned by the Port of Columbia, a local firm offers freight service from Dayton in neighboring Columbia County through Walla Walla and Milton-Freewater to Weston in Oregon.



An essential component of the wheat distribution system in the region is the **Grain Train**, a partnership between WSDOT and the three local ports.



Source: WSDOT - <https://wsdot.wa.gov/sites/default/files/2009/05/08/Freight-Rail-By-Owner-Map.pdf>

Within the Walla Walla Valley, the wheat is shipped by rail, truck, and barge. Established in the 1990s and jointly managed by WSDOT and the Ports of Moses Lake, Walla Walla, and Whitman County, the Grain Train carries wheat from eastern Washington areas to deep-water ports along the Columbia River. With 116 railcars, the Grain Train serves more than 2,500 cooperative members, including Walla Walla Valley farmers and, on average, it shuttles between 1,500 and 2,000 loads annually to barge ports or even larger trains.⁸⁷

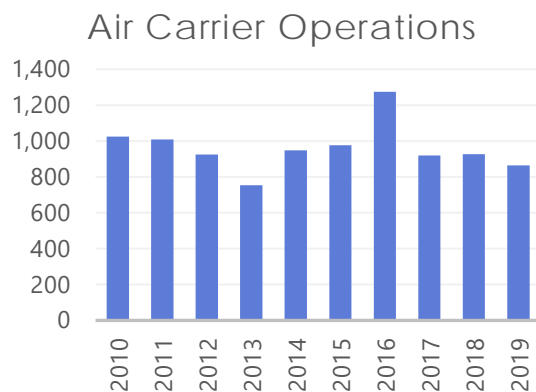


The Columbia and Snake Rivers are the principal **waterways** in the Walla Walla Valley and allow for the transport of bulk commodities on barges. Barging is one of the least-cost, most fuel-efficient modes of freight transportation.

Two main commodities moved out of the Walla Walla Valley are agricultural and paper products. Both rivers are included in WSDOT's designated waterway Freight and Goods Transportation System (FGTS). In 2019, the Columbia and Snake Rivers carried 5.0 million and 3.5 million tons of freight, respectively. Proper maintenance of the channels, locks, and dams ensures the continued viability of this system.



The Walla Walla Regional Airport (WWAR) accommodates both commercial air passenger as well as **air carrier** service.

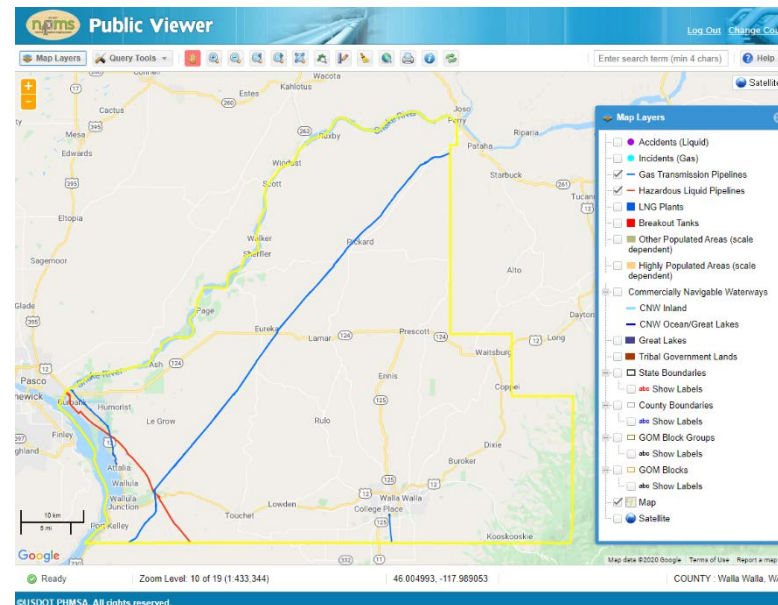


Source: WWAR - <http://wallawallaairport.com/airport-information/aviation-statistics>

In general, only high-value and time-sensitive goods are moved by air freight based on the relatively high transportation cost.

Over the life of the 2045 Plan, the tonnage and value of air freight is forecast to increase significantly. At this time, the air cargo capacity appears to be limited by the number of service providers. Nonetheless, based on the anticipated growth, air carrier operations at the Walla Walla Regional Airport should be monitored closely.

Within the region, there are two heliports and six additional airports, most of which are in private hands. Martin Field Airport, located west of College Place, is a privately owned community airport, which reported just under 7,900 local operations in 2019.⁸⁸



Pipelines represent a highly efficient method of transporting natural gas or petroleum products, but must be protected from damage or intentional sabotage.

Four **pipeline** operators are active across the Walla Walla Valley.

- ◆ Cascade Natural Gas
- ◆ Gas Transmission Northwest
- ◆ Northwest Pipeline (gas)
- ◆ Tesoro Logistics Northwest Pipeline (liquid)

Pipelines must be regularly inspected for public safety purposes, as they may carry flammable or hazardous materials. Within the region, no pipeline failures occurred and no enforcement actions were taken against any of the pipeline operators within the last ten years.⁸⁹ Exact freight volumes are unknown.

Interregional Passenger Transport

Within the Walla Walla Valley, interregional passenger transport is limited given the relatively small population size of the WWVMPO/SRTPO area.

Immediate interregional connections were already discussed within the earlier “Public Transit” section:

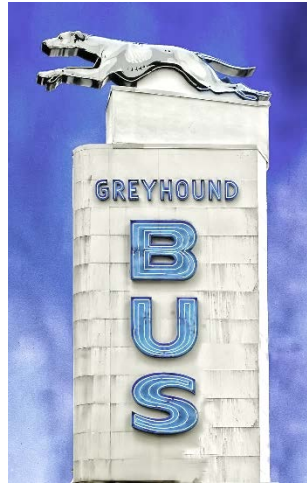
- ◆ Kayak Public Transit offers connections to Pendleton, La Grande, and Hermiston.
- ◆ Columbia County Public Transportation connects Walla Walla to Dayton and the Garfield County Transportation Service.
- ◆ The Grant County People Mover extends service to Prairie City and John Day.
- ◆ The Grape Line offers direct connectivity to Ben Franklin Transit, Amtrak, Greyhound, and the Tri-Cities Airport.

These regional transportation providers allow connections to destinations elsewhere in the state or nation.



Once in the Tri-Cities area, passengers can tap into a nationwide network of passenger rail and intercity bus service.

Via WSDOT’s Grape Line, passengers may access the **Amtrak** station, located at the Pasco Intermodal Station, from where the *Empire Builder* offers once-daily service to Portland in one direction and Spokane, Grand Forks, Fargo, Minneapolis, Milwaukee, and Chicago in the other direction.



The **Greyhound** station is also located at the Pasco Intermodal Station. There, direct connections are provided to Spokane, Seattle, Boise, and Portland, from which additional destinations can be accessed, including Canada and Mexico.

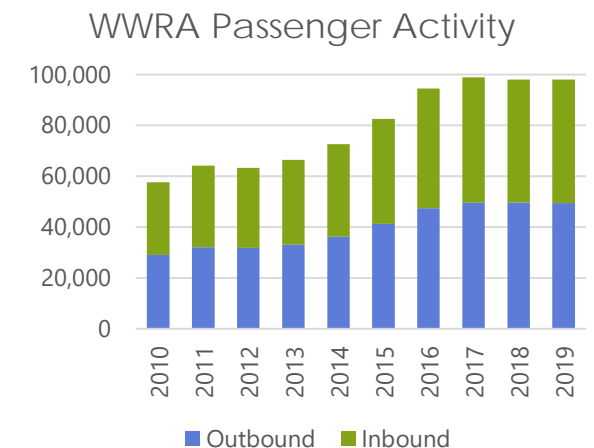
In addition to air carrier operations, the **Walla Walla Regional Airport (WWRA)** provides multiple daily, commercial flights directly to the Seattle-Tacoma International Airport (SEA), where passengers are able to connect to nationwide and international destinations.

Due to its location on the periphery of the urbanized area, ground access to the airport relies heavily on private and for-hire automobiles. Valley Transit also offers service to the airport terminal on request,

although the transit and flight schedules are not coordinated.



Over the last ten years, the number of boarding and alighting air passengers have steadily increased.

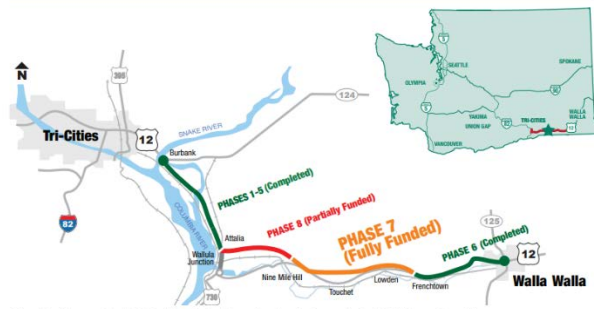


Source: WWRA - <http://wallawallaairport.com/airport-information/aviation-statistics>

Challenges and Opportunities

The Walla Walla Valley does not have a direct Interstate connection and therefore, the state highway system represents the lifeline for interregional transport as well as the majority of freight movements.

Four-laning US Highway 12 Phase 7 – Nine Mile Hill to Frenchtown Vicinity



Phase 7 builds upon the \$168.8 million the Legislature has already invested in the US Highway 12 corridor.

Source: WSDOT - <https://wsdot.wa.gov/sites/default/files/2018/03/15/US12Phase7folio.PDF>

Of particular importance to the region is **U.S. Highway 12**, which the WWVMO/ SRTPO and its member entities have identified as a high priority project, should additional funding become available.

Phase 7 of the U.S. 12 improvement is currently underway and will culminate in the completion of a directionally divided four-lane highway between Nine Mile Hill and Frenchtown.

Additional monies have already been programmed for the design and right-of-way acquisition associated with **Phase 8**, the final segment of the U.S. 12 improvement, which will implement the construction of a divided four-lane segment between Nine Mile Hill and Wallula.

Between 2010 and 2019, 6 fatality and 12 serious injury collisions occurred on the undivided two-lane stretch of U.S. 12 (Phase 8).

Progress along US Highway 12

Phase 1 – COMPLETED – July 2004	
Four-laning McNary Pool to Attalla	
Total Project Cost	\$11.2 million
Phase 2 – COMPLETED – November 2005	
Four-laning SR 124 to McNary Pool	
Total Project Cost	\$12.1 million
Phase 3 – COMPLETED – September 2007	
Four-laning Attalla Vicinity	
Total Project Cost	\$16.0 million
Phase 4 – COMPLETED – February 2010	
Wallula Junction to Walla Walla Corridor Study	
Total Project Cost	\$5.4 million
Phase 5 – COMPLETED – February 2010	
Attalla Vicinity to US 730 – Preliminary Design Only	
Total Project Cost	\$0.8 million
Phase 6 – COMPLETED – July 2010	
Four-laning Frenchtown Vicinity to Walla Walla	
Total Project Cost	\$51.9 million
US 12/SR 124 Intersection – COMPLETED May 2012	
Build new interchange at US 12 and SR 124	
Build new overpass at Humorist Road	
Total Project Cost	\$21.3 million

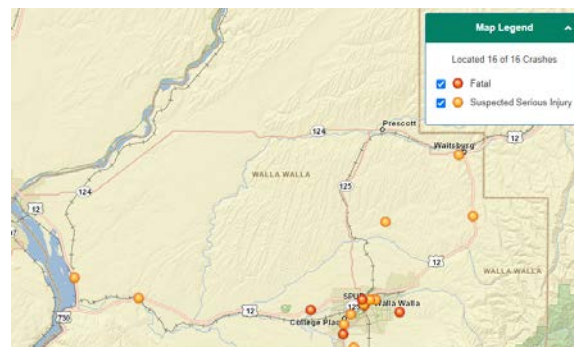
Finish what we started

Phase 7 – FULLY FUNDED	
Nine Mile Hill to Frenchtown Vicinity	
Estimated Project Cost	\$134.8 million
(Funded by 2015 Connecting Washington Transportation Funding Package)	
Pre-existing Funds	\$5.3 million
Estimated Total Project Cost	\$140.1 million
Phase 8 – Design and Right-of-Way FUNDED	
Wallula to Nine Mile Hill	
Design and Right-of-Way – Funded	\$34.0 million
(Funded by 2015 Connecting Washington Transportation Funding Package)	
Construction – Unfunded	\$161.0 million
Estimated Total Project Cost	\$195.0 million



Design visualization of Touchet North Road and the Touchet associated roadway.

Phase 8 is not only paramount to the region's economic vitality, but it is also set to replace the current two-lane section of U.S. 12 that has a history of severe crashes.



State Route 125 is part of the WSDOT's designated Freight and Goods Transportation System. On average, it carries over 500 trucks daily through one of the busiest commercial corridors within the City of Walla Walla. The parallel Myra Road, built with fewer driveway cuts and intersections, has already absorbed a large number of trucks since the roadway was completed

several years ago. Improvements to the identification and signage of primary truck freight routes may bring additional relief, particularly in light of the predicted growth in truck freight volumes.



The Walla Walla Valley is fortunate to be the home of a regional airport with daily commercial passenger flights. However, the **cost of airport operations** represents a financial burden, especially considering the required participation in the Federal Aviation Administration (FAA) control tower-cost sharing program. Furthermore, the long-term **viability of commercial passenger operations** must be supported through maintaining and growing usage volumes, which is key to retaining the service currently provided by Alaska Airlines.

In light of the forecasted 50% growth in truck freight volumes, the continued operation of the **Grain Train** is paramount. In its most recent strategic plan for the program, WSDOT recommended that the number of cars in the fleet be increased to support unit trains of sufficient lengths to secure more favorable rates.

Roadway System

The roadway network is an integral part of the community. It not only provides for the movement of automobiles, but regional roadways also offer right-of-way and infrastructure for public transit vehicles, pedestrians, and bicyclists. As such, roadways remain the primary component in addressing the region's transportation needs.

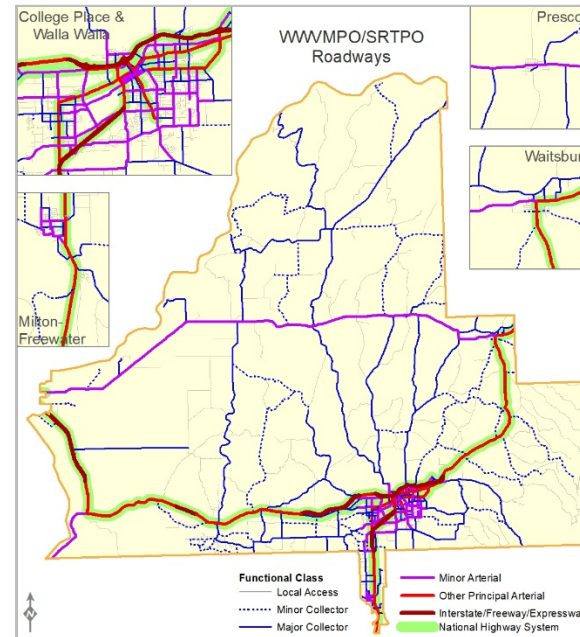
1,354 miles of public roadways exist within the Walla Walla Valley region, which is comprised of most of Walla Walla County and the northeast portion of Umatilla County. Limited financial resources dictate that the 2045 Plan focus on regionally significant highways, county roads, and city streets.

For the purpose of the 2045 Plan, the transportation network consisting of – public transit, pedestrian, and bicycle infrastructure, as well as navigable waterways, public use airports, railroads, and those public roadways that have a federal functional classification - are deemed to be regionally significant.

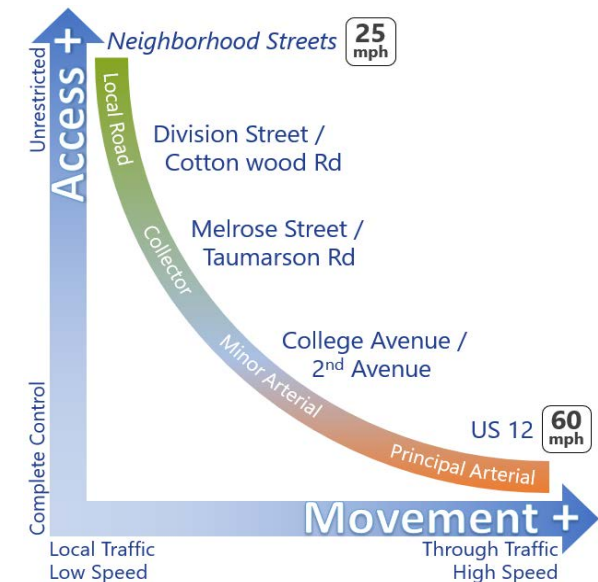
Out of all the publicly maintained roadways, 154 miles are U.S. and state highways. Among the remaining 1,199 miles of public roads, only 538 miles satisfy the federal functional classification requirement, which also makes these city and county roads eligible to receive federal transportation funding.

Urban Area Classification	Distance Served	Speed Limit	Access Points	Traffic Volume	Lane Number	Significance
Arterial	Long	High	Minimal	High	Many	Regional
Collector	Medium	Medium	Some	Medium	Some	Subarea
Local	Short	Low	Many	Low	Minimal	Local

Roadways serve two primary functions: **access** to specific locations and **movement** tied to distance, volume, and speed. The map shows regional roadways by functional class, along with the routes that are part of the National Highway System (NHS).



The NHS includes Interstates, the Strategic Highway Network, and Major Intermodal Connectors, all of which support the nation's economy, defense, and mobility.



Due to their importance for produce and grain transport and thereby the region's economic vitality, select farm-to-market roads are included in the functional classification system, although they are unpaved and their **gravel surface** limits usability, dependent on weather conditions.



Infrastructure Condition

As previously described in the “Performance Targets” section of the “Goal-Driven and Performance-Based” chapter, the National Highway System route conditions are monitored as part of the process prescribed by 23 CFR 490.307.

In addition, the WWVMPO/SRTPO member entities are keeping track of how the pavements on non-NHS routes fare. A measure commonly used is the **Pavement Condition Index** (PCI) – a numerical rating based on the type and severity of surface distress observed.

- ◆ Cracking – transverse, longitudinal, or alligator
- ◆ Rut depth of the wheel path
- ◆ Patching
- ◆ Potholes
- ◆ Ride quality or roughness

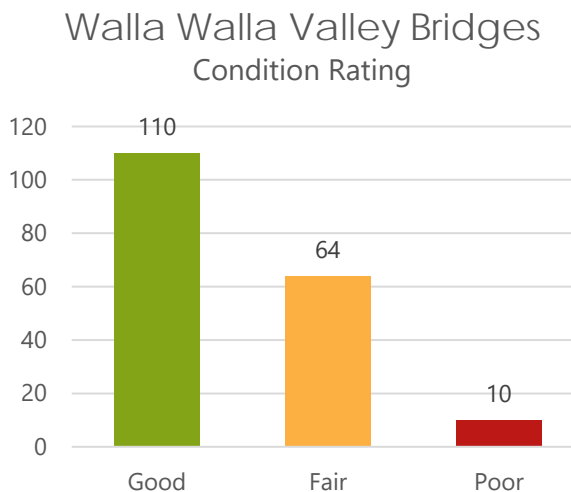
Regular monitoring is necessary to prevent deterioration to a level that would require costly rehabilitation or reconstruction.



The WWVMPO/SRTPO has not created a separate inventory and instead builds on the information compiled by its local agencies.

The WWVMPO/SRTPO and its member entities are dedicated to the preservation of the existing transportation network and therefore closely watch both pavement and bridge condition ratings.

The National Bridge Inventory lists 184 bridges for the Walla Walla Valley.



Source: FHWA InfoBridge Analytics - <https://infobridge.fhwa.dot.gov/BarStackChart>

60% of the region’s bridges are in good condition, even though 12% were built prior to 1920; 37% are more than 50 years old; and less than 5% have been replaced in the last decade.

WSDOT STATES THAT INSUFFICIENT INVESTMENTS IN PRESERVATION HAVE PUT THE SYSTEM ON A “PATH TO FAILURE”

According to WSDOT’s 2021-2023 Capital Improvement and Preservation Program, the current preservation backlog is approximately \$690 million per year - statewide.

This backlog affects every mode of transportation and, unaddressed, will result in deferred repairs that will incur much more expensive rehabilitation and reconstruction costs in the future.

Without the additional preservation funding, the following state assets in **the Walla Walla Valley region will be impacted:**

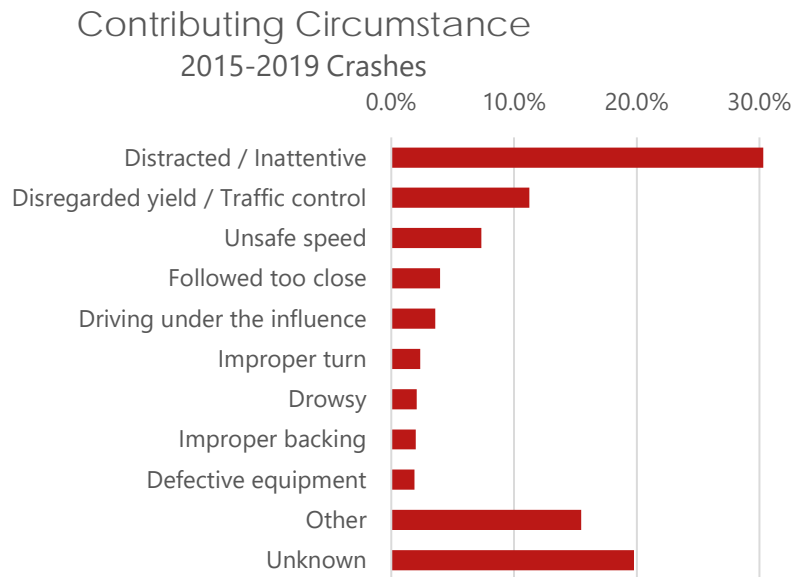
- Majority of state-owned freight routes
- Highways with speeds below 45 MPH
- Shoulder preservation projects, unless deemed necessary for safety
- Highway ramps

According to the latest data provided, the WSDOT facilities in the WWVMPO/SRTPO area need an annual investment of \$9.7 million. However, for the most recent 10-year period, approximately \$6 million have been programmed each year.

Traffic Safety

In the Oregon area of the WWVMPO/SRTPO, the most recent crash data covers the years 2014 to 2018. 289 collisions were recorded, which resulted in 243 injuries and 2 fatalities, including one pedestrian. Almost half of all crashes were caused by failure to yield (26%), unsafe speed (13.2%), and following too closely (10.0%).

Within the Washington portion, the most recent five years for which complete annual crash data is available is 2015 to 2019. During that time, a total of 4,653 collisions occurred, which caused a total of 1,190 injuries and 24 fatalities. The primary contributing cause for collisions is inattention and distraction (30.3%), followed by a disregard of traffic lights, stop signs,



Source: Crash Data – ODOT 2014-2018; WSDOT 2015-2019

and yields (11.3%) as well as speeding (7.3%). Almost half of all recorded collisions were caused by these behaviors.

The majority of crashes can be traced back to a combination of the following risk factors, which often overlap.

- ◆ Driver distraction, both from within and outside of the vehicle (38.6%)
- ◆ Related to an intersection (38.5%)
- ◆ Young driver (16 to 25 years) (35.1%)
- ◆ Lane departures and run-off-the road crashes (30.9% and 29.1%)
- ◆ Older driver (65+ years) (18.9%)
- ◆ Speeding (13.0%)
- ◆ Impaired driving, including alcohol and drugs (4.5%)

Travel Demand Forecast

The science behind predicting roadway traffic levels has matured tremendously since early computer models were first used in the 1960's. In general, a regional travel demand model (TDM) replicates roadway networks, captures driver and transit rider travel behavior, and uses algorithms calibrated to local conditions in order to analyze future roadway infrastructure needs. A regional TDM also allows for the analysis of

different capital improvement scenarios to assess how well they may address the forecasted demand.

The Walla Walla Valley's first TDM was developed in 2015. For the 2045 Plan, it was determined that the model should be updated to accommodate a much more fine-grained traffic analysis zone (TAZ) structure and also be expanded to cover the entirety of the agency's planning area.

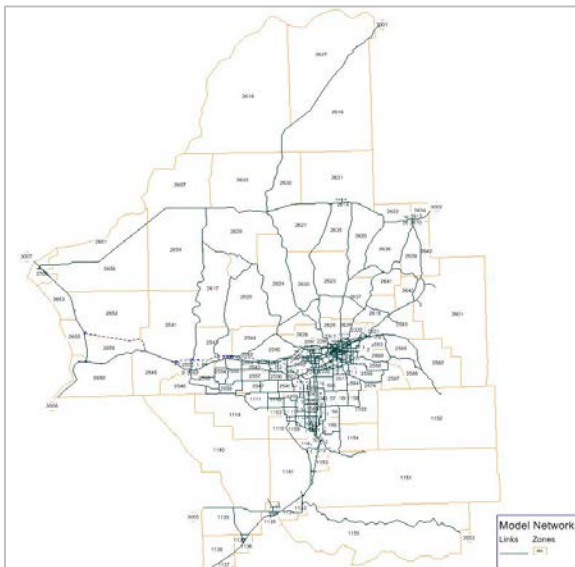
The WWVMPO/SRTPO TDM has a base year of 2019 and a forecast horizon year of 2045.

Using the supply and demand principle, the TDM requires input from multiple data sets.

- ◆ The **supply side** uses information on the existing roadway network and transit routes, which determine capacity, trip volume, and travel speed.
 - ◆ **Roadway** – Functional classification, number of lanes, and type of intersection control
 - ◆ **Transit** – Routes, service hours, and service frequencies
- ◆ The **demand side** is represented through various socioeconomic data sets.
 - ◆ **Population** – Number of people, location of households, and income
 - ◆ **Employment** – Number of workers by employment site and major sector

Currently, the WWVMPO/SRTPO's TDM lacks the structure as well as data needed to model pedestrian and bicycle travel. Future iterations of the TDM may become more sophisticated and allow for consideration of these active transportation modes.

WWVMPO/SRTPO agency and member entity staff collaboratively developed population and employment data, both for the **2019 base** and the **2045 forecast** year. All socio-economic and land use data was then aggregated into 489 TAZs, which were delineated to work hand-in-hand with 1,546 miles of the coded model network.



Interaction among TAZs occurs as each zone produces and attracts person trips. The population, household, and employment information assigned to each zone, determines the number of trips that are

produced and/or attracted. The generated trips are for various purposes, such as work, school, and more, and the number per household and breakout by purpose is specific to the region.

Built on a PT Visum software platform, the Walla Walla Valley TDM uses the typical four-step, gravity modeling process to determine the number of total trips, and which path and mode they are likely to take.

- ◆ **Trip Generation** – Households are the primary producer of trips and employment sites are the primary attractors. The productions and attractions are converted to vehicle trips that enter and leave each zone.
- ◆ **Trip Distribution** – Determining in which zone a trip might end, the trip distribution examines the attractiveness of zones based on proximity and travel time. The higher a zone's attractiveness, the larger the gravitational pull.
- ◆ **Mode Choice** – Several modes of transportation are offered within the TDM. The mode choice steps accounts for whether people drive alone, carpool, or use transit.
- ◆ **Assignment** – During the trip assignment step, it is determined which path each respective trip will take from its zone of origin to its destination.

Once the TDM produces ridership and traffic volumes, internal model rules are

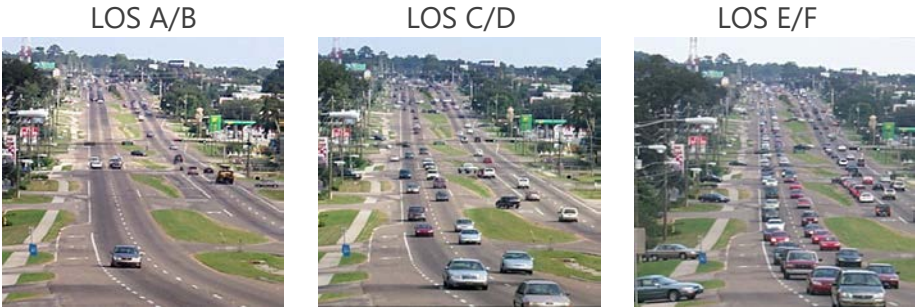
calibrated by adjusting factors and components until the TDM replicates known travel patterns. During the validation of the TDM, modeled transit usage and traffic volumes are compared to actual ridership and traffic counts. Once the modeled results match the traffic counts within an acceptable range of error, the model can then be used to test future year scenarios. Three distinct 2045 scenarios were analyzed.

- ◆ **Existing Plus Committed** – includes seven (7) capacity projects that are under construction or have committed funding
- ◆ **2045 Build** – encompasses 17 projects of the fiscally constrained 2045 Plan list that change network capacity
- ◆ **2045 Arterial Buildout** – represents 12 conceptual new thoroughfare connections/extensions and 14 major intersection modifications (*considered only for conceptual planning purposes*)

Each of the scenarios incrementally builds on the previous scenario's improvements.

The 2045 Arterial Buildout Scenario includes important north-south and east-west links that address legacy gaps and provide network connections to accommodate long-term regional growth. Having this fiscally unconstrained scenario allows the region to test these conceptual capacity improvements.

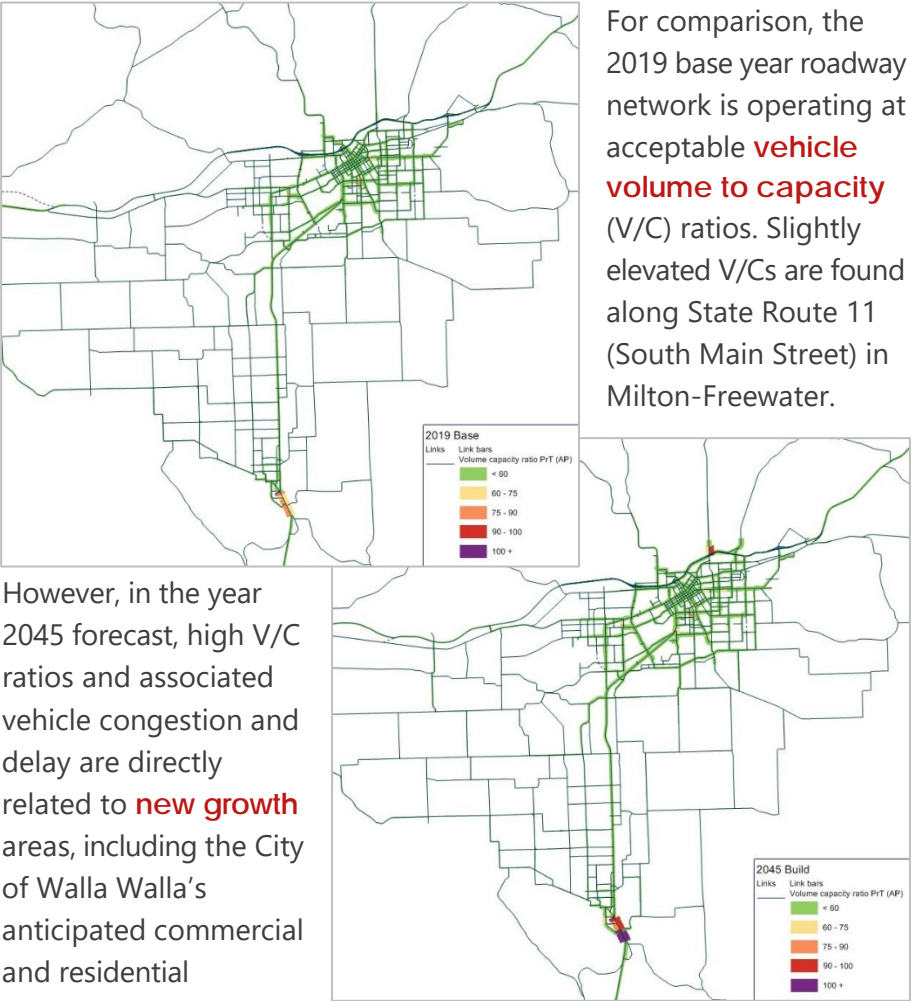
Equipped with year 2045 population and employment data, the TDM computes where along the network the increased transportation demand is most likely to travel, resulting in traffic volume over network capacity data that can be translated into a vehicle level of service (LOS). Roadway LOS is a commonly used measure that aims to assess the flow of vehicle traffic. The six LOS designations range from A to F, where LOS A represents free flow at posted speed, and through progressively worsening delays and congestion, LOS F represents gridlock.



The regional TDM focuses specifically on the **PM peak hour** – one-hour volumes (between 4 p.m. and 6 p.m.) – on a typical weekday. As expected, the increased demand due to population and employment growth through the year 2045 is forecasted to result in several network connections that will perform at LOS E/F, which would fall outside of the standards declared acceptable within the Walla Walla Valley.

Level of Service	Description	Volume-to-Capacity Ratio
A	Free flowing traffic, no delay	< 60
B	High driver comfort, little delay	60 – 75
C & D	Low driver frustration and some delay	75 – 90
E	High level of frustration and delay	90 – 100
F	Highest frustration, excessive delay	> 100

WSDOT has set LOS C and D as the standards for state highways located outside and inside of the urban growth area, respectively.



For comparison, the 2019 base year roadway network is operating at acceptable **vehicle volume to capacity** (V/C) ratios. Slightly elevated V/Cs are found along State Route 11 (South Main Street) in Milton-Freewater.

However, in the year 2045 forecast, high V/C ratios and associated vehicle congestion and delay are directly related to **new growth** areas, including the City of Walla Walla’s anticipated commercial and residential development north and west of the U.S. 12/Clinton interchange, as well as north of the South Hill Neighborhood housing development planned in the southern portion of the City of Milton-Freewater.

THE PROPOSED CAPACITY PROJECTS INCLUDED IN THE 2045 BUILD SCENARIO OFFER LITTLE TO NO RELIEF TO THESE TWO BOTTLENECKS SINCE THE PLANNED IMPROVEMENTS ARE NOT LOCATED NEARBY. THESE TWO AREAS OF CONCERN WILL HAVE TO BE STUDIED FOR POTENTIAL SOLUTIONS WITHIN THE NEXT FEW YEARS.

Challenges and Opportunities

The most pressing concerns for roadways in the Walla Walla Valley are the preservation and improvement of aging infrastructure, the reduction in crashes, as well as the lack of connectivity tied to missing segments among the regional thoroughfares.



We are faced with a **maintenance and preservation** crisis. Out of the 106 projects that made it onto the fiscally constrained list in the 2045 Plan, the vast majority are tied to rehabilitation and reconstruction of existing roadways. Only three projects are included that establish new connections not already in place today. Even though the majority of current and anticipated funds goes towards improving the existing roadway system, a 60% increase in preservation funding is needed to implement even a 50-year pavement update cycle, whereas a 200% increase over current levels would be required to allow for reconstruction of all regionally significant roadways once every 50 years.

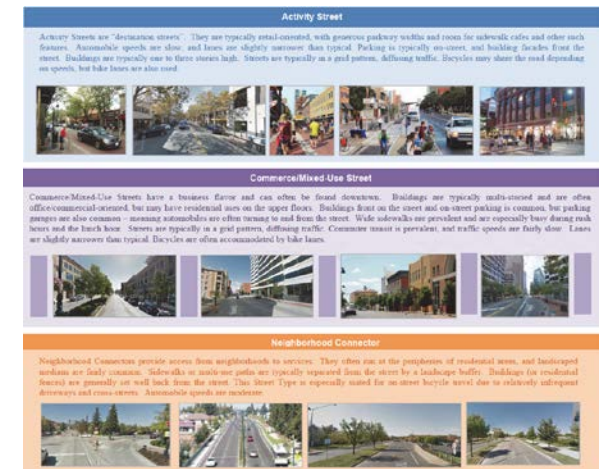
Unless we find a fiscally sustainable way to fund the deferred and much past-due maintenance and preservation efforts, the regional system will continue to see its roadway quality and overall condition decline to a point of pavement failure.



Any success of **improving traffic safety** depends heavily on public participation.

- ◆ Distracted driving results in more fatalities (46%) than any of the other risk factors.
- ◆ 60% of pedestrian- and 59% of bicycle-involved crashes occur at intersections.
- ◆ 58% of both lane departure and run-off-the-road crashes are accompanied by distracted driving and/or speeding and result in 42% of all fatalities.
- ◆ Young drivers are often distracted and have a particularly difficult time navigating the intersections.
- ◆ Older drivers also have a difficult time at intersections and a significantly higher proportion of pedestrian involvement.

Using a data-driven approach to tease out the underlying behaviors that impact traffic safety risks, may greatly help the region in formulating a targeted public awareness and education campaign.



There is keen interest within the Walla Walla Valley to proactively plan for a multi-modal transportation network that is fully supportive of anticipated future growth and will provide the desired connectivity across all jurisdictional boundaries.

Already underway, the collaborative work on the **Regional Thoroughfare System Plan** should continue to address persistent connectivity gaps and serve as a guide for longer-term capital improvement program planning and right-of-way preservation.

Operational Considerations

Building new roadways or adding capacity comes with a high price tag. Faced with limited funds, state, regional, and local agencies turn to travel demand management (TDM) and transportation system management & operations (TSMO) strategies to increase the capacity and efficiency of the existing network.

The following sections highlight TDM and TSMO efforts already employed in the Walla Walla Valley, along with additional best practices that could be considered.

Travel Demand Management

The TDM strategies' primary focus is reducing the number of cars on roadways.

- ◆ **Replace car trips** – by encouraging the use of transit, walking, or biking or increasing the number of people traveling together in one vehicle.
- ◆ **Redistribute car traffic** – from congested areas at peak travel times through use of restrictions, congestion pricing, ramp metering, or other methods.

In the Walla Walla Valley region, the TDM strategies focus on replacing car trips:

- ◆ Cities have identified areas for mixed use, which shortens the distance between destinations and lessens the need to drive.
- ◆ Valley Transit offers ridesharing resources with its Vanpool program and Carpool link.

- ◆ Bike racks are provided on all public transit vehicles to encourage bicycle use.
- ◆ In select areas, pedestrian comfort is greatly enhanced by buffer areas between sidewalks and vehicle traffic, street trees or shade awnings, and street furniture.
- ◆ Several pedestrian projects have been completed that included bulb-outs or a variety of pedestrian beacons, all of which increase the safety at crossings.
- ◆ Local entities have improved pedestrian and bicycle facilities, addressing existing conditions as well as network gaps.

There are additional best TDM practices that could be considered for local implementation.

Transit

- ◆ Provide a one-stop resource center to help travelers navigate the region by bus.
- ◆ Expand the service area and increase the bus frequency to provide more coverage and better travel times.
- ◆ Increase rider comfort and convenience by improving benches and shelters or offering internet and in-vehicle info systems.
- ◆ Improve pedestrian and bicycle access to bus stops for better first mile/last mile connectivity.

Walking

- ◆ Improve the safety and quality of the pedestrian experience through the provision of low-stress crossings, higher density, mix of uses, reduced setbacks, and design treatments, e.g., façade variations and ground floor transparency.

Biking

- ◆ Focus network improvements on connections among major activity centers.
- ◆ Develop low-stress connections.
- ◆ Implement a regionwide bikeshare program.
- ◆ Provide secure bicycle parking.
- ◆ Educate bicyclists and drivers on the safe use of shared space.

Employer-Based

- ◆ Provide on-site transit pass sales to increase employees' use of transit or offer tax-free commute benefits.
- ◆ Help establish and promote carpools and implement a "guaranteed ride home" program in the event that a person has to unexpectedly work late or leave early.
- ◆ Locate work sites near transit or in mixed-use areas to encourage walking and biking.
- ◆ Offer on-site facilities such as bicycle racks, lockers and showers, or improved transit stops and sidewalk connectivity.
- ◆ Offer alternative work schedules to reduce the trips during the work week.
- ◆ Allow employees to telecommute and work from home, either full- or part-time.

Land Use and Zoning

- ◆ Encourage mixed-use development to promote close proximity of residential, office, retail, civic, and institutional uses.
- ◆ Develop flexible parking requirements or even shared parking standards, based on nearby residential and employment densities, land use mix, and transit accessibility.

- ◆ Promote transit-supportive density with 7 or more housing units per acre to support basic 30-minute bus service.

Transportation System Management & Operations

TSMO strategies focus on increasing efficiency and reliability to enhance the performance of existing roadways.

- ◆ **Increase throughput** – by improving intersections and bottlenecks, and reducing conflict points.
- ◆ **Coordinate efforts** – through targeted activities, outreach, and partnerships.

In the Walla Walla Valley, TSMO strategies focus on throughput and coordination:

- ◆ Local cities have installed interconnected signals and upgraded control systems.
- ◆ Special event planning is performed regularly to support community activities.

Select additional TSMO activities could be considered for implementation in the region.

Signal and Intersection Improvements

- ◆ Replace older signal control technology, substituting in-pavement loops with video detection; include improved recognition of pedestrians and bicycles.
- ◆ Review timing and phasing of signalized intersections regularly, and optimize cycles to decrease overall delay.

- ◆ Coordinate signals along high-priority corridors to increase vehicle throughput.
- ◆ Review intersection design and traffic movements to determine the need for channelization changes or protected turns.

Access Management

- ◆ Design sites with major roadway frontage, then provide access from a reverse frontage road to decrease the number of driveways along thoroughfares.
- ◆ Monitor the number of driveways and encourage proper spacing to provide safe and reasonable access to sites.
- ◆ Control turning movements through the use of medians to decrease conflict points.
- ◆ Install medians as a refuge area for pedestrians or for turning vehicles to reduce mid-block accidents; design medians at critical intersections with a low curb for emergency response.
- ◆ Encourage residential driveways to have a shared access point to major roadways.

Traffic Calming

- ◆ Impose designated movement of traffic at intersections through forced-turn islands.
- ◆ Increase intersection capacity and safety by installing roundabouts; include pedestrian crossing treatments for persons with visual impairments.
- ◆ Consider speed humps to reduce vehicle speeds, causing driver discomfort when traversed at higher than posted speeds.

Additional Management Strategies

The following additional TSMO strategies could also be explored for implementation.

- ◆ **Regional Traffic Incident Management**
The main function of traffic incident management (TIM) is the detection of, response to, and clearing of traffic incidents to restore normal traffic flow as safely and quickly as possible. Effective TIM involves coordination among public and private stakeholders, including law enforcement, fire departments, emergency medical services, traffic control, towing and recovery, hazardous material contractors, and the media.
- ◆ **Traveler Information Systems**
Using technology to detect, analyze, and disseminate traffic and transit conditions helps travelers choose the best mode and route to reach their destination. Traveler information can include next bus arrival, emergency alerts, traffic delays, alternate routes, work zones, planned special events, tourism, and parking management, or more.
- ◆ **Targeted Traffic Enforcement**
In areas with a prevalence for speeding and reckless driving, targeted speed and law enforcement, potentially automated, can be employed to discourage dangerous driver behavior. Local partner agencies can assist law enforcement in identification of hotspots.

Policy and Action Recommendations

Within the framework of the adopted vision, goals, and objectives for the 2045 Plan, the policies and recommended actions listed here guide future regional transportation efforts, decisions, and investments in the Walla Walla Valley.

UNIVERSAL POLICY

CONSIDER SAFETY AND ACCESS –
FOR PEDESTRIANS, BICYCLISTS, PERSONS WITH
DISABILITIES, TRANSIT VEHICLES AND RIDERS,
MOTORISTS, EMERGENCY RESPONDERS, FREIGHT
HAULERS, AND RESIDENTS OF ALL AGES AND ABILITIES
– IN EVERY PLANNING AND PROJECT DECISION.

Walk, Bike, and Roll

- ◆ Continue facilitating regional peer-to-peer network and support implementation of the [Blue Mountain Region Trails Plan](#).
- ◆ Promote regionwide application of Complete Streets principles and support related projects.
- ◆ Initiate the collection of regionwide walking and biking activity data.
- ◆ Create a guide to enable the consistent assessment of condition and context for active transportation infrastructure.
- ◆ Fill-in and expand the existing walk, bike, and roll network to create a level-of-service overview and investment decision tool.

- ◆ Encourage infrastructure owners to emphasize repair and rehabilitation of active transportation elements.
- ◆ Promote initiatives, such as focused public outreach, education campaigns, or speed limit studies, to enhance the safety of the active transportation environment.

Public Transit

- ◆ Improve accessibility and walking, biking, and rolling connectivity at bus stops.
- ◆ Add relevant policy, action, and project recommendations to the 2045 Plan after the completion of Valley Transit's Comprehensive Operational Analysis.
- ◆ Support Milton-Freewater Public Transportation in its effort to conduct a comprehensive assessment of its system.
- ◆ Continue special transportation needs advocacy and outreach among local and regional councils and committees.
- ◆ Assist public transit providers with the implementation of multi-agency collective marketing, trip planning, and mobility management, as presented in the [Coordinated Public Transit - Human Services Transportation Plan](#).
- ◆ Assist public transit providers with the implementation of limited shuttle service to identified transit deserts as outlined in the [Rural Mobility Strategic Plan](#).
- ◆ Support WSDOT in its effort to improve intercity public transit connectivity and assist in promoting the Grape Line service.

Interregional Passenger and Freight Transport

- ◆ Support the WSDOT and Port of Walla Walla 'Grain Train' partnership.
- ◆ Encourage entities to seek funding for the completion of U.S. 12 Phase 8, which enables vital freight movements and is of interregional significance.

Roadway System

- ◆ Focus available funding on maintenance of existing roadways and bridges to enhance current asset condition and maintain a state of good repair.
- ◆ Emphasize safety and prevent loss of life by adopting Target Zero/Vision Zero for the WWVMPO/SRTPO.
- ◆ Analyze systemic collisions and hotspot crash locations and promote implementation of applicable countermeasures.
- ◆ Complete the update of the Regional Thoroughfare System Plan, which emerged as the successor to the 2005 Long-Term Arterial Plan.
- ◆ Support a Complete Street and Context Sensitive Solution approach to project development that takes into account anticipated needs and safety for all users as well as unique community features.

System Operations

- ◆ Encourage Walla Walla Valley entities to consider relevant, cost-efficient operational strategies ahead of capacity projects.

Sustainability and Stewardship

Transportation is not just about moving people and the goods they may need. This network of infrastructure and services not only affects the social aspects of Walla Walla Valley communities, but it also impacts the built and natural settings. Equity, sustainability, and stewardship were identified as high priorities for transportation planning in the region, and it is therefore important to consider potential societal as well as environmental impacts.

Access and Equity

“Transportation equals access” to opportunities and essential services, including housing, employment, education, health care, and recreation. Along with connectivity, access is a vital function of the Walla Walla Valley transportation system. In order to ensure that transportation access is provided equitably as part of this planning effort, the WWVMPO/SRTPO and its member entities seek to identify barriers to access, gaps in connectivity, and any disproportionately negative impacts, especially to traditionally underserved populations.

Access

Access is the ability to reach necessary and desired locations quickly and easily. It also includes the capacity to use different modes to reach those destinations. The level of access is determined by many factors, including the availability and quality of connections, the communication of relevant information, the scale of income, and personal age or physical ability.

As it will become apparent in the subsequent sections, walking, biking, and public transit all represent great equalizers when it comes to transportation access. Based on recent data,ⁱ around 1,750 and 1,640 of households in Umatilla and Walla Walla Counties, respectively, do not have access to a vehicle. For affected residents, walking, biking, and public transit are the only viable forms of transportation.

Since mode choice is important to both access and equity, the Walla Walla Valley region must strive to create and support a transportation culture in its communities that focuses on all modes instead of continuing with the legacy of concentrating on privately-owned vehicles.



Communication

How route, schedule, direction, or safety information is distributed to the transportation users plays

a critical role in their level of access. Using overly complicated words or long-winded explanations creates barriers for people with mental or cognitive impairments. Such terms are also challenging to translate into other languages. Given the fact that the Walla Walla Valley region has many Spanish speakers, translation is a fundamental need. One great approach for effective communication is the use of images or iconography. Albeit, not all transportation information can be rendered into symbols, so it is important that communication is accomplished in a clear, concise, and user-friendly manner.



Connectivity

As with many other aspects of life, the “Goldilocks” principle applies to access and connectivity. High-speed highways would not function well if too many small roads connected directly to them. In this case, too much access, creating too many points of potential conflict, is a detriment to safety and transportation system efficiency. Elsewhere, too little access is a problem. Busy thoroughfares with no or infrequent crossing locations essentially sever a community by making walking and biking not just unattractive, but potentially unsafe. And dead-end roads impose circuitous travel and force people to find alternate routes. Thoughtful transportation

ⁱⁱ American Community Survey (ACS) 2014-2018 data: <https://data.census.gov/cedsci>

planning helps manage and balance access, connectivity, efficiency, and safety needs.

Also of great significance to access, public transit provides a wide range of services from vanpools and on-demand rides to fixed route and intercity bus or rail. These connections are limited by limited capital and operating funds. However, through the thoughtful delineation of their service areas, placement of their stops, alignment of routes, and frequency of service, public transit can make a tremendous difference in the level of transportation access and connectivity that is provided within the host communities.

Income



A person's income has a significant impact on their transportation choices and therefore, their level of access. Someone who is very wealthy essentially has no access limitations, with private jets providing rapid transportation to nearly anywhere in the world. The wealthiest can now even go into outer space if they choose. Persons with lower incomes do not have these luxuries. In general, housing affordability tends to push out from urban centers, forcing low-income populations further from jobs and essential services. Traditionally underserved, lower-income neighborhoods also tend to lack or have poorly maintained infrastructure.

Furthermore, low income also decreases potential mobility choices in other ways. Second only to housing cost, private vehicle ownership is very expensive and low-income populations are also subject to higher loan rates and loan access challenges.

Smartphones have grown more expensive and as many transportation providers are shifting to an app-based information ecosystem, people with lower incomes may be left out. While public transit is well-adapted to addressing the mobility concerns of lower-income populations, they are dependent on the reliability and frequency of that service.



Age and Ability

Dependent on their stage within the human life cycle, people have different transportation needs. Babies or toddlers need sidewalks to be both wide and flat to accommodate strollers or those just learning to walk. Young children, who may not yet be fully cognizant of dangers, need to have safe crossing locations where they

are visible to vehicles. Older children and teenagers need slow, safe streets to learn how to ride a bicycle or drive a car. Adults need to be able to get to work in a timely fashion, whether that is by driving, using public transit, biking, walking, or rolling. Older people may become unable or choose not to drive and require good public transit and walkable neighborhoods to get around.

Most people are capable of using a greater number of transportation modes as they age. However, age is not the sole determinant of access to transportation options. Some people are born with disabilities, some develop them during their lifetime, and many more people experience disabilities temporarily through injuries or illness. These disabilities can have a significant impact on a person's ability to access opportunities and essential services, and it is up to the transportation system to provide support for all users.

It is important to recognize that all groups have specialized transportation needs that influence their choice and access, regardless of age, ability, income, location, or language. Providing for these varied needs is particularly challenging with a lack of proper funding driving the need for difficult decisions. Fortunately, even small, affordable changes such as painting and signing a crosswalk can have huge benefits to safety and access.

Equity

Even when everyone is given the same support, there are still portions of the population that require different assistance.

Equality – Treating everyone the same, providing equal resources regardless of need

Equity – Treating everyone fairly, offering opportunities dependent on need, providing support to alleviate outcome disparities

Disadvantaged groups face greater hurdles including a loss or lack of access to the goods, services, and opportunities they require. Historically, transportation planning has ignored or in some cases intentionally damaged disadvantaged communities, by placing highways through low-income neighborhoods, or between them and more affluent areas where services and opportunities were more commonplace. The harm from such decisions caused can still be felt in many cities. Strong, vibrant, and prosperous communities rely on the establishment and protection of equality as well as equity.

Environmental Justice

Imagine a public park in a neighborhood. The houses around the park all have an equal distance to access this community resource. However, if there are no marked crossings or sidewalks in the area directly south, those residents may be forced to

walk in and across dangerous streets, or they must drive to reach the park safely. Environmental justice is the way to investigate and address such impacts.

The Environmental Protection Agency (EPA) defines Environmental Justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” (EPA, 2020).

Incorporating non-discriminatory principles in the transportation planning and decision-making process is required by the U.S. Department of Transportation (U.S. DOT). The WWVMPO/SRTPO is responsible for ensuring that transportation projects which receive federal funding do not have a disproportionately high and adverse effect on minority or low-income populations. Environmental Justice reviews are conducted to ensure that all people are treated fairly, regardless of their race, origin, or income.

The WWVMPO/SRTPO followed the guidance provided in these laws and orders:

- ◆ Title VI of the Civil Rights Act of 1964
- ◆ The Civil Rights Restoration Act of 1987
- ◆ The 1994 Executive Order 12898 on Environmental Justice

- ◆ The 2012 updated Final U.S. DOT Environmental Justice Order (5610.2(a))

The three cornerstones of Environmental Justice in the various laws and orders are:

- ◆ Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations.
- ◆ Ensure the full and fair participation by all potentially affected communities in the decision-making process.
- ◆ Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The WWVMPO/SRTPO conducted public outreach for the 2045 Plan in an inclusive manner. Furthermore, the agency completed a systemwide analysis of the proposed transportation

investments. As described in detail in the following section, no disproportionately high and adverse effect or potential displacement were found to impact the Environmental Justice populations within the region.



Walla Walla Valley Environmental Justice Populations

Census data is available for two specific Environmental Justice populations at the census block group and tract level: minority and low-income populations.

A minority is a person who is Black, Hispanic or Latino (regardless of race), Asian American, American Indian or Alaskan Native, or Native Hawaiian and Other Pacific Islander.

Walla Walla County’s population is 28.1% minority and Umatilla County’s population is 33.6% minority. For the purpose of this analysis, if a block group has more than 50% minority population, it is considered a minority block group.

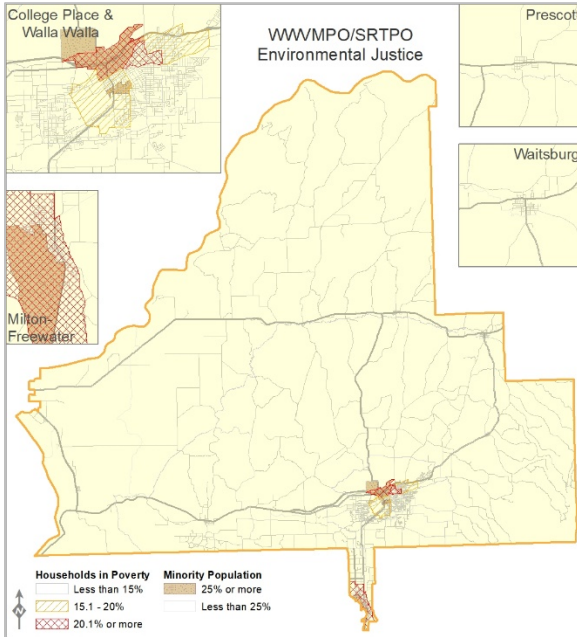
Based on 2014-2018 American Community Survey (ACS) data, 53 Census block groups

(or portions thereof) make up the WWVMPO/ SRTPO study area. None of these block groups have a minority population greater than 50%, though it is important to note that six are between 25 and 50% minority. The Environmental Justice analysis took those six block groups into account.

The determination of low-income status varies by the number of people per household and the thresholds is set annually by the U.S. Department of Health and Human Services.^j

The region relies on Census computations of the households that have been “at or below the poverty threshold” in the past 12 months. For the purpose this analysis, tracts are considered low-income, if 15% or more of the households are low-income. Based on 2014-2018 ACS data, the median household

income in Walla Walla County is \$56,533 and 13.9% of households are at or below the poverty threshold. In Umatilla County, the median household income is \$51,887 and 17.3% of households are at or below the poverty threshold. Based on a 15% benchmark, four of Walla Walla County’s 12 tracts are low-income, Environmental Justice areas. Umatilla County has two tracts within the Walla Walla Valley and one of them is a low-income, Environmental Justice area.



As shown in the map, the minority and low-income Environmental Justice populations are concentrated in the urbanized portion of the study area, which follows spatial patterns common to the majority of other

Environmental Population	Assumption	Number of Projects	Pedestrian / Bicycle	Bridge	Intersection	New Construction	Paving	Reconstructi On	Safety	Signalization / Technology
Minority Block Group (25% +)	Through or directly adjacent	8	2	1			2			3
Low-Income Tract (at/below poverty level)	Through or directly adjacent	32	9	2	2		4	9		6

^j U.S. Department of Health and Humans Services (DHHS): <https://aspe.hhs.gov/poverty-guidelines>

U.S. cities. Furthermore, based on the systemwide analysis, the anticipated impacts of the 2045 Plan projects have been identified as neither disproportionate nor adverse.

Needs will always outnumber the means to provide for them. However, making transportation decisions that improve equity and strive to create equal opportunities for all is and will remain the ultimate goal. Environmental Justice helps address imbalances by making sure that project considerations are inclusive of all populations and selected investments do not significantly or adversely impact any one group.

Built Environment and Human Health

Physical surroundings play a significant role in promoting or harming human health. Air quality within a region has considerable impact on humans, as well as the plants and animals that live there. Water is an essential part of life, but transportation can disrupt natural flows and increase runoff, which leaks pollutants into nearby water sources. The noise created by transportation systems, such as that along highways or under the paths of jet aircraft, can increase stress levels and damage cardiovascular health.

Having a vibrant and active community with easy access to goods, services, and opportunities can provide substantial

physical and mental health benefits. Even how a community member feels when walking down a street can alter the person's wellbeing.

Air Quality

Pollution in the air does not always originate from where it is found. Air pollutants can travel far distances and come from both stationary and mobile sources. The toxins that these sources produce cause significant health problems for humans, in addition to damaging the natural environment.

Motor vehicles are a significant mobile source of air pollutants. An important part of the transportation planning process is protecting regional air quality and maintaining compliance with federal air quality standards.



In 1963, the U.S. government responded to increasing air pollution by passing the Clean Air Act (CAA). This established a federal

program to research techniques designed to monitor and control air pollutants. The CAA requires the Environmental Protection Agency (EPA) to develop National Ambient Air Quality Standards (NAAQS) for air pollutants considered harmful to public health and the environment. Primary standards provide direct public health benefits, while secondary standards consist of protecting the public welfare, mitigating decreased visibility, and reducing damage to animals, crops, vegetation, and buildings. The following is a list of the six [criteria air pollutants](#) designated by the EPA, along with their health effects and common sources:

Carbon Monoxide (CO) – is a gas that, in high concentrations, can reduce oxygen intake, resulting in damage to critical organs like the heart and brain. People with cardiovascular diseases are especially sensitive to carbon monoxide levels. This gas is formed when fossil fuels are burned to power vehicles or industrial processes.

Ground-Level Ozone (O₃) – is a gas that negatively impacts the respiratory system, particularly for older adults, children, or those with lung diseases such as asthma or emphysema. It can also harm sensitive ecosystems. Different from the stratospheric ozone that protects living things from ultraviolet radiation, ground-level ozone is formed when sunlight interacts with

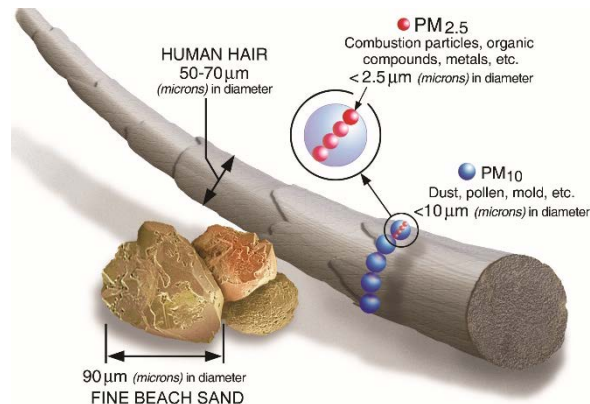
emissions from motor vehicles, industrial processes, and solvents.

Lead (Pb) – is a metal that, when inhaled (or ingested), accumulates within the body. When enough lead is present, a person will experience extremely significant impacts to cardiovascular, developmental, immune, nervous, reproductive, and urinary systems. While the EPA's elimination of leaded gasoline has greatly reduced lead emissions, they are still created by leaded aviation fuel, ore and metal processing, and the manufacturing of goods that use lead, such as car batteries.

Nitrogen Dioxide (NO₂) – is a gas that negatively impacts the respiratory system, particularly for older adults, children, or those with lung diseases including asthma or emphysema. NO₂ is created when fuels are burned to power vehicles, heavy machinery, or industry processes. Nitrogen oxides can react with carbon monoxide and other particles in the air to form ground-level ozone or particulate matter.

Sulfur Dioxide (SO₂) – is a gas that negatively impacts the respiratory system, particularly for older adults, children, or those with lung diseases such as asthma or emphysema. SO₂ is produced when sulfur or materials containing sulfur are burned, including fuels for vehicles or industrial uses. On rare occasions, volcanoes also contribute to the amount of sulfur dioxide.

Particulate Matter (PM_{2.5} and PM₁₀) – comes in two different sizes. These fine particulates are difficult to filter from the air without respirators and can be very harmful to the heart and lungs. PM_{2.5} particles are 2.5 micrometers or less and typically come from soot, smoke, and vehicle emissions.



PM₁₀ particles are 10 micrometers or less and typically come from dust, pollen, and mold. For a size comparison, a typical human hair is between 50 and 70 micrometers wide, or about the width of the finest grain of sand. Once inhaled, the PM_{2.5} and PM₁₀ particles get deep into the lungs, where they cause irritation, decrease lung function, and may also impact cardiovascular health.

Air Quality Standards and Monitoring

The EPA and state ecology or environmental departments use air quality monitoring data to determine if a specific site meets the set national standard for each criteria pollutant. Environmental departments at the state

level give recommendations to the EPA on how to designate certain areas. The EPA then makes the final determination in one of three categories:

- ◆ **Attainment** – an area or site meets the NAAQS standards
- ◆ **Nonattainment** – an area or site does not meet one or more standards
- ◆ **Unclassifiable** – if there is insufficient information to make a determination

The Walla Walla Valley has a maintenance area for the PM₁₀ pollutant, as air quality data collected at a monitoring site located in Wallula previously violated the respective air quality standard.

For detailed information on related Washington State Department of Ecology (ECY) and EPA activities, as well as WWVMPPO/ SRTPO air quality conformity determination requirements, refer to [Appendix C](#).

Water Quality

Water is essential for all life and preserving its quality is vital to human health. Transportation affects water quality in several different ways. Roads, parking lots, and other paved, impervious surfaces increase runoff rates and erosion. They also delay precipitation from entering the groundwater supply that recharges aquifers, rivers, and streams. Vehicles are a source of many water pollutants, including oils, other chemicals, and dirt.



Even harmful compounds in exhaust fumes are returned to the earth later as acid rain.

Vehicles require an extensive network of fueling infrastructure and the underground storage tanks at fueling stations can leak fuels directly into the water table. The process of extracting, processing, and distributing vehicle fuels is also harmful to water quality, particularly if oil is spilled, which creates immense environmental costs.

Roadway maintenance activities impact water quality as well. Herbicides and pesticides used for roadside vegetation control can leach into the water supply. Salt used to eliminate road ice in the winter raises the salinity of the rivers and streams and can destroy habitats or sensitive ecosystems such as wetlands.

Negative impacts to water quality are harmful to all forms of life and it is important to mitigate or avoid them as

much as possible, particularly stormwater runoff from transportation systems.

Noise

The sound created by passing motor vehicles or an overhead aircraft can be substantial and disruptive. In certain states, home sellers are required by law to disclose whether their property is near an airport, and studies in Washington have shown that values increase the further properties are located from an airport approach path. While airports as well as Interstates and interregional highways provide tremendous economic benefit to regions, the equity of their placement and impact on nearby neighborhoods must be considered.



In general, noise can be evaluated as to its loudness or intensity, frequency, duration, and subjective impact on a person's level of annoyance. Different modes of transportation have inherently different noise profiles and, although the human impact is to a certain degree affected by the

person's level of sensitivity, noise has been shown to increase stress levels in humans. Just the distraction noise causes can increase blood pressure and harm sleep patterns and productivity.



Community Health

Transportation planners and public health officials share the common goal of integrating health-promoting policies and supportive design into the built environment, which over time leads to healthier communities.

Albeit, the health of a community is not measured by any one person, but by the aggregate health outcomes of all residents. As each person is physically, mentally, and emotionally different, there is no single measurement or standard. However, the development and expansion of walking, biking, and rolling programs and infrastructure elements can make noticeable, long-term improvements in the population's health and wellness through

the increase in physical activity. In addition, a well-designed transportation system also provides the needed access to the goods, services, and opportunities that are necessary to establish and maintain healthy lifestyles.

Speaking to the importance of active transportation modes is the most recent iteration of the Walla Walla County [Community Health Improvement Plan](#) (CHIP), that identified obesity and physical activity among the top ten health priorities.

Community Character

The built environment, inclusive of the transportation infrastructure, can take many forms that provide not just the desired function but may also display distinct elements associated with the community in which they are located. This community character plays an important role in public health as it fosters a sense of place and belonging: New Orleans has the Bourbon District, New York has Harlem, and Las Vegas has the Vegas Strip. Each of these places feels unique and special because of how they were designed and how the community identity has been preserved. Such places provide inspiration or generate feelings of nostalgia due to their unique nature. While not every place possesses these qualities to the same extent, the design of transportation system elements can either harm or contribute to making a streetscape feel inviting.



The preservation of community character and place-making efforts often emphasizes human-scale transportation improvements that focus not only on the addition of roadway, pedestrian, or bicycle infrastructure, but also on the provision of amenities and streetscaping that allow these transportation improvements to become an integral part of the communities they serve. Bus stops, bike racks, lampposts, and traffic signal designs can all convey a sense of place. It is important to have public input when designing these elements to foster community spirit and preserve the existing cultural feel.

A local example can be found in the City of College Place, which recently completed a public art competition to spruce up the normally unadorned traffic utility boxes at signalized intersections. Designs from local artists were selected for these boxes, which will beautify the City and discourage graffiti once they are finished.



Maintenance and Preservation

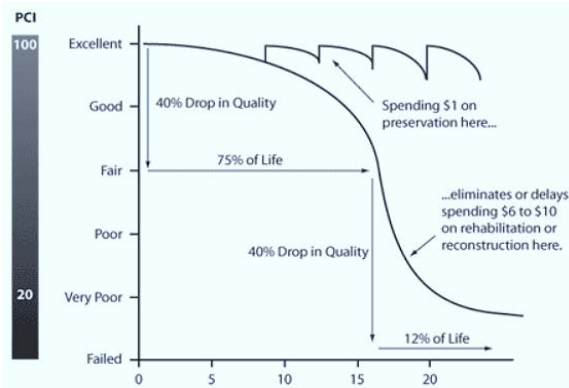
Roadways and bridges, and even sidewalks, are expensive to build, and even more expensive to replace. While eventually all transportation infrastructure needs to be rebuilt, the life cycle can be extended and the large reconstruction expenses can be delayed through timely maintenance and preservation activities.

Routine Maintenance – performed in reaction to an event, season, or overall deterioration of a transportation asset

Preventative Maintenance – used as a proactive and cost-effective means of extending the useful life of an asset

Preservation – improves or sustains the condition of an asset in a state of good repair generally without adding capacity⁹⁰

Preventative maintenance and preservation activities are cheaper by a factor of 6 to 10 when compared to rehabilitation or outright reconstruction. This fact is illustrated in the graphic that depicts what happens to the Pavement Condition Index (PCI) over time.⁹¹



Source: FHWA - https://www.planning.dot.gov/documents/ASI_report/asi-index.htm

In general, timely preventative treatments restore pavement conditions and prevent the rapid deterioration which is seen in poorly maintained pavements.

It may not seem like it, but transportation infrastructure is under constant attack, every day. The weather brings hot and cold temperatures that cause expansion and

contraction leading to stress fractures. Rainfall can cause flooding, which may create potholes, wash out road beds, or smash floating debris into bridges. Freezing temperatures expand any water present in small surface cracks, turning them into larger faults. Snowfall prompts drivers to use chains or studded tires, which chip away at the pavement. Plant roots expand cracks or create bumps and fractures. Vehicle weight also puts stress on infrastructure surfaces and structures, causing roadway surfaces and bridges to flex. Even something as simple as most vehicles using the same lane position will over time create ruts in the surface in response to their weight.

While nothing can be done to stop damage from occurring on roadways and bridges, their lifespans can be greatly extended with proper and regular maintenance.

It only takes one pothole to cause a serious crash for a bicyclist or damage a vehicle to the point of requiring expensive repairs. The one pothole may impact many bicyclists and cars and even cause them to swerve unsafely.



Unfortunately, maintenance and preservation are not especially glamorous activities – particularly when compared to new ribbon-cutting projects. This natural challenge has contributed to systemic underinvestment in

proper maintenance and preservation activities necessary to keep roadways and bridges in a state of good repair (SGR).

A state of good repair exists for transportation infrastructure when 1) it functions and performs as designed, 2) the condition does not pose an unacceptable safety risk, and 3) scheduled maintenance needs are being met.

Safety and Security



Safety

Vehicle crashes are one of the leading causes of deaths and injuries in the U.S., making safety a primary concern for transportation planning. Defined as **protection from unintentional harm**, safety is both a national performance goal and planning factor as well as a Walla Walla Valley goal, all of which seek to significantly reduce serious injuries and fatalities on all public roadways for all users. This is done through the implementation of transportation improvements, utilizing proven counter-measures to address known safety issues.



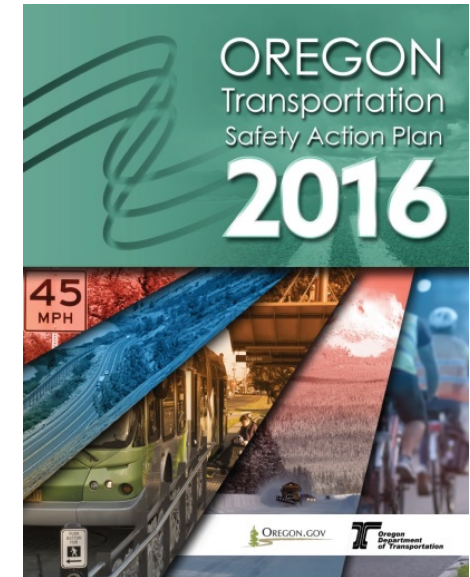
Strategic Highway Safety Plans

Each state takes a lead role in establishing safety goals for public roadways, while local agencies make safety a priority for all transportation modes. The Federal Highway Administration requires every state to have a Strategic Highway Safety Plan (SHSP), which establishes a comprehensive framework for reducing fatalities and serious injuries. Washington State's SHSP is called Target Zero and the plan sets the goal of **zero traffic fatalities or serious injuries by the year 2030**. This ambitious goal reflects the seriousness of impacts that crashes can have on not just human lives, but society in general and even the economy. The Target Zero plan focuses on six strategies to accomplish this goal:

- ◆ **Education and Outreach** – Give road users the information to make good choices, such as driving unimpaired, wearing a seat belt, and avoiding distractions.

- ◆ **Enforcement** – Use data-driven analysis to help law-enforcement officers pinpoint and address locations with a high number of behavior-driven fatal and serious-injury crashes, such as speeding and impairment.
- ◆ **Engineering** – Design roads and roadsides using practical solutions to reduce crashes, or to reduce the severity of crashes if they do occur.
- ◆ **Emergency Medical Services (EMS)** – Provide high-quality and rapid medical response to injury crashes.
- ◆ **Evaluation** – Determine how Washington is doing in meeting goals, understanding what is contributing to crash occurrences, and selecting appropriate counter-measures to reduce those crashes using the approaches listed above.
- ◆ **Leadership** – Bring together key state and local agencies, traffic safety advocates, partners, and stakeholders to set the vision and direction for traffic safety and support the necessary collaboration needed to achieve zero fatality and serious injury crashes by 2030.

The highest priority collision factors identified in the plan are driver impairment, roadway or lane departure, speeding, young driver (ages 16-25) involvement, distracted driving, and intersections.



The SHSP for Oregon is called the Oregon Transportation Safety Action Plan (TSAP), which sets the long-term objective of **zero deaths or life-changing injuries** from crashes and envisions to reach its goal **by the year 2035**. Last updated in 2016, ODOT is working on a new version anticipated for release in 2021. The current plan sets out six goals for reducing fatalities and serious injuries:

- ◆ **Safety Culture** – Transform public attitudes to recognize all transportation system users have responsibility for other people's safety in addition to their own safety while using the transportation system. Transform organizational transportation safety culture among employees and agency partners (e.g., state agencies, MPOs,

Tribes, counties, cities, Oregon Health Authority, stakeholders, and public and private employers) to integrate safety considerations into all responsibilities.

- ◆ **Infrastructure** – Develop and improve infrastructure to eliminate fatalities and serious injuries for users of all modes.
- ◆ **Healthy, Livable Communities** – Plan, design, and implement safe systems. Support enforcement and emergency medical services to improve the safety and livability of communities, including improved health outcomes.
- ◆ **Technology** – Plan, prepare for, and implement technologies (existing and new) that can affect transportation safety for all users, including pilot testing innovative technologies as appropriate.
- ◆ **Collaborate and Communicate** – Create and support a collaborative environment for transportation system providers and public and private stakeholders to work together to eliminate fatalities and serious injury crashes.
- ◆ **Strategic Investments** – Target safety funding for effective engineering, emergency response, law enforcement, and education priorities.

Oregon's TSAP also outlines four broad near-term Emphasis Areas (EAs). The first is risky behaviors, such as impaired driving,

not using seatbelts, speeding, and distracted driving. Second is infrastructure, which aims to reduce fatalities or serious injuries by constructing or retrofitting transportation infrastructure with safety treatments. Vulnerable users are also called into focus, thereby aiming to protect pedestrians, bicyclists, motorcyclists, and older road users. Finally, improved systems emphasize increased connections between data analytics, employee training, response efforts, and driver education.

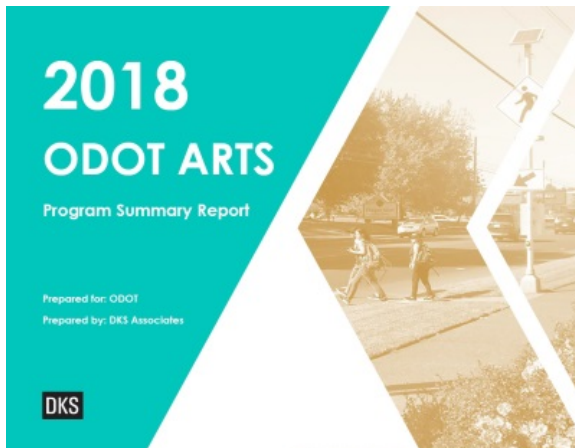


Highway Safety Improvement Programs

Every five years, the FHWA requires each state to develop, implement, and evaluate a highway safety improvement program to significantly reduce fatalities and serious injuries from roadway crashes. The Highway Safety Improvement Program (HSIP) must outline processes for collecting, maintaining, and analyzing safety data; conducting road

safety audits; and establishing priorities for the implementation of HIS projects. In Washington State, safety funds are programmed and spent according to the SHSP in one of three different funding categories:

- ◆ **City Safety Program** – funds projects that reduce fatal and serious injury crashes on city or town streets and state highways, using engineering improvements and countermeasures. Projects can either address specific locations or make systemic improvements based on top crash type(s) throughout the city or town
- ◆ **County Safety Program** – funds projects that reduce fatal and serious injury crashes on county roads, using engineering improvements and countermeasures. These projects can be at intersections, specific locations, or along corridors and are prioritized based on the highest crash type(s) in the county.
- ◆ **Railway-Highway Crossing Program** – funds projects that reduce the number of fatalities, injuries, and crashes at public at-grade crossings. At least 50% of the funds must be used to install or upgrade protective devices, such as gates, pedestrian crossings, signal systems, and signage. Funds can also be used to transition an at-grade crossing to a grade-separated crossing.



In Oregon, the HSIP is known as the All Roads Transportation Safety (ARTS) Program. The ARTS Program emphasizes data analytics to determine which projects will best reduce fatalities and serious injuries on Oregon's public roadways. Funding is directed into several categories:

- ◆ **Hot Spot** – funds projects that focus on specific locations including intersections, curves, or short road segments with a history of fatalities or serious injuries. The nature of the crash is used to select the proper countermeasure.
- ◆ **Systemic** – funds projects that hone in on specific system-wide safety concerns, covering roadway segments, entire corridors, or multiple locations throughout a community.
 - ◆ **Systemic Intersection** – focuses on utilizing low-cost treatments such as warning signs or reflectors to improve safety at intersections.

- ◆ **Systemic Roadway Departure** – addresses crashes on road segments or along corridors by adding curve warning signage, pavement markings, high-friction road surface treatments, or rumble strips to prevent run-off-road and head-on crashes. These crash types are more common in rural areas and are also of concern to the Walla Walla Valley.
- ◆ **Systemic Bicycle-Pedestrian** – funds a broad range of projects to match the distributed nature of bicycle and pedestrian crashes. These projects also add bicycle lanes and cycle tracks, or enhance existing pedestrian facilities or crossing locations.



Public Transportation Agency Safety Plans

In the Walla Walla Valley, there are two public transit agencies, Valley Transit and Milton-Freewater Public Transportation, which provide service within and between

the cities of College Place and Walla Walla as well as Milton-Freewater, respectively. In compliance with recent federal regulations, these public transit agencies are tasked with developing a Public Transportation Agency Safety Plan (PTASP) to demonstrate their commitment to safety. At a minimum, each plan is required to include the following:

- ◆ Approval by the agency's Accountable Executive and Board of Directors (or equivalent)
- ◆ Designation of a Chief Safety Officer
- ◆ Process documentation of the agency's Safety Management System, including a Safety Management Policy, Safety Risk Management, Safety Assurance, and Safety Promotion
- ◆ Employee reporting program
- ◆ Performance targets based on measures established in FTA's National Public Transportation Safety Plan (NSP)
- ◆ Criteria to address requirements and standards set in FTA's Public Transportation Safety Program and the NSP
- ◆ Process and timeline for the annual review and periodic update of the safety plan

The approved Valley Transit and Milton-Freewater Public Transportation PTASP targets are shown alongside other transportation performance metrics in [Appendix C](#).

Security

Defined as protection from intentional harm, security seeks to reduce damage inflicted by people, such as terrorism or criminal actions, as well as those of natural disasters, like floods or earthquakes. For transportation planning, security efforts target roadways, bridges, airports, and more with projects and programs that improve the transportation system's resilience. Equally important as the hardening of infrastructure elements is the provision of redundancy. Having a single roadway as the only lifeline to a community presents a significant risk if that road should become blocked by a landslide or wildfire.

Proper emergency management consists of four phases: preparedness, response, recovery, and mitigation.

Even with the best preparation, the response to a natural disasters or terror events is often hectic. This makes planning and preparing for such events even more important.



- ◆ **Preparedness** means anticipating the potential problems that may arise

during an emergency and then taking the appropriate steps to proactively identify the necessary resources to deal with a variety of situations. Resources can include materials, people, and organizational partnerships.

- ◆ **Response** efforts can take significant coordination across many different agencies and partnerships and include setting up emergency shelters, caring for the sick and injured, fighting fires, performing search and rescue, and assessing the damage.
- ◆ **Recovery** can begin after an emergency has passed. Reestablishment of business operations greatly depends on prior preparedness and planning as well as the severity of the emergency itself. The type of incident can also dictate what kinds of funding sources and support are available for recovery efforts. As an example, both Umatilla and Walla Walla Counties received a Presidential Major Disaster Declaration following flooding in early 2020, which allowed them to seek Public Assistance funds to repair damaged infrastructure.
- ◆ **Mitigation** aims to outright prevent or at least minimize future risk. For instance, a community that is adjacent to a frequently flooding river may choose to move some structures to higher ground.

Emergency Management Plans for the Walla Walla Valley Region



Washington State Emergency Management

The Washington State Military Department's Emergency Management Division (EMD) is responsible for minimizing the impact of emergencies and disasters on the people, property, environment, and economy of the State. The Division notifies and alerts state agencies and local governments of impending emergencies and disasters. During state emergencies, the EMD manages the State Emergency Operations Center (EOC) and coordinates the response to ensure help is provided to those who need it, quickly and effectively. The EOC is designated as the central location for information gathering, disaster analysis, and response coordination. Representatives from other state agencies, federal government agencies, and local organizations also provide coordination assistance.

Oregon State Emergency Management

The Oregon Emergency Operations Plan (EOP) directly addresses the recovery phase of emergency management. Strong interagency and public-private coordination is an important part of the plan.



A key principle of the EOP is the stipulation that disasters be handled at the lowest level of government necessary to respond effectively. This helps to preserve state and federal resources for the most critical of emergencies, allowing for more flexible and scalable response efforts.

In emergencies, ODOT is tasked to close state highways and reroute traffic in coordination with the state and local law enforcement; manage civilian traffic and coordinate military deployments, including the Oregon National Guard; maintain a radio network connecting ODOT personnel with local expertise; receive, store, and stage materials from the Strategic National Stockpile; and transport search and rescue teams and provide a transportation infrastructure liaison.



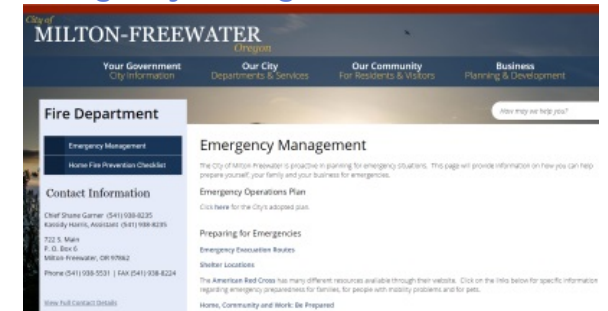
Umatilla County Emergency Management

The Emergency Operations Plan for Umatilla County is an all-hazard plan, describing how various agencies and organizations will organize and respond to emergencies and disasters. The EOP provides a framework for coordinated response and recovery activities. The County views emergency management planning as a continuous process, linked closely with training and exercises and designed to establish

comprehensive preparedness that prioritizes increased resiliency.

The County's Emergency Management Department is responsible for transportation support. It plans for high-hazard areas and identifies the numbers of potential evacuees, including those who require transportation to reception areas. The department also coordinates transportation for special needs populations, as well as confirms and manages locations of staging areas and pick-up points for evacuees requiring public transportation.

City of Milton-Freewater Emergency Management



The City of Milton-Freewater also has an Emergency Operations Plan which lays out the incident command structure and continuity of governance.

Milton-Freewater Public Transportation is responsible for the relocation of vulnerable, special needs populations, the coordination of transit to support evacuations, and the transportation of victims to hospitals.

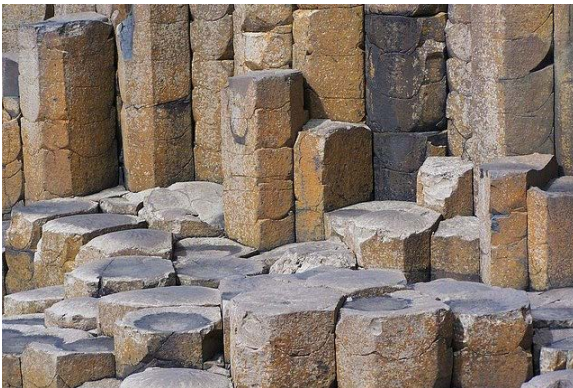
Natural and Cultural Environments

Positioned between the Columbia and Snake Rivers and the foothills of the northern Blue Mountains, the Walla Walla Valley is home to an abundance of natural and cultural resources.

Shaped by ice-age floods, which laid bare volcanic bedrock in some places and deposited mineral-rich soils in others, the region possesses an interesting geomorphology, which gave rise to its unique vegetation and wildlife.

Named after the Walla Walla people, the area was home to the Cayuse, Umatilla, and Walla Walla peoples long before recorded history.

A steady stream of settlers started arriving during the second half of the 19th century and brought with them the seeds that started the region's extensive agriculture.



Natural Resources

Composed of unique farmlands, parks and open spaces, wetlands and flood zones, as well endangered or even threatened flora and fauna, the natural environment of the Walla Walla Valley provides the region's citizens with a large variety of outdoor spaces and resources. It is incumbent on proactive transportation planning to support their vitality and protect these limited assets for future generations.

Farmlands

At the end of the last ice age, first the Missoula Floods and subsequently the wind deposited mineral-rich soils through-out eastern Washington, creating a wealth of prime farmland within the WWVMP/SRTPO's planning area. In cooperation with other interested federal, state, and local government organizations, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service has inventoried **prime and unique farmlands** in an effort to identify the extent and location of important

agricultural lands that can be used for the production of the nation's food supply.

Prime farmland is defined as land that is not urban, built-up, or located in water areas and has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops.

When properly managed, prime farmland's associated soil quality, growing season, and moisture supply are sufficient to feasibly and sustainably produce high yields. Within the Walla Walla Valley, much of this prime farmland is used to grow wheat and the world-famous Walla Walla sweet onions.

Unique farmlands are used for the production of specific high-value crops, and possess a special combination of physical and chemical characteristics needed for the economically feasible production of sustainable high yields of specialized crops, such as nuts, fruits, or vegetables.

In the Walla Walla Valley, these unique farmlands were historically used to produce apples, but increasingly more acreage has been converted to the production of wine grapes. The region has two unique wine-growing regions known as American Viticultural Areas (AVAs): the Walla Walla Valley AVA and the Rocks District in Milton-Freewater, which is a sub-appellation of the

Walla Walla Valley AVA. These regions supply grapes to over 140 local wineries. Agriculture is a major component of the region's economic base, which makes the preservation of high-quality agricultural lands a topic of utmost importance.

Parks and Open Spaces

Opportunities for outdoor recreation and exploration are essential to the high quality of life enjoyed throughout the region. Within the Walla Walla Valley, these opportunities exist in various forms, such as parks, trails, natural landmarks, recreation areas, forests, wildlife refuges, golf courses, campgrounds, and more. It is critical that transportation infrastructure connects everyone to these exciting locations, which are shown here alongside the agencies that operate and maintain them for the public's enjoyment:

Federal Lands

- ◆ National Park Service
 - ◆ Whitman Mission National Historic Site
 - ◆ Lewis and Clark National Historic Trail
 - ◆ Wallula Gap National Natural Landmark
- ◆ U.S. Forest Service
 - ◆ Umatilla National Forest

- ◆ U.S. Army Corps of Engineers
 - ◆ Boating – Ayer Boat Basin, Ice Harbor Lock and Dam, Lower Monumental Lock and Dam, and Matthews Boat Ramp
 - ◆ Camping – Charbonneau Park and Fishhook Park
 - ◆ Day Use – Mill Creek/Bennington Lake Recreational Area, Rooks Park, Shoreline Road, and South Shore
 - ◆ Habitat Management Units – Hollebeke and Walker
- ◆ U.S. Fish and Wildlife Services
 - ◆ McNary National Wildlife Refuge, including the Burbank Slough, Casey Pond, Peninsula, Quarry Pond, Madame Dorian, Wallula, and Juniper Canyon areas

Tribal Resources

- ◆ Frenchtown Historic Site – Natural Area (located north of Walla Walla River and separated by Old Highway 12 from the Frenchtown Historical Foundation parcel)



State Lands

- ◆ Washington State Department of Fish and Wildlife – McDonald Bridge, Sunnyside-Snake River, and Swegle Road Wildlife Areas

City Facilities

- ◆ **College Place** – Harvest Meadows, Lions, Kiwanis, and Veterans Parks; and Poor Farm Cemetery.
- ◆ **Milton-Freewater** – Community, Freewater, Marie Dorian, Morello, Olinger, Orchard, and Yantis Parks; Joe Humbert Family Aquatic Center; Memorial Field; Milton-Freewater Golf Course; and Rotary Sports Complex.
- ◆ **Prescott** – Prescott Swimming Pool.
- ◆ **Waitsburg** – Preston Park, Waitsburg City Cemetery, and Waitsburg Swimming Pool.
- ◆ **Walla Walla** – Eastgate Lions, Fort Walla Walla, Heritage Square, Howard Tietan, Jefferson, Memorial, Menlo, Pioneer, Vista Terrace, Volunteer, Washington, Wildwood, and Xeriscape Parks; First Avenue Plaza; Mill Creek Sportsplex; Mill Creek Trail; Mountain View Cemetery; Veteran's Memorial Golf Course; and Veteran's Memorial Pool.

Local **schools, colleges, and universities** also contribute to the wealth of open spaces, as do many other sites, including cemeteries, country clubs, golf courses, memorial gardens, and parks throughout Walla Walla and Umatilla Counties.



Wetlands and Flood Hazard Zones

The name Walla Walla translates to “many waters” and this holds true within the Walla Walla Valley. Rivers and streams, both big and small, are numerous and course throughout the region. This river system contains many flood hazard zones, which experience periodic flooding within the low-lands adjacent to these water bodies.

- ◆ Based on [Federal Emergency Management Agency](#) information, approximately 18,160 acres are considered flood hazard zones and are either within the floodway or the base flood elevation zone.

Extensive settlement and agricultural activities have left only a few wetlands undisturbed. Many of those that remain, particularly those of high quality, are managed or owned by state or federal authorities. Unlike flood hazard zones, wetlands are inundated by surface or ground water frequently enough to support

certain types of vegetation or aquatic life that require moisture-saturated soil conditions.

- ◆ According to the [National Wetlands Inventory](#), 1,033 wetland features exist within the study area.

The placement of transportation infrastructure can impact these delicate wetland ecosystems, as well as the flood mitigation capabilities of the river system, by increasing stormwater runoff and damaging sensitive habitats.



Endangered or Threatened Species

The Walla Walla Valley is the home of currently 60 plant and animal species that need protection. The list includes mammals, birds, fish, mollusks, insects, amphibians, and reptiles, as well as a variety of plants. Gray wolves, Canada Lynxes, Yellow-billed Cuckoos, and Bull Trout are under considerable levels of threat. The Thistle Milkvetch plant is thought to be completely or at least locally extinct. The Walla Walla River and the Touchet River watershed supports bull trout and steelhead, which are

considered a threatened species under the Federal Endangered Species Act. Within the 15,000-acre McNary National Wildlife Refuge and the nearby U.S. Army Corps of Engineers’ Habitat Management Units, several rare and endangered birds can be found, alongside bald eagles and peregrine falcons.

A complete table of the federally and state-listed species can be found in [Appendix D](#).

Cultural Resources

Archaeological Sites

Though it was named for the Walla Walla people, the region is composed of the traditional lands of the Cayuse, Umatilla, and Walla Walla Native American tribes. Humans have been present in the Walla Walla Valley for over 12,000 years and the abundance of Native American activity has created nearly 250 recorded archaeological sites within just Walla Walla County. Such sites are **non-renewable resources**, deserving protection against looting and vandalism, and are therefore not depicted on a map.

The first Euro-Americans to visit the area were a band of intrepid explorers led by Meriwether Lewis and William Clark in 1805, 215 years ago. They canoed down the Snake and Columbia Rivers on their way to the Pacific Ocean and passed through the center of Walla Walla County on their return journey. Fur traders established outposts shortly afterwards and the Whitman Mission

followed in 1836. It was not until the mid-19th century that settlers from the United States of America began arriving in earnest. In 1862, the City of Walla Walla was the first settlement in the area to incorporate.

Historic Sites

Numerous historic structures are still present in the Walla Walla Valley, many of which date from before 1900. In order to be officially listed on the [National Register of Historic Places](#) (NRHP), a site or district must be at least 50 years old, look much the same as when it was first built, and be significant in terms of architecture, landscape, engineering achievements, or historical importance.

For the Washington portion of the WWMPO/SRTPO, the [Washington Information System for Architectural and Archaeological Records Data](#) (WISAARD) can be used to find them. For the Oregon portion, the [Oregon Parks & Recreation Department](#) maintains a database of historic sites.

The majority of NRHP sites within the Walla Walla Valley are residential properties of historical or architectural significance. However, Fort Walla Walla and the Whitman Mission cover a larger area. Below is a complete list of sites in the region:

City of Walla Walla

- ◆ Bachtold Building - Interurban Depot
- ◆ Max Baumeister Building
- ◆ John F. Boyer House

- ◆ Norman Francis Butler House
- ◆ Dacres Hotel
- ◆ Electric Light Works Building
- ◆ Fort Walla Walla Historic District
- ◆ Green Park School
- ◆ Kirkman House
- ◆ Liberty Theater
- ◆ George Ludwigs House
- ◆ Marcus Whitman Hotel
- ◆ Memorial Building, Whitman College
- ◆ Miles C. Moore House
- ◆ Northern Pacific Railway Passenger Depot
- ◆ Osterman House
- ◆ Saint Patrick Church, School, and Rectory
- ◆ Small-Elliott House
- ◆ US Post Office - Walla Walla Main
- ◆ Walla Walla Carnegie Public Library
- ◆ Walla Walla Valley Traction Company Car Barn
- ◆ Washington School
- ◆ Whitehouse-Crawford Planing Mill



- ◆ YMCA Building - Walla Walla

City of College Place

- ◆ Saturno-Breen Truck Garden

City of Waitsburg

- ◆ William Perry Bruce House
- ◆ Mary Hubbard House
- ◆ Preston Hall



- ◆ Waitsburg High School
- ◆ Waitsburg Historic District

Walla Walla County

- ◆ Cox - Utter House
- ◆ Dixie High School
- ◆ Touchet Cemetery
- ◆ Walla Walla Fair Pavilion
- ◆ Whitman Mission National Historic Site

In or near Milton-Freewater

- ◆ Central School
- ◆ Columbia College



- ◆ Williams Frazier Farmstead
- ◆ Sarah E. Ireland House
- ◆ Still-Perkins House
- ◆ Walla Walla Valley Traction Company Passenger Station and Powerhouse

Heritage Barns

The [Washington State Department of Archaeology and Historic Preservation](#) also maintains a database of historic barns in their [Heritage Barn Register](#).

In the Walla Walla Valley, five Heritage Barns have received grant funding for restoration since the grant program's inception in 2007:

- ◆ James P. Seitz / Frazier Octagonal Barns



- ◆ Plucker Family Farm Barn
- ◆ Reser Centennial Barn
- ◆ Russell Barn
- ◆ Small Barn

Impact Mitigation

Federal transportation planning requirements call for a discussion of potential environmental mitigation activities as part of the long-range planning process. Emphasis should be placed on activities as well as areas that may have the greatest potential to restore and maintain the environmental functions that may be

affected by the 2045 Plan. In order to gain a better understanding of which specific natural, cultural, or EPA-regulated sites may be impacted by the recommended projects, the WWVMPO/SRTPO first reviewed EPA's screening tool [NEPAAssist](#) and then conducted a map-based analysis to determine a potential spatial nexus.

Environmental Population	Assumption	Number of Projects	Pedestrian / Bicycle	Bridge	Intersection	New Construction	Paving	Reconstruction	Safety	Signalization / Technology
Registered Historic Sites	Within 100 ft	14	1	1	1			5		6
Parks and Open Spaces	Within 100 ft	19	7		1		1	6		4
Parks and Open Spaces	Through	1	1							
Wetland Areas	Within 100 ft	12	3	2			4	1	2	
Flood Hazard Zones	Through or directly adjacent	27	4	6		1	3	9	4	
Wildlife Refuge/ Critical Habitat	Within 100 ft	20	4	5			3	4	2	2
PM 10 Air Quality Maintenance Site	Through or directly adjacent	8		2		1	2		3	
EPA-Regulated Sites	Within 100 ft	11	2		2		2	2		3

Source: National Park Service Cultural Resources; Washington Department of Archeology and Historic Preservation; WWVMPO/SRTPO Member GIS; U.S. Fish and Wildlife; Washington Department of Ecology; U.S. Environmental Protection Agency

According to [23 CFR 450.324\(f\)\(10\)](#), the mitigation discussion may focus on policies, programs, or strategies and it is to be developed with input from federal, state, and tribal wildlife, land management, and regulatory agencies. The listed environmental mitigation strategies are intended to be regional in scope and therefore do not typically address potential project-level impacts.

Potential Mitigation Strategies

Although detailed impact studies are conducted and associated mitigation strategies are assessed once projects move from the planning into the design phase, appropriate mitigation strategies for potential impacts can be discussed at the conceptual stage. Sequencing of mitigation actions typically includes the following:

- ◆ **Avoid** the impact by altering the design or alignment, or forego implementing all or part of the project.
- ◆ **Minimize** impacts by limiting the extent and magnitude of the project, or its construction envelope.
- ◆ **Mitigate** the impact by repairing, rehabilitating, or restoring the affected resources or environments.
- ◆ **Reduce or eliminate** the impact over time with preservation and maintenance operations over the life of the project.
- ◆ **Compensate** for the impact by replacing or providing substitute resources or environments.



Affected Resource	Potential Mitigation Measure	Potential Mitigation Areas
NRHP List or Eligible Sites	Mitigation may include context sensitive solutions and design modifications, reduction in visual impacts, integration of interpretive displays or educational activities, archeological studies or data recovery, photo documentation or archival recordation, or relocation of historical structures.	Historical resource impacts are primarily mitigated on-site and on an individual project- or resource-basis; compensatory mitigation measures are generally not as prevalent as they are for natural resources.
Farmland	Mitigation may focus on saving productive farmland through land swapping, fencing replacement or improvement, relocation or replacement of farm buildings, replacement or improvement of pasture water resources, or improved access to fields and pastures; in addition, the timing of construction activities may be considered.	Of particular interest for impact avoidance are parcels of prime farmland. The determination of mitigation approach and potential areas for implementation is project specific and may occur on- or off-site.
Parks and Open Space	Mitigation measures for publicly owned parks, recreation areas, wildlife refuges, or historical sites may include relocation or upgrade of park facilities, purchase of replacement park, expansion of nearby park facility, inclusion of design elements to minimize impacts, landscaping, context sensitive solutions, or advanced land banking.	The Department of Transportation Act Section 4(f) stipulates that all feasible and prudent alternatives and all possible actions to minimize harm must be considered. Mitigation measures and implementation areas are determined in consultation with affected jurisdictions.

<i>Affected Resource</i>	<i>Potential Mitigation Measure</i>	<i>Potential Mitigation Areas</i>
<i>Endangered or Threatened Species</i>	Mitigation may include specific actions to protect species, preserve or enhance habitats, establish buffer areas, avoid planting food species near roadways, or provide fencing and fauna over- or underpasses; tree clearance may be restricted, construction activities may occur outside of nesting or spawning season; rare plant species may be relocated; and conservation banking may be used.	Mitigation actions and potential areas for implementation are typically discussed during the consultation process required under the Endangered Species Act - Section 7.
<i>Wetlands</i>	Avoidance, minimization, and compensation are key elements of wetland mitigation activities; mitigation banking should be considered to compensate for unavoidable losses.	On-site mitigation is preferred; a watershed approach could be utilized; mitigation banks have been established in Oregon and Washington; the region does not have a designated mitigation bank.
<i>Perennial and Intermittent Streams</i>	Mitigation should restore and enhance stream use through channel restoration, bank stabilization, natural stream design, riparian buffer plantings, fish and aquatic habitat improvements, use of specialized culverts, specialized agricultural crossings and fencing, dam removal, drainage remediation, bridge pier removal, and avoidance of in-stream construction work.	Mitigation actions and potential areas for implementation are typically determined during the Clean Water Act Section 404 permit review process.

Potential environmental mitigation activities should also cover project related construction phasing and staging and may include the minimization of site disturbances through modifying timing, design, and alignment, or eliminating certain project features. Commonly impacted resources and applicable potential mitigation measures and areas are shown in the table.

The potential mitigation measures are refined and expanded as project-level impacts are addressed during preliminary engineering and design, and the specific areas for their implementation are determined prior to carrying out each 2045 Plan project.



Recommended Investments

Federal and state requirements mandate that the 2045 Plan only include operational and capital investments that can reasonably be expected to have sufficient funding.

Fiscal constraint has been a key component of transportation plans and programs since the early 1990's and focuses on identifying those revenue sources that are committed, available, as well as reasonably expected.

Establishing both realistic revenues as well as costs is a critical component of the creation of a fiscally feasible and viable transportation plan. Albeit, looking 25 years into the future is accompanied by a host of financial assumptions and the Walla Walla Valley has chosen to be fiscally conservative. Thus, the order of magnitude analysis of revenues and costs presented in this chapter are not assuming unknown sources of funding but, instead, are based on historical funding and expenses to which the appropriate revenue growth and year-of-expenditure factors have been applied. How these localized numbers were developed, along with what investments they are able to support, is captured in the following sections.

Revenue and Cost Estimation

The identification of revenues that are committed, available, or reasonably expected starts with the funds already included in the region's Transportation Improvement Program.

Next, is the extrapolation of historic authorizations, particularly if those are tied to funding allocation formulas. In addition, reasonably expected funding includes those sources that are in line with, or similar to, historical trends, recurring grants, or previously successful fiscal or legislative strategies. Within these general guidelines, the WWVMPO/SRTPO compiled a list of historical and current transportation funding awards assigned to member entities, reviewed current allocations and historical trends, requested revenue information from its member entities, reviewed local entity budgets, and obtained Washington Office of the State Auditor (SAO) records on transportation-specific revenues and expenditures. The following summary provides an overview of key inputs to the draft revenue for the 2045 Plan:

- ◆ Recent Awards – Ten-year data on Transportation Improvement Program funds (developed by ODOT, WSDOT, and the WWVMPO/SRTPO), Connecting Washington funds (compiled by WSDOT)

and Oregon House Bill (HB) 2017 funding data (developed by ODOT)

- ◆ Local Washington Member Funds – Five-year SAO data (compiled by WSDOT and WWVMPO/SRTPO staff)
- ◆ Local Oregon Member Funds – Five-year city and county budget information and annual “federal to state” fund exchanges
- ◆ Public Transit – Five-year SAO records and agency budget data for Valley Transit as well as five-year budget data for Milton-Freewater Public Transportation



In order to account for increases over time, historical growth rates by revenue source were analyzed and projected out to 2045:

- ◆ In line with projections developed in June 2020 for both Oregon^k and Washington^l, a COVID-19-related impact on revenue growth is anticipated to last through 2025; thereafter, local revenues are projected to grow at 1% or 2% per year, dependent on whether they are tied to

^k Oregon Office of Economic Analysis (May 20, 2020), Oregon Economic Forecast, June 2020

^l Washington State Economic and Revenue Forecast Council (June 2020), Washington State Economic and Revenue Forecast, June 2020, Vol. XLIV, No. 2

real estate property or sales tax (based on 1995-2020 inflation data).

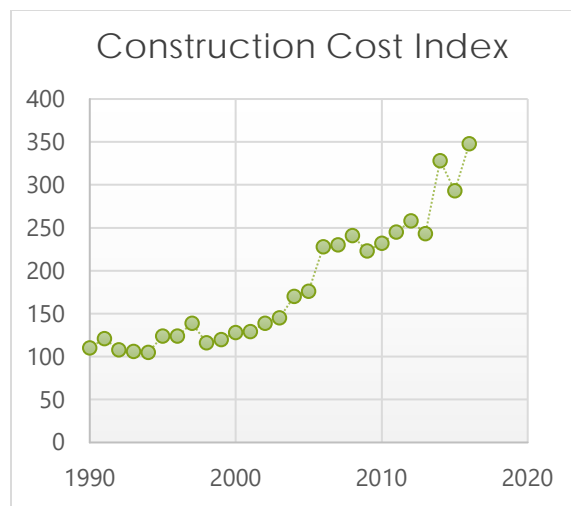
- ◆ Federal funds - allocated to the region - will increase by 1.2% per year.
- ◆ Other federal and state funding will be held constant.

Similar to the work done for revenues, the WWVMPO/SRTPO also compiled ten years of project data to develop typical costs by improvement type. The purpose of this information is two-fold:

- ◆ Projects submitted for potential inclusion in the plan were reviewed for reasonableness of their cost estimate, with the understanding that the figures represent planning estimates.
- ◆ Proposed projects that strictly address pavement preservation do not have to be specifically listed in the 2045 Plan, thus the unit cost data was used to develop system-wide estimates related to the upkeep of existing infrastructure.

Historically, construction cost increases - accounting for both labor and materials - have far outstripped revenue growth.

This trend is also reflected in the 2045 Plan, underscoring the need to find additional and sustained funding to maintain the condition of the existing multi-modal transportation system.



Source: WSDOT Construction Cost Index data retrieved from wsdot.wa.gov/Business/Construction/CostTrends.htm

Again, to account for cost increases over time, the WWVMPO/SRTPO reviewed statewide and nationwide transportation construction cost indices.

The findings resulted in an annual increase of 4.5% as the year-of-expenditure factor, which is used to assess project costs for later phases of the 2045 Plan as well as the financial assessment for ongoing maintenance and preservation activities.

System Preservation Needs

Costs associated with the preservation of the existing transportation system are accounted for ahead of any new project expenditures through a) the listing of anticipated transit asset replacements and b) the systemwide estimation of roadway pavement preservation.

Regionwide, there are 312 miles of sidewalks and 22 miles of multi-use pathways. However, their condition has not yet been fully inventoried and it is therefore uncertain as to how many of those miles may need to be rehabilitated or completely reconstructed.

Almost 96% of all paved and regionally significant roadways have an asphalt or bituminous surface. Based on the compiled unit cost data, the assumed current dollar "cost per lane mile" ranges from just under \$20,000 for local "chip seals" to contracted "mill and overlay" treatments for \$188,000. Complete reconstruction (starting at no less than \$460,000 per lane mile) and bridge projects are not accounted for in this systemic assessment of preservation needs and must be listed individually in the 2045 Plan.

Using this systemwide unit cost data, the WWVMPO/SRTPO developed several maintenance scenarios for the 2045 Plan:

- ◆ **Scenario A** replicates current practices and accounts for a ten-year cycle of chip seals on local, functionally classified roadways and one cycle of mill and overlay pavement treatment plus one cycle of chip seals on state highways and important local roadways (such as local National Highway System (NHS) routes). Over the life of the plan, Scenario A accounts for \$180.5 million in

preservation activities, if work is completed in-house; however, if state highway work is contracted out, costs may increase to \$250.6 million.

- ◆ **Scenario B** assumes a more ideal cycle of seven years in between chip seals and, again, at least one pavement treatment on state highways and a few, select local roadways. This scenario would cost between \$216.8 and \$298.9 million.
- ◆ At a cost of \$257.1 to \$339.2 million, **Scenario C** would also provide seven-year chip seal cycles, one pavement cycle on state highways and, in addition, one mill and overlay treatment on at least 25% of all local, functionally classified roadways, which is equivalent to a 100-year mill and overlay pavement cycle.

Ideally, the WWVMPO/SRTPO and its member entities would like to move to a preservation regimen more akin to Scenario B, or better yet C. However, the current funding levels are deemed insufficient to make this change.

Moreover, the agency has estimated that in order to have a single mill and overlay treatment on local, functionally classified roadways – at least once every 50 years – a 60% increase over current preservation funding levels would be needed, and a 200% increase would allow for road replacement.

The WWVMPO/SRTPO, its Technical Advisory Committee, and its Policy Board members have selected the systemwide maintenance Scenario A as the realistic portrayal of ongoing preservation activities for the purpose of financial planning in the 2045 Plan. At the same time, the agency and its members acknowledge that the current maintenance efforts fall short of what is needed to substantially improve the condition of the regional transportation infrastructure. The resulting **long-term repercussions** on the systemwide **state of good repair** will have to be addressed within the near future.

Fiscal Constraint

Having developed revenue estimates and systemwide preservation costs, the fiscal constraint analysis must use both to determine how much of the anticipated funding is available for the implementation of additional transportation improvements.

As revenues and expenditure grow at different rates, this calculation is done for each plan phase, as shown in the following tables – first for pedestrian, bicycle, and roadway infrastructure and then for public transit services and assets.

Pedestrian-Bicycle-Roadway Revenue				Oregon Total \$34,804,300
<i>Federal</i>	2021-2025	2026-2035	2036-2045	2021-2045
<i>STBG (Exchange)</i>	\$3,243,100	\$7,050,000	\$7,943,000	\$18,236,100
<i>SRTS</i>	\$0	\$250,000	\$250,000	\$500,000
Total Federal	\$3,243,100	\$7,300,000	\$8,193,000	\$18,736,100
<i>State</i>	2021-2025	2026-2035	2036-2045	2021-2045
<i>HB 2017</i>	\$1,047,600	\$2,095,000	\$2,095,000	\$5,237,600
<i>ODOT Fix-it (fed/state)</i>	\$18,500	\$37,000	\$37,000	\$92,500
Total State	\$1,066,100	\$2,132,000	\$2,132,000	\$5,330,100
<i>Local</i>	2021-2025	2026-2035	2036-2045	2021-2045
<i>City</i>	\$194,000	\$428,000	\$522,000	\$1,144,000
<i>County</i>	\$1,626,100	\$3,591,000	\$4,377,000	\$9,594,100
Total Local	\$1,820,100	\$4,019,000	\$4,899,000	\$10,738,100

Pedestrian-Bicycle-Roadway Revenue

Washington Total **\$466,441,000**

<i>Federal</i>	<i>2021-2025</i>	<i>2026-2035</i>	<i>2036-2045</i>	<i>2021-2045</i>
<i>STBG (US/R)</i>	\$8,101,600	\$16,826,000	\$18,958,000	\$43,885,600
<i>STBG</i>	\$6,878,100	\$13,756,000	\$13,756,000	\$34,390,100
<i>STBG (BR)</i>	\$10,732,400	\$6,597,000	\$6,597,000	\$23,926,400
<i>TA (US/R)</i>	\$343,600	\$788,000	\$888,000	\$2,019,600
<i>NHPP</i>	\$13,921,600	\$21,423,000	\$21,423,000	\$56,767,600
<i>HSIP</i>	\$2,177,400	\$3,603,000	\$3,603,000	\$9,383,400
<i>Other</i>	\$229,500	\$0	\$0	\$229,500
<i>Total Federal</i>	\$42,384,200	\$62,993,000	\$65,225,000	\$170,602,200

<i>State</i>	<i>2021-2025</i>	<i>2026-2035</i>	<i>2036-2045</i>	<i>2021-2045</i>
<i>CWA</i>	\$8,118,000	\$0	\$0	\$8,118,000
<i>TIB</i>	\$558,900	\$20,691,000	\$20,691,000	\$41,940,900
<i>CRAB</i>	\$3,501,900	\$7,246,000	\$7,246,000	\$17,993,900
<i>Other</i>	\$439,600	\$0	\$0	\$439,600
<i>Total State</i>	\$12,618,400	\$27,937,000	\$27,937,000	\$68,492,400

<i>Local</i>	<i>2021-2025</i>	<i>2026-2035</i>	<i>2036-2045</i>	<i>2021-2045</i>
<i>City</i>	\$18,901,500	\$49,456,000	\$54,020,000	\$122,377,500
<i>County</i>	\$28,149,800	\$34,657,000	\$40,221,000	\$103,027,800
<i>TBD</i>	\$1,941,100	\$0	\$0	\$1,941,100
<i>Port</i>	\$0	\$1,000,000	\$1,000,000	\$2,000,000
<i>Total Local</i>	\$48,992,400	\$84,113,000	\$94,241,000	\$227,346,400

Federal Sources:

After 2025, assuming 1.2% Average Annual Growth for Regional Federal Funds (US/R); 0% for all others

STBG – Surface Transportation Block Grant
(Exchange) – State Exchange of federal funds
(US/R) – Urban Small or Rural Allocation
(BR) – Bridge
SRTS – Safe Routes to School
TA – Transportation Alternatives [Pedestrian/Bicycle]
(US/R) – Urban Small or Rural Allocation
NHPP – National Highway Performance Program
HSIP – Highway Safety Improvement Program
Other – Highway Infrastructure Program (HIP);
 Western Federal Lands (WFL)

State Sources:

After 2025, assuming 0% Average Annual Growth Rate for State Funds

HB 2017 – Oregon House Bill 2017
ODOT Fix-it – Statewide Transportation Improvement
 Program funds assigned to maintenance and
 preservation (incl. federal and state grants)
CWA – Connecting Washington
TIB – Transportation Improvement Board
CRAB – County Road Administration Board
Other – Safe Routes to School; Bicycle and Pedestrian
 Safety

Local Sources:

After 2025, assuming Average Annual Growth Rate of 1% for Property Tax and 2% for Other Local Revenues

City – General Fund Appropriations, Property Tax, Local
 Road Tax, Fuel Tax Distribution, Bond Proceeds
County – Property Tax, Local Road Tax, Fuel Tax
 Distribution
TBD – Transportation Benefit District
Port – Economic Development Sales Tax Fund Grants to
 Local Governments

Systemwide preservation is deducted from these revenue estimates to arrive at the

level of funding for selected 2045 Plan projects.

Oregon Fiscal Constraint

Pedestrian-Bicycle-Roadway

	2021-2025	2026-2035	2036-2045	2021-2045
Revenue Estimate	\$6,129,300	\$13,451,000	\$15,224,000	\$34,804,300
Moved Forward	\$0	\$4,228,550	\$12,440,450	
Preservation Needs	\$1,900,750	\$5,239,100	\$8,395,450	\$15,535,300
Selected Projects	\$0	\$0	\$0	\$0
Unassigned Balance	\$4,228,550	\$12,440,450	\$19,269,000	\$19,269,000

Washington Fiscal Constraint

Pedestrian-Bicycle-Roadway

	2021-2025	2026-2035	2036-2045	2021-2045
Revenue Estimate	\$103,995,000	\$175,043,000	\$187,403,000	\$466,441,000
Moved Forward	\$0	\$4,364,273	\$934,173	
Preservation Needs	\$24,317,400	\$68,266,300	\$107,409,100	\$199,992,800
Selected Projects	\$75,313,327	\$110,206,800	\$79,766,900	\$265,287,027
Unassigned Balance	\$4,364,273	\$934,173	\$1,161,173	\$1,161,173

At this time, WWVMPO/SRTPO's Oregon member entities have not identified any immediate project needs, and just under \$19.3 million in transportation funding is currently unassigned.

With the exception of preservation activities, identification of projects within the Oregon area of the Walla Walla Valley is primarily carried out as part of the development of the Oregon Statewide Transportation Improvement Program (STIP). Since the development of the next STIP has recently begun and is expected to continue through 2023, any projects that come out of that development effort can subsequently be included in the 2045 Plan through the process of a plan amendment.

Public Transit Revenue		Oregon Total \$9,398,000		
		2021-2025	2026-2035	2036-2045
Federal		\$818,000	\$1,737,000	\$1,957,000
State		\$577,000	\$1,154,000	\$1,154,000
Local		\$339,000	\$749,000	\$913,000
Total		\$1,734,000	\$3,640,000	\$4,024,000
				\$9,398,000

Source: Milton-Freewater Budget data

As Milton-Freewater Public Transportation is considering a complete revision of their current service model, the replacement schedule for their assets is in flux and will be updated once the comprehensive assessment is complete.

Public Transit Revenue		Washington Total \$209,085,000		
		2021-2025	2026-2035	2036-2045
Federal		\$5,546,000	\$11,773,000	\$13,265,000
State		\$2,267,000	\$4,534,000	\$4,534,000
Local		\$28,334,000	\$62,565,000	\$76,267,000
Total		\$36,147,000	\$78,872,000	\$94,066,000
				\$209,085,000

Source: State Auditor Office and Valley Transit data

Facility maintenance, rolling stock preservation and replacement, and operational expenses are balanced against the revenues that consist of various federal and state grants, sales tax revenues (Valley Transit), fare collection, and additional sources of local funding.

In addition to Valley Transit's administrative building, transit maintenance shop, bus shelters, and other passenger amenities, a significant portion of the agency's assets lies in rolling stock. When the buses, dial-a-ride vans, van pool vehicles, or support vehicles reach the end of their useful life, they must be replaced.

Public Transit Expenditure		Washington Total \$206,975,060		
		2021-2025	2026-2035	2036-2045
Vehicle Replacement		\$12,183,880*	\$22,734,677	\$23,718,155
Transit Operations		\$23,935,963	\$55,760,567	\$68,641,818
Total		\$36,119,843	\$78,495,244	\$92,359,974
				\$206,975,060


Source: Valley Transit and State Auditor Office data

* 2021-2025 vehicle replacement adjusted for reserve balance

Selection of Projects

As previously described, [23 CFR 450.306\(b\) and \(d\)](#) stipulates that the Walla Walla Valley region develop its long-range transportation plan through a performance-driven, outcome-based approach that also considers ten federal planning factors. In addition, [23 USC 150\(b\)](#) requires the region to make progress towards identified national performance goals and applicable targets that were developed in accordance with [23 CFR 490.105](#).

The WWVMPO/SRTPO and its members collaborated closely on the development of goals and objectives that tie directly back to the federal planning factors and, at the same time, draw the focus to those investments that promote the region's specific vision.

Goal Area	Specific Objective
Safety 	<p>Include safety countermeasures to alleviate fatality and serious injury hot spots and barriers to safe routes to schools.</p> <p>Improve horizontal and vertical alignment or sight distance.</p> <p>Improve design or add safety features (transit bus pullout, pedestrian crossing, buffer area, lighting, etc.).</p> <p>Incorporate proactive safety and design elements identified in a safety audit/plan.</p>
Preservation and Infrastructure Condition 	<p>Increase the condition rating of a bridge (deck, superstructure, substructure, culvert).</p> <p>Increase the pavement condition rating.</p> <p>Mitigate known maintenance or condition issues.</p> <p>Improve curb ramps, sidewalks, and crosswalks to meet ADA requirements.</p>

Accessibility and Mobility



- Incorporate a sidewalk on at least one side of the roadway.
- Incorporate bike lanes for each direction or provide a separate facility to reduce rider stress (from ADT, posted speeds).
- Remove barriers for pedestrians, cyclists, or people with disabilities.
- Improve access for Environmental Justice populations (low income or minority) with a focus on community activity and employment centers.

Integration and Connectivity



- Close infrastructure gaps.
- Improve a regionally significant corridor.
- Include multi-modal elements (sidewalk, bicycle, carpool, vanpool, park-and-ride, or transit component, etc.).
- Improve connections to resolve legacy issues (multi-modal, redundancy, efficiency).

Resiliency and Reliability



- Protect from potential impacts from natural disasters.
- Improve Travel Time Reliability and existing or forecasted congestion.
- Reduce or mitigate stormwater impacts to surface transportation.

Economic Vitality




- Improve major routes between significant residential, commercial, or industrial sites.
- Support regional freight movement (state- or locally designated freight route).
- Provide direct access to a major activity or employment center.

Stewardship 	Provide consistency with planned growth and economic development.
	Use human-scale design to make transportation infrastructure approachable.
	Improve air quality by promoting opportunities to reduce greenhouse gas emissions and single occupancy vehicle (SOV) travel.
	Avoid impacts to environmentally sensitive areas.
Security 	Include design elements to harden infrastructure and protect transportation system users from sources of intentional harm.
	Support emergency preparedness and response.
Efficient System Management and Operations 	Align transportation improvements with land use and functional context for all modes of transportation.
	Improve operational efficiency (channelization, integrated traffic control, multi-modal components, etc.).
	Include access management elements (raised medians, reduced number of driveways, turn restrictions, etc.).
Travel and Tourism 	Include "place-making" elements (lighting, benches, plazas, public art, etc.).
	Enhance the travel experience (wayfinding signage, activated hazard warnings, Intelligent Transportation System (ITS) - Traveler Information, etc.).
	Keep design consistent with the nearby urban or rural aesthetics.

The Walla Walla Valley has also opted for a **qualitative approach**, which allows **conceptual projects** to compete and the ranking to be **mode independent**.

The qualitative assessment is tied to **relevance** (high/medium/low) and **impact** (significant/moderate/neutral/negative). The project comparison is accomplished through assignment of numerical values to both factors:

- ♦ 5 = High
 ♦ 3 = Medium
 ♦ 1 = Low
- 
- ♦ 2 = Significant
 ♦ 1 = Moderate
 ♦ 0.1 = Neutral
 ♦ -1 = Negative

Following the formulation of the goals and objectives, the public was given the opportunity to weigh in on their relative level of importance. The agency evaluated the responses to various public survey questions to arrive at the following aggregate level of priority:

Goal Area	Weighting
Safety	5
Preservation and Infrastructure Condition	4.5
Accessibility and Mobility	4.5
Integration and Connectivity	4
Resiliency and Reliability	4
Economic Vitality	3.5
Stewardship	3.5
Security	3
Efficient System Management and Operations	2
Travel and Tourism	1

Expressed as weighting factors to be applied to each goal area, the public's feedback was instrumental in further differentiating the merit of each proposed project to the region. The resulting numerical ranking determined the order in which the projects were considered for inclusion in the **fiscally constrained project list** for the 2045 Plan. The final numerical rank is not shown in the following table. Instead, the underlying assessment is simply shown as a ++/+/o notation.

Project Sponsor	Project Name	From	To	Length	Exist. Lane	Prop. Lane	Brief Description	Safety Focus	Pedestrian Mode	Bicycle Mode	Capacity Changes	Cost Estimate	Plan Phase	Year of Expenditure Cost	Safety	Preservation & Condition	Accessibility & Mobility	Integration & Connectivity	Resiliency & Reliability	Economic Viability	Stewardship	Security	Efficient Mgmt & Operations	Travel & Tourism
WSDOT	SCR 2021 Region Wide BCT Replacement - Freeway	Various	Various				Safety: Guardrail Improvements					\$124,028	TIP	\$124,028	++	++		+		++				
Walla Walla County	Countywide Signing & Guideposts						Safety: Signs and Guideposts	Roadway Departure				\$145,000	TIP	\$145,000	++	++		+		+				
Walla Walla County	Abbott Road MP 0.25 to MP 0.50	0.25	0.5	0.3	2	2	Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk			\$208,548	TIP	\$208,548	++		++	+			+			
WSDOT	SR 125/Plaza Way Vic Stage 2 - Sidewalk Improvements	Plaza Way (4.4)	Orchard (4.7)	0.3	4	4	Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk			\$211,300	TIP	\$211,300	++	+	++	++	+	++	++	+	++	++
Waitsburg	Taggart Road Extension	Mill Race	Highway 12	1.0	0	2	New: Construction				Increase in Lanes	\$270,000	TIP	\$270,000			+	+		+	++			
WSDOT	SR 128 et al/SE Washington	Various	Various				Safety: Centerline rumble strips					\$353,711	TIP	\$353,711	++			+		++				
Walla Walla	Citywide Pedestrian Safety Treatments	Various	Various				Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk			\$393,845	TIP	\$393,845	++		++	+			+			
WSDOT	US 730/4.1 Miles N of Oregon Border - Rockfall Prevention	Twin Sisters Vic		0.1	2	2	Safety: Rockfall Prevention					\$493,637	TIP	\$493,637	++	+	o	+	+	++	+	++	o	o
Waitsburg	Mill Race Rd Grade Crossing	Main Street	City Limits	0.2	2	2	Roadway: Reconstruction		Curb-tight Sidewalk			\$583,403	TIP	\$583,403	+	++	++	+		+	+			+
WSDOT	SR 125/OR Stateline to Military Rd - ADA	Stateline	Military Rd	4.4	4	4	Ped/Bike: Improvements for Persons with Disabilities	Protect Ped/Bike	Curb-tight Sidewalk			\$629,425	TIP	\$629,425	++		++	+			+			
College Place	Mojonnier Road Reconstruction (PE & RW Phases)	College Avenue	Bluvue Lane	0.6	2	3	Roadway: Design and Right-of-Way	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path	New Center Turn Lane	\$711,000	TIP	\$711,000	++	++	++	+	++	++	+	++	++	++
Walla Walla County	Wallula Avenue MP 2.00 to MP 2.20	2	2.2	0.2	2	2	Intersection: Reconstruction	PDO Hotspot	Curb-tight Sidewalk		New Roundabout	\$724,943	TIP	\$724,943	++	o	++	+	+	+	+	++	o	
College Place	SW 4th 4Bikes Project	College Avenue	Academy Way	0.5	3	3	Ped/Bike: Bicycle Improvements	Address Injury	Curb-tight Sidewalk	Buffered Bikeline		\$866,000	TIP	\$866,000	++	o	++	++	+	+	++	++	++	+
Walla Walla County	Drumheller Bridge on Sudbury Road, MP 3.99 to MP 4.09	3.99	4.09	0.1	2	2	Bridge: Rehabilitation	Roadway Departure				\$956,250	TIP	\$956,250		++		+	++	+	+	++		o
WSDOT	US 730/5.2 Miles N of Oregon Border - Rockfall Prevention	Wallula Jct. Vic		0.2	2	2	Safety: Rockfall Prevention					\$1,107,864	TIP	\$1,107,864	++	+	o	+	+	++	+	++	o	o
WSDOT	US 12/US 12 Over Abandoned Railroad - Bridge Painting	Wallula Jct. Vic		0.1	2	2	Bridge: Painting					\$1,245,723	TIP	\$1,245,723		++		+	++	++	+	++		+
Walla Walla County	Fishhook Park Road MP 0.00 to MP 1.40	0	1.4	1.4	2	2	Paving and Widened Shoulder	Roadway Departure		Widened Shoulder 4ft+		\$1,371,550	TIP	\$1,371,550	+	++	+	+		+				+
Walla Walla County	Arch Bridge on Lamar Road, MP 2.64 to MP 2.94	2.64	2.94	0.3	2	2	Bridge: Replacement					\$1,451,800	TIP	\$1,451,800		++		+	++	+	+	++		o
WSDOT	US 730/3.0 Miles N of Oregon Border - Rockfall Prevention	Port Kelley Vic		0.2	2	2	Safety: Rockfall Prevention					\$1,535,603	TIP	\$1,535,603	++	+	o	+	+	++	+	++	o	o
Walla Walla County	Peppers Bridge Road MP 0.36 to MP 1.61	0.36	1.61	1.3	2	2	Roadway: Reconstruction	Roadway Departure		Widened Shoulder 4ft+		\$1,700,000	TIP	\$1,700,000	++	++	+			+		+	+	+
WSDOT	SR 125/Plaza Way - Intersection Improvements	4.3	4.65	0.4	4	4	Intersection: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk		New Roundabout	\$2,385,776	TIP	\$2,385,776	++	+	++	++	++	++	+	+	++	++

Project Sponsor	Project Name	From	To	Length	Exist. Lane	Prop. Lane	Brief Description	Safety Focus	Pedestrian Mode	Bicycle Mode	Capacity Changes	Cost Estimate	Plan Phase	Year of Expenditure Cost	Safety	Preservation & Condition	Accessibility & Mobility	Integration & Connectivity	Resiliency & Reliability	Economic Viability	Stewardship	Security	Efficient Mgmt & Operations	Travel & Tourism
Walla Walla	9th Ave and Plaza Way/Dalles Military Intersection and Street Improvements	9th Ave	Village Way	0.3	4	3	Paving and Lane Changes	Address Injury	Curb-tight Sidewalk	Bikelane	Road Diet	\$2,390,000	TIP	\$2,390,000	++	+	++	++	++	++	++	+	++	++
Walla Walla County	Middle Waitsburg Road MP 6.10 to MP 7.92 (Walla Walla Co. 2017 Safety Program)	6.1	7.92	1.8	2	2	Roadway: Reconstruction and Realignment	Roadway Departure		Widened Shoulder 4ft+		\$2,400,000	TIP	\$2,400,000	++	++	+	+		+				+
Walla Walla County	Lower Waitsburg Road MP 4.23 to MP 6.25	4.23	6.25	2.0	2	2	Roadway: Reconstruction and Realignment	Roadway Departure		Widened Shoulder 4ft+		\$2,554,000	TIP	\$2,554,000	++	++	+	+		+				+
WSDOT	US 730/4.4 Miles N of Oregon Border - Rockfall Prevention	Twin Sisters Vic		0.2	2	2	Safety: Rockfall Prevention					\$2,569,239	TIP	\$2,569,239	++	+	o	+	+	++	+	++	o	o
WSDOT	US 12/Walla Walla River Bridge - Bridge Painting	Wallula Jct. Vic		0.1	2	2	Bridge: Painting					\$3,164,997	TIP	\$3,164,997		++		+	++	++	+	++		+
Walla Walla County	Mill Creek Road MP 1.10 to MP 3.96	1.1	3.96	2.9	2	2	Roadway: Reconstruction and Realignment	Roadway Departure		Widened Shoulder 4ft+		\$3,210,000	TIP	\$3,210,000	++	++	++	++		+				++
Walla Walla	Poplar Street - Colville to 5th	Colville	5th	0.4	4	3	Roadway: Reconstruction and Lane Changes	Address Injury	Buffered Sidewalk	Buffered Bikelane	Road Diet	\$3,299,775	TIP	\$3,299,775	++	++	++	+	++	+	+	+	+	+
Walla Walla	Rose Street Bridge Replacement at Mill Creek	Intersection	Intersection	0.1	2	2	Bridge: Replacement	Protect Ped/Bike	Curb-tight Sidewalk			\$4,026,660	TIP	\$4,026,660	++	++	++	+	++	++	+	++		+
Walla Walla County	Dell Sharpe Bridge on Pettyjohn Road, MP 5.20 to MP 5.80	5.2	5.8	0.6	2	2	Bridge: Replacement					\$7,231,250	TIP	\$7,231,250		++		+	++	+	+	++		o
WSDOT	Asphalt/Chip Seal Preservation Walla Walla Valley Metropolitan Planning	Various	Various				Paving					\$12,766,386	TIP	\$12,766,386	+	++				++				++
WSDOT	US 12/Wallula to Nine Mile Hill - Build New Highway (Phase 8) (PE & RW Phases)	Wallula	Nine Mile Hill	13.0		4	New: Design and Right-of-Way	Address Fatality		Widened Shoulder 4ft+	Increase in Lanes	\$21,800,000	TIP	\$21,800,000	++	+	o	++	++	++	+	++	++	++
WSDOT	US 12/Dodd Rd Vicinity to Wallula Vicinity - Paving	Dodd Rd Vic	Wallula Vic	3.0	4/2	4/2	Paving					\$2,378,000	TIP new	\$2,378,000	+	++				++				++
WSDOT	US 730/Oregon State Line to US 12 - Paving	Oregon State line	US 12	6.0	2	2	Paving					\$2,947,770	TIP new	\$2,947,770	+	++				++				++
WSDOT	SR 125/OR Stateline to Military Rd - Paving	Stateline	Military Rd	4.4	4	4	Paving					\$5,519,586	TIP new	\$5,519,586	+	++				++				++
Walla Walla	Alder & Poplar Street-Merriam to Colville	Merriam	Colville	0.5	2	2-3	Roadway: Reconstruction and Lane Changes	Address Injury	Curb-tight Sidewalk	Buffered Bikelane		\$4,270,000	Short 2021-2025	\$4,662,900	++	++	++	++	++	+	+	+	++	+
Walla Walla	Park Street Bike and Pedestrian	Boyer	Alder	0.6	2	2	Ped/Bike: Pedestrian and Bicycle Improvements	Protect Ped/Bike	Buffered Sidewalk	Bikelane		\$400,000	Short 2021-2025	\$436,800	++	++	++	++	+	+	+	+	+	o
College Place	College Avenue CP Post Office Ped Crossing (500 S. College Avenue)	Fourth Street	Sixth Street	0.0	3	3	Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk	Signed/ Shared Route		\$90,000	Short 2021-2025	\$98,300	++	+	++	+	+	++	++	+	+	+
College Place	Mojonnier Road Reconstruction (CN Phase)	College Avenue	Bluvue Lane	0.6	2	3	Roadway: Reconstruction	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path	New Center Turn Lane	\$5,452,900	Medium 2026-2035	\$8,468,200	++	++	++	++	++	+	+	+	++	+
Walla Walla	Poplar Street - 5th to 14th	5th	14th	0.6	4	3	Roadway: Reconstruction and Lane Changes	Address Injury	Buffered Sidewalk	Buffered Bikelane	Road Diet	\$4,500,000	Medium 2026-2035	\$6,988,400	++	++	++	++	++	+	+	+	++	o
Walla Walla	Plaza Way - Village to Taumarson	Village Way	Taumarson	0.8	2	2-3	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$4,500,000	Medium 2026-2035	\$6,988,400	+	++	++	++	++	++	+	+	+	o
Walla Walla	Chestnut and Howard Intersection Improvement	Maple	Locust	0.1	2	2	Intersection: Improvement	Address Injury	Buffered Sidewalk	Bikelane	New Traffic Light	\$1,000,000	Medium 2026-2035	\$1,553,000	++	++	++	++	+	+	+	+	++	o

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College Place	12th Street Reconstruction (Larch to College Avenue)	College Avenue	Larch Avenue	0.5	2	2	Roadway: Reconstruction	Address Fatality	Multi-Use Path 10ft+	Off-road Path		\$2,858,200	Medium 2026-2035	\$4,438,700	++	++	++	+	+	+	+	+	+	+
College Place	12th Street Reconstruction (Larch to Myra)	Larch Avenue	Myra Rd	0.7	2	2	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Off-road Path		\$4,045,800	Medium 2026-2035	\$6,283,000	++	++	++	+	+	+	+	+	+	+
College Place	C Street & Myra Rd Intersection	Deccio Rd	Myra Rd	0.1	3	3	Intersection: Improvement	PDO Hotspot	Curb-tight Sidewalk	Signed/ Shared Route		\$25,000	Medium 2026-2035	\$38,800	++	+	++	++	++	++	+	+	++	+
WSDOT	SR 125 Walla Walla Vic - Active Transportation Improvements				4	4	Ped/Bike: Pedestrian and Bicycle Improvements		Multi-Use Path 10ft+			\$1,500,000	Medium 2026-2035	\$2,329,500	++	++	++	++	o	+	+	o	+	+
Walla Walla	Plaza Way Sidewalks	Village Way	Taumarson	0.8			Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$500,000	Medium 2026-2035	\$776,500	++	+	++	++	+	+	++	+	+	o
College Place	Whitman Drive & Larch Intersection	Larch Avenue	Whitman Drive	0.1	3	3	Intersection: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/ Shared Route	New Traffic Light	\$304,160	Medium 2026-2035	\$472,400	++	++	++	+	+	+	+	+	++	+
College Place	12th Street & Larch Intersection	12th/Larch	12th/Larch	0.1	2	2	Intersection: Reconstruction	Address Fatality	Curb-tight Sidewalk	Off-road Path	New Signal or Roundabout	\$1,600,000	Medium 2026-2035	\$2,484,800	++	+	++	+	+	+	+	+	++	+
Walla Walla	School Avenue and Pleasant Street Realignment	Amelia	Carl	0.2	2	2	Intersection: Improvement	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$965,000	Medium 2026-2035	\$1,498,600	++	++	++	+	+	+	+	+	+	o
Prescott	A Street Reconstruction	1st Street	Front Street	0.1	2	2	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk			\$450,000	Medium 2026-2035	\$698,800	++	++	++	++	+	+	+	+	+	o
Walla Walla County	RESER ROAD MP 0.97 TO MP 1.22	0.97	1.22	0.3	2	2	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Widened Shoulder 4ft+		\$1,170,000	Medium 2026-2035	\$1,817,000	++	++	++	++	o	+	+	+	o	o
Walla Walla County	WALLULA AVENUE MP 0.00 TO MP 0.25	0	0.25	0.3	2	2	Bridge: Replacement			Widened Shoulder 4ft+		\$2,000,000	Medium 2026-2035	\$3,105,900	++	++	+	+	++	++	+	++	o	o
Walla Walla	Tietan Street Sidewalks - 4th to Plaza	4th	Plaza	0.4	2	2	Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$880,000	Medium 2026-2035	\$1,366,600	++	+	++	++	+	+	+	+	+	+
Walla Walla	Avery Street Improvements	Rose	Electric	0.2	2	2	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Bikelane		\$1,500,000	Medium 2026-2035	\$2,329,500	+	++	++	+	+	++	+	+	+	o
Walla Walla	Myra Rd - SR 125 to Taumarson	SR 125	Taumarson	0.5	0	3	New: Construction	Protect Ped/Bike	Buffered Sidewalk	Bikelane	Increase in Lanes	\$9,000,000	Medium 2026-2035	\$13,976,700	+	+	++	++	++	++	+	+	+	+
Walla Walla	Park Street Improvements	Alder	Juniper	0.6	2	2	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Bikelane		\$3,300,000	Medium 2026-2035	\$5,124,800	++	++	++	++	+	o	+	+	+	+
College Place	College Avenue & Southside Development Intersection II	Sager Middle School 1755 S. College	Sager Middle School 1755 S. College	0.0	3	3	Intersection: Reconstruction	Roadway Departure	Curb-tight Sidewalk	Signed/ Shared Route	New Traffic Light	\$365,170	Medium 2026-2035	\$567,100	++	+	++	+	+	++	+	+	++	+
College Place	College Avenue & Southside Development Intersection I	College Place High School 1755 S.	College Place High School 1755 S.	0.0	3	3	Intersection: Reconstruction	Roadway Departure	Curb-tight Sidewalk	Signed/ Shared Route	New Traffic Light	\$365,170	Medium 2026-2035	\$567,100	++	+	++	+	+	++	+	+	++	+
Walla Walla	Alder Street - Roosevelt to Brock	Roosevelt	Brock	0.5	2	2	Intersection: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$3,413,000	Medium 2026-2035	\$5,300,300	+	++	++	++	+	o	+	+	+	o
Walla Walla	9th and Alder Signal Replacement			NA			Intersection: Signal Replacement	Protect Ped/Bike				\$450,000	Medium 2026-2035	\$698,800	+	+	+	+	+	+	+	+	++	+
Walla Walla	9th Ave and Main Signal			NA			Intersection: Signal Replacement	Protect Ped/Bike				\$450,000	Medium 2026-2035	\$698,800	+	+	+	+	+	+	+	+	++	+
Walla Walla County	SCHOOL AVENUE MP 0.00 TO MP 1.11	0	1.11	1.1	2	2	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$2,400,000	Medium 2026-2035	\$3,727,100	++	++	++	++	o	+	+	+	o	o

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Waitsburg	Sidewalks Improvements (Harmon, E 2nd, and Garden Streets, and E Camp Road)	Various	Various	0.7	2	2	Ped/Bike: Pedestrian Improvements		Curb-tight Sidewalk			\$250,000	Medium 2026-2035	\$388,200	++	o	++	+	+	+	+	+	+	o
Walla Walla County	3RD AVENUE S. PAXTON BRIDGE MP 2.30 TO MP 2.77	2.3	2.77	0.5	2	2	Bridge: Replacement and Road Reconstruction					\$900,000	Medium 2026-2035	\$1,397,700	++	++	+	+	++	+	o	+	o	o
Walla Walla	Opticom System Upgrades	Various	Various	NA			Safety: Technology Upgrade					\$250,000	Medium 2026-2035	\$388,200	++	+	o	+	+	o	+	++	++	o
Walla Walla	Chestnut Street 2nd to Howard	2nd	Howard	0.3	2	2	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Bikelane		\$3,300,000	Medium 2026-2035	\$5,124,800	+	++	+	+	+	+	+	+	+	o
Walla Walla County	LYONS FERRY ROAD MP 0.20 TO MP 2.81	0.2	2.81	2.6	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$2,950,000	Medium 2026-2035	\$4,581,300	++	+	+	+	+	++	+	+	o	o
Walla Walla County	MOJONNIER ROAD MP 0.14 TO MP 1.40	0.14	1.4	1.3	2	2	Roadway: Realignment			Widened Shoulder 4ft+		\$1,000,000	Medium 2026-2035	\$1,553,000	++	+	+	+	o	+	+	+	o	o
Walla Walla County	RESER ROAD MP 3.29 TO MP 5.19	3.29	5.19	1.9	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,080,000	Medium 2026-2035	\$1,677,200	++	+	+	+	o	+	+	+	o	o
Walla Walla County	FISHHOOK PARK ROAD MP 1.40 TO MP 2.92	1.4	2.92	1.5	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$800,000	Medium 2026-2035	\$1,242,400	++	+	+	+	o	+	+	+	o	o
Walla Walla County	HARVEY SHAW ROAD MP 0.03 TO MP 2.00	0.03	2	2.0	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,000,000	Medium 2026-2035	\$1,553,000	++	+	o	+	o	++	+	+	o	o
Walla Walla County	HARVEY SHAW ROAD MP 2.00 TO MP 3.35	2	3.35	1.4	2	2	Roadway: Reconstruction and Realignment	Roadway Departure		Widened Shoulder 4ft+		\$60,000	Medium 2026-2035	\$93,200	++	+	o	++	o	++	o	+	o	o
Walla Walla County	HARVEY SHAW ROAD MP 5.43 TO MP 8.05	5.43	8.05	2.6	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,600,000	Medium 2026-2035	\$2,484,800	++	+	+	+	o	++	+	+	o	o
WSDOT	SR 125/Military Rd to N 13th Ave - Paving	Military Rd	N 13th Ave	1.5	4/2	4/2	Paving					\$1,663,950	Medium 2026-2035	\$2,584,100	o	++	o	+	o	++	o	o	o	o
Walla Walla County	WALLULA AVENUE MP 0.25 TO MP 1.84	0.25	1.84	1.6	2	2	Roadway: Reconstruction			Widened Shoulder 4ft+		\$900,000	Medium 2026-2035	\$1,397,700	+	+	+	+	o	+	+	+	o	o
Walla Walla County	MIDDLE WAITSBURG ROAD MP 14.40 TO MP 16.41	14.4	16.41	2.0	2	2	Roadway: Reconstruction	Roadway Departure		Widened Shoulder 4ft+		\$1,000,000	Medium 2026-2035	\$1,553,000	++	+	+	+	o	+	+	+	o	o
WSDOT	SR 125 Spur/N 13th Ave to Myra Rd - Paving	N 13th Ave	Myra Rd	0.8	2	2	Paving					\$466,650	Medium 2026-2035	\$724,700	o	++	o	+	o	++	o		o	o
Walla Walla County	MCKAY ALTO ROAD MP 0.00 TO MP 1.28	0	1.28	1.3	2	2	Roadway: Reconstruction	Roadway Departure		Widened Shoulder 4ft+		\$750,000	Medium 2026-2035	\$1,164,700	+	+	o	o	o	+	+	+	o	o
Walla Walla	Poplar Street 14th to Myra	14th	Myra	1.0			Roadway: Reconstruction	Address Injury	Buffered Sidewalk	Buffered Bikelane	Road Diet	\$1,600,000	Long 2036-2045	\$3,858,700	++	++	++	++	++	++	+	+	++	o
Walla Walla	School Ave. Sidewalks	Pleasant	Woodmere Lp	0.2	2	2	Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$875,000	Long 2036-2045	\$2,110,200	++	++	++	++	o	+	++	++	+	o
WW Cty/Cnty (WW)	School Avenue Improvements Alder to Bryant	Alder	Bryant	0.8	2	2	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$2,000,000	Long 2036-2045	\$4,823,400	++	++	++	++	+	+	+	+	+	o
Walla Walla County	RESER ROAD MP 0.49 TO MP 0.97 (Fern to Wilbur)	0.49	0.97	0.5	2	2	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Path 8ft+	Bikelane		\$1,680,000	Long 2036-2045	\$4,051,700	++	++	++	++	o	++	+	+	o	o
Walla Walla	Central Business Dist. Signal Upgrade	various	various	NA			Intersection: Technology Upgrade					\$150,000	Long 2036-2045	\$361,800	+	++	+	+	++	++	+	++	++	o

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Walla Walla	Cottonwood Road sidewalks & Pedestrian Bridge	Thunder Ridge	Russell Creek	0.1			Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Multi-Use Path 10ft+	Bikelane		\$400,000	Long 2036-2045	\$964,700	++	+	++	++	+	+	+	+	+	+
Walla Walla	Mill Creek Trail Re-Pave	Cambridge	Tausick	0.9			Ped/Bike: Pedestrian and Bicycle Improvements	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path		\$150,000	Long 2036-2045	\$361,800	+	++	++	++	+	+	+	+	+	+
Walla Walla	2nd Ave. Bridge over Mill Creek			0.1	3	3	Bridge: Replacement					\$1,500,000	Long 2036-2045	\$3,617,600	o	++	+	+	++	++	+	+	+	+
Walla Walla	Central Business Dist. Signal Interconnect	various	various	NA			Intersection: Signal Interconnect				New Traffic Light	\$150,000	Long 2036-2045	\$361,800	+	o	+	++	++	++	+	+	++	+
Walla Walla	Melrose Street Reconstruction	Wilbur	Airport Way	1.1	2	2	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/ Shared Route		\$1,500,000	Long 2036-2045	\$3,617,600	++	++	++	++	+	+	+	+	+	o
WW Cty/Cnty (WW)	Bryant Avenue Sidewalks	Division	Reser	1.1	2	2	Ped/Bike: Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk	Bikelane		\$1,000,000	Long 2036-2045	\$2,411,700	+	+	++	++	o	+	+	+	o	o
Walla Walla	Audible Accessible signal Improvements	Various	Various	NA			Ped/Bike: Improvements for Persons with Disabilities	Protect Ped/Bike				\$350,000	Long 2036-2045	\$844,100	++	++	++	+	o	o	+	+	+	+
Walla Walla	Main-Palouse-Boyer Intersection Accessibility			NA			Ped/Bike: Improvements for Persons with Disabilities	Protect Ped/Bike	Curb-tight Sidewalk	Signed/ Shared Route		\$100,000	Long 2036-2045	\$241,200	++	+	++	+	o	+	+	+	+	+
WSDOT	SR 125 Spur/N 13th Ave to Myra Rd - ADA	N 13th Ave	Myra Rd	0.8	2	2	Ped/Bike: Improvements for Persons with Disabilities		Curb-tight Sidewalk			\$116,790	Long 2036-2045	\$281,700	+	++	+	++	o	++	+	+	o	o
WSDOT	SR 125/Military Rd to N 13th Ave - ADA	Military Rd	N 13th Ave	1.5	4/2	4/2	Ped/Bike: Improvements for Persons with Disabilities		Curb-tight Sidewalk			\$1,063,930	Long 2036-2045	\$2,565,900	+	++	+	++	o	++	+	+	o	o
Walla Walla	Howard Street - Park to Tietan	Park	Tietan	0.8	2	2	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Bikelane		\$5,209,000	Long 2036-2045	\$12,562,600	+	++	+	+	+	+	+	+	+	o
Walla Walla	9th and Pine Signalization			NA			Intersection: Traffic Signal				New Traffic Light	\$350,000	Long 2036-2045	\$844,100	+	o	+	+	+	++	+	+	++	o
Walla Walla	Howard and Reser Signalization			NA			Intersection: Traffic Signal				New Traffic Light	\$350,000	Long 2036-2045	\$844,100	++	+	+	+	+	+	+	+	+	o
Walla Walla/ College Place (WW)	Myra/Garrison Village Way Signal			NA	4	5	Intersection: Traffic Signal	Protect Ped/Bike	Curb-tight Path 8ft+	Off-road Path	New Traffic Light	\$2,200,000	Long 2036-2045	\$5,305,800	+	+	++	+	+	+	+	+	+	+
Walla Walla	Clinton Street Reconstruction	Isaacs	Alder	0.4	2	2	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Signed/ Shared Route		\$2,500,000	Long 2036-2045	\$6,029,300	+	++	+	+	+	+	+	+	+	o
Walla Walla County	STOVALL ROAD MP 0.90 TO MP 2.00	0.9	2	1.1	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,070,000	Long 2036-2045	\$2,580,500	++	+	+	+	o	+	+	+	o	o
Walla Walla County	MILL CREEK ROAD MP 6.5 TO MP 8.0	6.5	8	1.5	2	2	Roadway: Reconstruction	Roadway Departure		Widened Shoulder 4ft+		\$2,100,000	Long 2036-2045	\$5,064,600	++	+	+	+	o	+	+	+	o	o
Walla Walla County	LEWIS PEAK ROAD MP 0.00 TO MP 9.24	0	9.24	9.2	2	2	Roadway: Reconstruction and Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,600,000	Long 2036-2045	\$3,858,700	++	+	o	+	o	+	+	+	o	o
Walla Walla County	BEET ROAD MP 0.71 TO MP 1.41	0.71	1.41	0.7	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$940,000	Long 2036-2045	\$2,267,000	++	+	+	+	o	o	+	+	o	o
Walla Walla County	LOWER WAITSBURG ROAD MP 13.50 TO MP 14.78	13.5	14.78	1.3	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,570,000	Long 2036-2045	\$3,786,400	++	+	+	+	o	+	+	+	o	o
Walla Walla County	MIDDLE WAITSBURG ROAD MP 11.65 TO MP 13.0	11.65	13	1.4	2	2	Roadway: Reconstruction and Realignment	Roadway Departure		Widened Shoulder 4ft+		\$2,080,000	Long 2036-2045	\$5,016,400	++	+	+	+	o	+	+	+	o	o
Walla Walla County	MUD CREEK ROAD MP 3.00 TO MP 3.50	3	3.5	0.5	2	2	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$470,000	Long 2036-2045	\$1,133,500	++	+	o	o	o	o	o	+	o	o

Air Quality Conformity Note

As discussed in the Sustainability and Stewardship Chapter, the WWVMPO/SRTPO must demonstrate that transportation projects included in the 2045 Plan will not cause air quality to degrade to levels that would be in violation of the allowed standards for particulate matter with a diameter of ten microns or less (PM₁₀).

According to [40 CFR 93.126](#), the majority of selected investments in the 2045 Plan are **exempt projects**, which do not require air quality conformity determination. In the Walla Walla Valley, these projects address:

- ◆ Safety
 - ◆ Railroad/highway crossing
 - ◆ Projects that correct, improve, or eliminate a hazardous location or feature
 - ◆ Shoulder improvements
 - ◆ Increasing sight distance
 - ◆ Highway Safety Improvement Program implementation
 - ◆ Traffic control devices and operating assistance (other than signalization projects)
 - ◆ Guardrails, median barriers, crash cushions
 - ◆ Pavement resurfacing and/or rehabilitation
 - ◆ Pavement marking
 - ◆ Lighting improvements
 - ◆ Widening narrow pavements or reconstructing bridges (no additional travel lanes)
- ◆ Transit
 - ◆ Operating assistance to transit agencies
 - ◆ Purchase of support vehicles
 - ◆ Rehabilitation of transit vehicles^m
 - ◆ Purchase of office, shop, and operating equipment for existing facilities

- ◆ Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)
- ◆ Construction or renovation of power, signal, and communications systems
- ◆ Construction of small passenger shelters and information kiosks
- ◆ Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)
- ◆ Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet^m
- ◆ Construction of new bus or rail storage/maintenance facilities categorically excluded in [23 CFR 771](#)
- ◆ Pedestrian and Bicycle Facilities
- ◆ Other
 - ◆ Planning and technical studies
 - ◆ Noise attenuation
 - ◆ Directional and informational signs
 - ◆ Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes

According to [40 CFR 93.127](#), the following types of projects may be **exempt from a hot spot analysis**, if they are NOT also identified in [40 CFR 93.123\(b\)\(1\)](#):

- ◆ Intersection channelization projects
- ◆ Intersection signalization projects at individual intersections
- ◆ Interchange reconfiguration projects
- ◆ Changes in vertical and horizontal alignment
- ◆ Truck size and weight inspection stations
- ◆ Bus terminals and transfer points

^m The project is exempt if it is in compliance with control measures in the applicable implementation plan.

The US 12/Wallula to Nine Mile Hill (Phase 8) - PE-RW Phases has been identified as a **non-exempt project**, which is required to complete project level conformity determination. (40 CFR 93.116)

The required analysis and interagency consultation (40 CFR 93.105(c)) is likely to show that this project does not cause or contribute to any new localized violation of the PM₁₀ standard, increase the frequency or severity of any existing PM₁₀ violations, or delay a prescribed milestone.

Plan Amendment Process

A complete update of the 2045 Plan will occur no later than four years following the original approval. In the interim, revisions to the plan may be submitted by any of the WWVMPO/SRTPO member entities according to the established amendment process:

- ◆ Using the 2045 Plan - Project Submission Matrix, the requesting entity provides detailed project information, along with the self-evaluation of the project's regional merit and any support materials, such as a copy of a funding authorization letter.
- ◆ WWVMPO/SRTPO staff reviews the request and seeks additional information, as needed.
- ◆ In the event that the requested project triggers the need for an air quality conformity re-determination, WWVMPO/SRTPO staff will start the required process immediately.
- ◆ A draft 2045 Plan amendment is prepared.
- ◆ The draft amendment is published to solicit review and comments.
- ◆ Thereafter, the draft amendment, including any comments received, is provided for TAC review and recommendation.
- ◆ The 2045 Plan Amendment is then presented to the Policy Board for final review and approval.
- ◆ Once approved, the revised 2045 Plan is transmitted to FHWA, FTA, ODOT and WSDOT.

There are several situations that may prompt a 2045 Plan amendment request by a WWVMPO/SRTPO member agency:

<i>Reason for Amendment</i>	<i>Listed in the plan?</i>	<i>Action Required</i>
<i>New funding is received</i>	Yes – in the unfunded “illustrative” list	Add new funding to the forecasted revenue. Move project to the fiscally constrained list.
<i>An unfunded project is now a higher priority</i>	Yes – in the unfunded “illustrative” list	Rank “unfunded, high priority” project based on 2045 Plan selection process. Update the fiscally constrained project list by either a) adding new funding or b) removing a project that does not rank as high in comparison.
<i>A new high priority project is identified</i>	No	Rank “new, high priority” project based on 2045 Plan selection process. Update the fiscally constrained project list by either a) adding new funding or b) removing a project that does not rank as high in comparison.

Certain 2045 Plan revisions may be connected to an amendment of the Metropolitan/Regional Transportation Improvement Program (M/RTIP):

- ◆ In order to process both amendments more efficiently, WWVMPO/SRTPO staff recommends that the schedule established for M/RTIP changes is also applied to any 2045 plan amendments, thus utilizing the same schedule for the public comment period, the TAC review and recommendation, and the final Policy Board review and approval.
- ◆ As the approval of the M/RTIP amendment is dependent on the prior approval of the 2045 Plan changes, a revision of the 2045 Plan will therefore be processed ahead of a related M/RTIP amendment.

Unfunded Projects

The following illustrative projects cannot be implemented with available funds. If additional funding is identified, it is recommended that the first 13 projects receive preference on account of their high value and score.

Project Sponsor	Project Name	From	To	Length	Brief Description	Safety Focus	Pedestrian Mode	Bicycle Mode	Capacity Changes	Cost Estimate
WSDOT	US 12/Preston Ave Bridge Replacement	Neal lane	Garden St	0.5	Bridge: Replacement					\$3,500,000
[Not yet identified]	US 12/Phase 8 Construction	Wallula	Nine Mile Hill	13.0	Future Thoroughfare	Address Fatality		Widened Shoulder 4ft+	Increase in Lanes	\$195,000,000
College Place	Rose Street Grind/Overlay & ADA Improvements	College Avenue	Carey Ct	0.7	Paving and Pedestrian Improvements	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path		\$1,108,000
College Place	SE Ash Street Corridor Improvement	Fourth Street	C Street	0.5	Paving	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$792,000
[Not yet identified]	US 12/Wilbur Ave	Wilbur Ave		0.1	Intersection: Improvement	Address Injury	Curb-tight Path 8ft+	Signed/Shared Route	New Roundabout	\$11,000,000
[Not yet identified]	US 12/Clinton Ave	Clinton St		0.1	Intersection: Improvement - OR Interchange	Protect Ped/Bike	Curb-tight Sidewalk / Path 8ft+	Signed/Shared Route - OR - Grade Separation	\$11,000,000 - OR \$35,000,000	
College Place	West Whitman Drive Grind & Overlay/ADA Improvements	College Avenue	Academy Way	0.5	Paving and Pedestrian Improvements	Address Fatality	Multi-Use Path 10ft+	Off-road Path		\$792,000
WSDOT	SR 125 State Line to Walla Walla	OR State Line	Myra Rd	3.5	Intersection: Improvement				New Roundabout	\$22,000,000
WSDOT	SR 124/S Lake Rd (RTPO boundary line)	Janell Ln	Tuttle Ln	0.5	Intersection: Improvement	PDO Hotspot			New Roundabout	\$2,000,000
College Place	Whitman Drive South Multiuse Path Gap Elimination	531 W. Whitman Drive	405 W. Whitman Drive	0.1	Ped/Bike: Pedestrian and Bicycle Improvements	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path		\$80,000
College Place	College Avenue Grind/Overlay & ADA Improvements	Blalock Avenue	Cedar Bend Drive	1.5	Paving and Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$2,296,800
College Place	Larch Grind & Overlay (C to Lamperti Streets)	C Street	Lamperti Street	1.3	Paving	Address Injury	Curb-tight Sidewalk	Signed/Shared Route		\$1,959,300
College Place	NE Lambert Avenue Reconstruction	Rose Street	C Street	0.2	Roadway: Reconstruction	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path		\$697,200
ODOT	OR 11/Sunnyside (Umapine Hwy SR 332)	SR 332		0.1	Intersection: Improvement	Address Fatality			Roundabout - ** Subject to ORS 366.215	\$9,500,000
ODOT	OR 11/Ferndale Rd	Ferndal Rd		0.1	Intersection: Improvement	Address Injury			Roundabout - ** Subject to ORS 366.215	\$9,500,000
ODOT	OR 11/SW 2nd Ave/ Main Street	Main St		0.1	Intersection: Improvement	PDO Hotspot	Curb-tight Sidewalk	Signed/Shared Route	Roundabout - ** Subject to ORS 366.215	\$9,500,000
College Place	C & Larch Intersection Improvement	Lambert Ave	C Street	0.0	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$350,000
College Place	SW 4th Street Extension	Doans Avenue	Academy Way	0.3	Future Thoroughfare	Protect Ped/Bike	Curb-tight Sidewalk	Buffered Bikeline	Increase in Lanes	\$1,077,600
College Place	SW Peppers Bridge Rd Reconstruction	Tamaurson Rd	Old Milton Hwy	0.6	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Off-road Path		\$1,996,200
College Place/Walla Walla (CP)	Myra Rd - Villages at Garrison Creek/Fort Walla Walla Park Pedestrian	Fort Walla Walla	Garrison Village Way	0.1	Ped/Bike: Pedestrian Refuge and Beacon	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$500,000
College Place	Tamaurson & Peppers Bridge Intersection Improvement	SR 125	Bliss Lane	0.1	Intersection: Improvement	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route	New Roundabout	\$300,000
Walla Walla	Wilbur Ave Extension - Bryant to Reser	Bryant	Reser		Future Thoroughfare	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route	Increase in Lanes	\$3,000,000
WSDOT	SR 124/East of Burbank Heights	DOT Maint Site	E of Agate Rd	5.0	Safety: Corridor Improvements	Address Injury		Widened Shoulder 4ft+		\$20,000,000
WSDOT	SR 124/Burbank Heights	Gallant Rd	DOT Maint Site	5.0	Safety: Corridor Improvements	Address Injury		Widened Shoulder 4ft+		\$5,000,000
College Place	Damson Avenue Street Reconstruction	Rose Street	Cargill Ln	0.1	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$415,000

** Marked projects may reduce vehicle-carrying capacity and require further evaluation per ORS 366.215

Project Sponsor	Project Name	From	To	Length	Brief Description	Safety Focus	Pedestrian Mode	Bicycle Mode	Capacity Changes	Cost Estimate
College Place	SW Davis Street Extension Project	Fourth Street	12th Street	0.5	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$1,584,000
College Place	College Avenue & State Route 125 Improvement	Sager Middle School 1755 S. College	State Route 125	0.2	Intersection: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route	New Roundabout	\$2,000,000
College Place	SE 4th Street Grind/Overlay & ADA Improvements	College Avenue	Highland Park Drive	0.5	Paving and Pedestrian Improvements	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$823,680
Walla Walla	East Isaacs Avenue Improvements	Tausick	WWCC Entr.	0.2	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Bikeline	New Center Turn Lane	\$1,344,000
College Place	SW Doans Grind/Overlay & ADA Improvements	Whitman Drive	Julia Street	0.5	Paving and Pedestrian Improvements	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path		\$792,000
Walla Walla	4th Ave. Bridge over Mill Creek			0.1	Bridge: Replacement					\$1,500,000
College Place	Southside extension (Clarence-Doans Extension)	Julia Street	Brickner Rd	0.8	Future Thoroughfare	Protect Ped/Bike	Curb-tight Sidewalk	Off-road Path	Increase in Lanes	\$2,629,800
WSDOT	US 12 & US 730 Junction - Safety Improvements	Wallula Jct. Vic		0.2	Intersection: Improvement	Address Injury				\$5,500,000
Walla Walla	Alder and Division Traffic signal			NA	Intersection: Traffic Signal				New Traffic Light	\$300,000
Walla Walla	Cherokee Street Reconstruction	3rd Ave	2nd Ave	0.2	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Signed/Shared Route		\$405,000
Walla Walla	Orchard Street Reconstruction	Chase	3rd	0.3	Roadway: Reconstruction	Protect Ped/Bike	Buffered Sidewalk	Signed/Shared Route		\$607,000
Walla Walla	Boyer Street Bicycle Improvements	Main	Wilbur	1.6	Ped/Bike: Bicycle Improvements	Protect Ped/Bike	Buffered Sidewalk	Bikeline		\$250,000
College Place	W. Whitman Drive North-Half Street Improvement	Academy Way	Martin Airfield	0.5	Paving and Pedestrian Improvements	Protect Ped/Bike	Multi-Use Path 10ft+	Off-road Path		\$971,654
Walla Walla	Wilbur Ave Reconstruction	Pleasant	Bryant	0.4	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$2,500,000
Walla Walla	Howard and Abbott Signalization			NA	Intersection: Traffic Signal				New Traffic Light	\$300,000
Walla Walla County	L. HOGYE ROAD, SUBSTATION BR. MP 0.00 TO MP 0.25	0	0.25	0.3	Bridge: Replacement and Road Realignment					\$1,000,000
Walla Walla County	STATELINE ROAD, PINE CREEK NO. 2 BR. MP 2.10 TO MP 2.63	2.1	2.63	0.5	Bridge: Replacement and Road Reconstruction					\$680,000
Walla Walla	Isaacs and Wellington Signalization			NA	Intersection: Traffic Signal				New Traffic Light	\$350,000
Walla Walla	3rd Ave. Bridge over Garrison Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla	Berney Dr. Bridge #1 over Yellowhawk Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla	Chase Ave. Bridge over Garrison Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla	Fern Ave. Bridge over Yellowhawk Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla	6th Ave Bridge over Mill Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla County	S. FORK COPPEI ROAD, GANQUET BR. MP 0.06 TO MP 0.25	0.06	0.25	0.2	Bridge: Rehabilitation					\$900,000
Walla Walla	Rose and Avery Signalization			NA	Intersection: Traffic Signal				New Traffic Light	\$300,000
Walla Walla	N 4th Ave Improvements	Moore	Rees	0.2	Paving	Protect Ped/Bike	Curb-tight Sidewalk	Bikeline		\$405,000
Walla Walla	Otis St. Bridge over Mill Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla	Sturm Ave. Bridge over Yellowhawk Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla	Tietan and Fern Signalization			NA	Intersection: Traffic Signal				New Traffic Light	\$300,000
College Place	SW 12th Street	College Avenue	Davis Avenue	0.3	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Signed/Shared Route		\$1,200,000

Project Sponsor	Project Name	From	To	Length	Brief Description	Safety Focus	Pedestrian Mode	Bicycle Mode	Capacity Changes	Cost Estimate
Walla Walla County	LOWER WAITSBURG ROAD MP 11.40 TO MP 12.40	11.4	12.4	1.0	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,550,000
Walla Walla County	PLEASANT STREET MP 1.46 TO MP 1.56	1.46	1.56	0.1	Roadway: Reconstruction	Protect Ped/Bike	Curb-tight Sidewalk	Widened Shoulder 4ft+		\$1,030,000
Walla Walla County	PLAZA WAY MP 0.00 TO MP 0.34	0	0.34	0.3	Roadway: Realignment			Widened Shoulder 4ft+		\$760,000
Walla Walla	Rustic Place Bridge over [Yellowhawk] Creek			0.1	Bridge: Replacement					\$1,500,000
Walla Walla County	DODD ROAD MP 6.30 TO MP 10.28	6.3	10.28	4.0	Roadway: Reconstruction	Roadway Departure		Widened Shoulder 4ft+		\$4,170,000
Walla Walla County	FREDRICKSON ROAD/BRIDGE MP 0.90 TO MP 1.21	0.9	1.21	0.3	Bridge: Replacement and Road Realignment					\$770,000
Walla Walla County	HARVEY SHAW ROAD (DRAINAGE) MP 3.35 TO MP 3.60	3.35	3.6	0.3	Roadway: Reconstruction			Widened Shoulder 4ft+		\$800,000
Walla Walla County	JB GEORGE ROAD MP 0.10 TO MP 0.74	0.1	0.74	0.6	Roadway: Realignment					\$1,880,000
Walla Walla County	MCDONALD ROAD MP 0.00 TO MP 1.30	0	1.3	1.3	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$170,000
Walla Walla County	SHEFFLER ROAD MP 7.30 TO MP 9.40	7.3	9.4	2.1	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,070,000
Walla Walla County	MISSION ROAD MP 0.00 TO MP 1.51	0	1.51	1.5	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$1,000,000
Walla Walla County	SPRING CREEK ROAD MP 3.85 TO MP 4.30	3.85	4.3	0.5	Roadway: Realignment	Roadway Departure		Widened Shoulder 4ft+		\$620,000
WSDOT	US 12/Walla Walla - Crawford Dr to Frazier Dr Noise Walls	Crawford Dr	Frazier Dr	0.4	New: Noise Wall					\$1,634,505
WSDOT	US 12/Walla Walla - Wellington Ave Noise Walls			0.2	New: Noise Wall					\$1,564,292
WSDOT	US 12/Walla Walla to Clarkston - ITS Improvements				Safety: Technology Upgrade					\$600,000
Walla Walla County	LUCKENBILL ROAD, MARNACH CORNER BR. MP 1.80 TO MP 2.20	1.8	2.2	0.4	Bridge: Replacement and Road Realignment					\$860,000
Walla Walla County	SMITH SPRINGS ROAD, KEN NOBLE BR. MP 3.30 TO MP 3.60	3.3	3.6	0.3	Bridge: Replacement and Road Realignment					\$880,000
Walla Walla County	3RD AVENUE S. MP 1.66 TO MP 1.90	1.66	1.9	0.2	Roadway: Realignment					\$570,000
Walla Walla County	CM RICE ROAD MP 6.40 TO MP 6.80	6.4	6.8	0.4	Roadway: Realignment					\$460,000
Walla Walla County	COPPEI ROAD MP 1.20 TO MP 1.70	1.2	1.7	0.5	Roadway: Realignment					\$460,000
Walla Walla County	DEPPING ROAD MP 0.00 TO MP 0.75	0	0.75	0.8	Roadway: Realignment					\$1,300,000
Walla Walla County	EUREKA NORTH ROAD MP 2.80 TO MP 3.60	2.8	3.6	0.8	Roadway: Realignment					\$850,000
Walla Walla County	LAKE ROAD MP 0.00 TO MP 1.00	0	1	1.0	Roadway: Reconstruction					\$1,700,000
Walla Walla County	DAGUE ROAD MP 0.00 TO MP 0.25	0	0.25	0.3	Roadway: Reconstruction					\$650,000
Walla Walla County	ELECTRIC AVENUE MP 0.00 TO MP 1.07	0	1.07	1.1	Roadway: Reconstruction		Curb-tight Sidewalk			\$750,000
Walla Walla County	HUMORIST ROAD W. MP 0.19 TO MP 0.89	0.19	0.89	0.7	Roadway: Reconstruction		Curb-tight Sidewalk			\$700,000
Walla Walla County	PLAZA WAY MP 0.25 TO MP 0.82	0.25	0.82	0.6	Roadway: Reconstruction		Curb-tight Sidewalk			\$1,000,000
Walla Walla County	SUBBURY ROAD MP 11.60 TO MP 17.00	11.6	17	5.4	Roadway: Reconstruction					\$1,060,000
Walla Walla County	TOUCHET NORTH ROAD MP 5.03 TO MP 6.00	5.03	6	1.0	Roadway: Reconstruction					\$450,000
Walla Walla County	DEPPING ROAD MP 0.30 TO 0.60 (CULVERT)	0.3	0.6	0.3	Bridge: Replacement and Road Reconstruction					\$65,000

Project Sponsor	Project Name	From	To	Length	Brief Description	Safety Focus	Pedestrian Mode	Bicycle Mode	Capacity Changes	Cost Estimate
Walla Walla County	FLETCHER ROAD MP 0.00 TO MP 0.10	0	0.1	0.1	Roadway: Realignment					\$35,000
Walla Walla County	HUMORIST ROAD E. AT SLOUGH MP 2.20 TO MP 2.78	2.2	2.78	0.6	Roadway: Realignment					\$450,000
Walla Walla County	LAST CHANCE ROAD MP 1.00 TO MP 1.50	1	1.5	0.5	Roadway: Realignment					\$1,080,000
Walla Walla County	LOVERS LANE MP 0.0 TO MP 1.25	0	1.25	1.3	Roadway: Realignment					\$960,000
Walla Walla County	LOWER DRY CREEK ROAD MP 1.10 TO MP 2.50	1.1	2.5	1.4	Roadway: Realignment					\$960,000
Walla Walla County	LOWER MONUMENTAL ROAD MP 6.30 TO MP 7.60	6.3	7.6	1.3	Roadway: Realignment					\$1,060,000
Walla Walla County	LOWER WHETSTONE ROAD MP 0.00 TO MP 2.20	0	2.2	2.2	Roadway: Realignment					\$1,090,000
Walla Walla County	LYONS FERRY ROAD MP 14.20 TO MP 14.60	14.2	14.6	0.4	Roadway: Realignment					\$860,000
Walla Walla County	MOJONNIER ROAD MP 1.40 TO MP 2.30	1.4	2.3	0.9	Roadway: Realignment					\$1,080,000
Walla Walla County	PEPPERS BRIDGE ROAD MP 1.67 TO MP 2.28	1.67	2.28	0.6	Roadway: Realignment					\$890,000
Walla Walla County	RUSSELL CREEK ROAD MP 0.00 TO MP 0.86	0	0.86	0.9	Roadway: Realignment					\$880,000
Walla Walla County	RUSSELL CREEK ROAD MP 2.90 TO MP 3.50	2.9	3.5	0.6	Roadway: Realignment					\$720,000
Walla Walla County	SCENIC LOOP ROAD MP 1.47 TO MP 2.00	1.47	2	0.5	Roadway: Realignment					\$880,000
Walla Walla County	SHEA ROAD MP 0.00 TO MP 0.18	0	0.18	0.2	Roadway: Realignment					\$110,000
Walla Walla County	SHEFFLER ROAD MP 11.20 TO MP 11.90	11.2	11.9	0.7	Roadway: Realignment					\$960,000
Walla Walla County	SHEFFLER ROAD MP 3.90 TO MP 5.39	3.9	5.39	1.5	Roadway: Realignment					\$1,580,000
Walla Walla County	SHEFFLER ROAD MP 9.40 TO MP 10.60	9.4	10.6	1.2	Roadway: Realignment					\$1,070,000
Walla Walla County	SMITH ROAD MP 0.74 TO MP 1.24	0.74	1.24	0.5	Roadway: Realignment					\$360,000
Walla Walla County	SPRING VALLEY ROAD MP 6.60 TO MP 6.73	6.6	6.73	0.1	Roadway: Realignment					\$170,000
Walla Walla County	TOUCHET NORTH ROAD, MP 2.40 TO MP 2.90	2.4	2.9	0.5	Roadway: Realignment					\$450,000
Walla Walla County	WILBUR AVENUE MP 0.50 TO MP 0.75	0.5	0.75	0.3	Roadway: Realignment					\$980,000
Walla Walla County	LYONS FERRY ROAD MP 3.65 WISEMAN INTERSECTION	3.55	3.75	0.2	Roadway: Reconstruction and Realignment					\$150,000
Walla Walla County	FERN AVENUE MP 1.10 (DECOMMISSION STORMWATER OUTFALL)	1.1	1.1	0.0	Stormwater: Improvement					\$225,000
Walla Walla County	MAIN STREET (T) MP 0.06 TO MP 0.30	0.06	0.3	0.2	Stormwater: Improvement					\$430,000
Walla Walla County	OLD MILTON HWY MP 3.85 TO MP 3.90 STORMWATER	3.85	3.9	0.0	Stormwater: Improvement					\$65,000
Walla Walla County	SCHOOL AVENUE MP 0.96 (DECOMMISSION STORMWATER OUTFALL)	0.96	0.96	0.0	Stormwater: Improvement					\$225,000
Walla Walla County	WHITELY ROAD MP 0.20 TO MP 0.40 STORMWATER	0.2	0.4	0.2	Stormwater: Improvement					\$330,000
Walla Walla County	BISCUIT RIDGE ROAD MP 2.53 (CULVERT)	2.53	2.53	0.0	Stormwater: Replace Culvert					\$102,000
Walla Walla County	COCHRAN STREET (D) CULVERT REPLACEMENT				Stormwater: Replace Culvert					\$530,000
Prescott	1st Street	A Street	E Street	0.3	Roadway: Reconstruction		Curb-tight Sidewalk			\$3,115,000

Appendices

Appendix A. Public Comment Tracker

The public comment period for the Walla Walla Valley Metropolitan and Regional Transportation - 2045 Plan took place from December 10, 2020, through January 10, 2021. Comments received on the draft 2045 Plan from the public, member entities, or local organizations – whether positive or negative – were handled in the following manner:

- ◆ All comments were requested in writing.
- ◆ As appropriate, a written response is provided to the individual or organization concerning recommendations or decisions arising from the Technical Advisory Committee and Policy Board meetings or the sponsoring entity.
- ◆ Comments concerning specific projects are forwarded to the sponsoring entity.
- ◆ A copy of the comments, or summaries of substantive contents, are provided to the Technical Advisory Committee and the Policy Board for their evaluation.

The specific comments received and the responses provided to the commenters are included in the following table:

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
1	Who and What is Moving	Walk, Bike, and Roll	23 ff.	<p>The intersection of Dalles Military and Hwy 125 (9th) at Plaza Way is very dangerous for pedestrian traffic. The blue line represents the area for a new pedestrian crossing.</p> <p>The approaches are not ADA compliant and the buttons to push to trigger the crossing signals are missing the round chrome piece.</p> <p>Also, you need a pedestrian path along the west side of 9th to Orchard ST.</p>	<i>The Dalles Military/Hwy 125/Plaza Way intersection is already slated for reconstruction; the intersection will be modified to include a roundabout, inclusive of ADA-compliant pedestrian crossings on all four legs of the intersection. The 2045 Plan also includes the addition of the sidewalk on the west side of Hwy 125 (9th Ave) during the "second stage" of the same project.</i>
2	[All]		-	I reviewed the Plan. It looks good.	
	Sustainability and Stewardship	Natural and Cultural Environments	63	<p>My only edits are as follows: Page 63 facilities – Poor Farm Cemetery (City-owns it, it["]s at Mockingbird Drive and Sandpiper Lane)</p> <p>Everything else looks great.</p>	The cemetery was added to the list.
3	[All]		-	<p>Thanks for the opportunity to review WWV's 2045 Plan! I read through the document and thought it was well written and extremely comprehensive; great work! I also sent the draft out to the various WSDOT divisions to get additional comments within their areas of expertise. The Public</p>	

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
				Transportation Division and Active Transportation submitted comments, which are attached. Please reach out if you have any questions or concerns.	
3a	Goal-Oriented and Performance-Driven	Electric Vehicles	14	Besides climate change, a decrease in battery costs also drove electric vehicle adoption.	The text was updated to include the decreased battery cost.
	Goal-Oriented and Performance-Driven	Electric Vehicles	15	Re: battery costs, I think a good citation is always the Bloomberg New Energy Finance report, and you could also put in the 2020 number from here https://about.bnef.com/blog/battery-pack-prices-cited-below-100-kwh-for-the-first-time-in-2020-while-market-average-sits-at-137-kwh/ , i[e.] 90% from 2010-20[0]2[0]	The text was updated to reflect most recent data.
	Goal-Oriented and Performance-Driven	Electric Vehicles	15	I think U.S. household sales are probably a lagging indicator here, maybe take a look at the bnef roundup of ev trends or this iea doc https://www.iea.org/reports/electric-vehicles ; would also challenge that its charging, rather than the incentive structure--consider, e[.]g[.] what's happened in the European Union vs. here. Also, need to at least nod to the internal combustion engine (ICE) vehicle phaseouts, which have come to the U.S. with California, especially given the nature of the plan. Deloitte here https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/electric-vehicle-trends-2030.html	<i>Great information. As the trends are similar for EV sales, the text was not updated. Information on internal combustion engine phase-out may be added once more US-centric data is available.</i>
	Goal-Oriented and Performance-Driven	Electric Vehicles	15	Electrification of the us transit bus fleet might again benefit from an international perspective, since that's where the action is - Chinese electric bus stats in particular. Recommend incorporating the role that the international market will play in providing vehicles and driving the market towards EV.	<i>Again, great feedback. Without specific data sources, the text was not updated.</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
	Goal-Oriented and Performance-Driven	Other Trends	17	Alternative Fuel Vehicles--I'm curious what the argument of this section is? I think if you look long[-]term and at climate driven electrification, it's hard to see any of this stuff maturing? But hydrogen for some industry uses has some potential here...I just don't see this as a particularly widespread or promising trend in comparison to the other things you've discussed; just given the costs of batteries, I'd be surprised if any of these trends pick up.	<i>Alternative fuel vehicles were included for "completeness of information" purposes. At this time, it is unknown to what degree they will play a role in the future.</i>
	Who and What is Moving	Work Travel	21	Work travel - it would be helpful to describe how teleworking, specifically in 2020, has changed the work commute landscape. Is there any sense that employers in the area/region will extend telework options to suitable jobs once the pandemic is over? Do you anticipate that this will change how people get around during the typical work week? You may also consider your section on economic opportunity, and whether expanding telework options will outsource jobs to other remote destinations, or whether it will enhance the flexibility of employers locally.	<i>Information on the impacts of the pandemic, particularly on commute behaviors and tele-working, has been collected nation-wide; however, region-specific data was unavailable at the time the 2045 Plan was developed. Future iterations will certainly review and analyze any changes in work commute and travel behaviors.</i>
	Who and What is Moving	Public Transit	27	Public transit - I think the opening paragraph to this section could be both more generalized and more specific. Yes, public transportation plays a critical role to the groups you have mentioned (disabled, children, low-income, elderly). However[,] it plays an even bigger role than that. It opens up new opportunities for jobs and economic activity, social opportunities, etc. And communities of color, in particular, have often been left behind by public transportation for decades. I think they should be called out specifically as a group that directly and critically benefits when public transportation is easily and readily available.	<i>Thank you for your feedback. "Minority populations" were added to the list.</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
	Who and What is Moving	Roadway System	40	Travel demand - I am not familiar with the acronym TDM being used for travel demand modeling, and although it may be, transportation demand management (TDM) is also regularly used. It might be worth a specific callout "not to be confused with transportation demand management" or something like this, or abandon the use of TDM altogether, as it lends itself to reliance on the acronym and doesn't utilize as much plain-talk, which is really encouraged for public materials.	<i>The duplication of the abbreviation "TDM" is based on common usage and has also been reflected in the list of frequently used acronyms (P. 102). Fortunately, in the 2045 Plan, the travel demand modeling and the travel demand management activities are not discussed in the same section.</i>
	Who and What is Moving	Operational Considerations	44	I believe TSMO is the generally accepted acronym and you could drop the ampersand.	The text was updated.
	Who and What is Moving	Operational Considerations	44	As mentioned on page 46, there is an acronym used for travel demand modeling of TDM, but then here it is switched to travel demand management (WSDOT uses transportation demand management but I believe travel demand management is fine/generally accepted) ... I would reconsider using the same acronym for two different concepts.	<i>(Refer to entry for comment on P. 40)</i>
	Sustainability and Stewardship	Access and Equity	49	Great job at mentioning directly that transportation planning has forgotten or purposely planned without marginalized and vulnerable communities.	
	Sustainability and Stewardship	Access and Equity	50	WSDOT has learned that best practice is to not use the term 'minority' as it groups, essentially, everyone that isn't white. If possible, throw this out and be specific about the populations you are talking about (Black, Asian American, etc.). If you need to 'group' these demographics, you could consider terms like "Black, Indigenous, and People of Color -BIPOC", under[-]rep[r]esented groups, disadvantaged groups, vulnerable groups, marginalized groups, etc. These are more specific about who this group is.	<i>Thank you for your feedback. As the section specifically pertains to the "Environmental Justice" determination guided by the Federal Highway Administration, the 2045 Plan retains the federal definition. Nonetheless, the WWVMPO/SRTPO will closely watch for related language changes in the future.</i>
	Sustainability and Stewardship	Access and Equity	50	Are you using the federal poverty level threshold/guidelines in defining low-income tracts? Is that accurate for your area? Much of WA State's	<i>The U.S. Census Bureau's calculation of households below the poverty threshold was used -</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
				planning is focusing on 200% of the federal poverty level, but that may not be reflective of your community.	https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html
	Sustainability and Stewardship	Access and Equity	51	In identifying that there was no impact on EJ populations, what criteria did you use? I suppose a converse question is do these projects do anything to relieve the overlapping impacts that EJ communities face?	<i>The following adverse impacts were investigated:</i> - Decrease in access, mode choices, or safety - Increase in travel time or risk of displacement
	Sustainability and Stewardship	Built Environment and Human Health	52	"The Walla Walla Valley has a maintenance area for the PM10 air pollutant, as a monitoring site located in Wallula previously violated the respective air quality standard." - This raised concern about what the impact/consequence of the monitoring site in Wallula was (e.g. was data collected there incorrect?). Recommend clarifying and elaborating on this or delete the section about the previous location in Wallula.	<i>Great catch!</i> The text was updated to clarify that the "data collected" at the site violated the standard.
	Sustainability and Stewardship	Built Environment and Human Health	52	Would consider removing the bit about volcanoes adding to sulfur dioxide, as it seems outside of the scope of this plan since it is not related to the built environment and human-created conditions.	[No changes were made.]
	Sustainability and Stewardship	Built Environment and Human Health	52	The impacts of air pollution are worth laying out here a bit, and I would go into much more depth about the effects and current situation in regards to them.	<i>The document provides only a high-level overview to preserve brevity and overall readability.</i>
	Sustainability and Stewardship	Community Character	54	You may consider the New York-Harlem comparison, or holding it up for it's cultural significance. It has lost a lot of its character and culture due to rising prices, gentrification, etc.	[No changes were made.]
	Sustainability and Stewardship	Natural and Cultural Environments	62	Recommend adding energy as a natural resource, like solar, wind, or hydro.	<i>Interesting food for thought. The WWVMP/STPO will take that into consideration for future iterations.</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
	Sustainability and Stewardship	Cultural Resources	64	"The first Euro-Americans to visit the area were a band of intrepid explorers led by Meriwether Lewis and William Clark in 1805, 215 years ago." - Recommend removing the word intrepid or finding a different quote. You could consider the implications that this section has with the history of slaves, indigenous peoples, and people held against their will to aid this mission.	[No changes were made.]
	Sustainability and Stewardship	Cultural Resources	64	"Such sites are considered non-renewable resources, deserving of protection, and are therefore not depicted on a map." This is confusing - explain/clarify why the status of deserving protection results in no map depiction.	The text was updated to specifically point out the threat of vandalism.
	Sustainability and Stewardship	Cultural Resources	64	Minimal coverage of tribal history in the area. Consider adding more information about tribal cultural resources. E.g. any recent history (last 50-100 yrs) to note? Also, was there a Chinese population in Walla Wall[a], during the Gold Rush - with lasting cultural resources/impact?	<i>The document provides only a high-level overview to preserve brevity and overall readability.</i>
	Sustainability and Stewardship	Cultural Resources	65	"It was not until the mid-19th century that settlers from the United States of America began arriving in earnest." - Remove this sentence.	[No changes were made.]
	Recommended Investments	Selection of Projects	76-81	A 'numerical ranking' is mentioned before sharing the project list, but I was confused in trying to figure out how these scored. I see some projects with ++ almost across the board, that aren't at the top of the list. If this is truly how they are ranking, in descending order, then you might add a column with an actual ranking (1,2,3...) and include the score. Right now the scoring system and project list are not as intuitive.	Text was added to clarify that the numerical ranking used for the original prioritization of projects is not shown and, instead, has been replaced with the simplified ++ / + / o notations in the project table.
	Recommended Investments	Unfunded Projects	84-85	A similar comment to the pg 82-87 comment, about including the project score and ranking in this unfunded list.	<i>Not all illustrative projects received a final ranking and, again for brevity purposes, the unfunded project table was limited to only show basic project characteristics.</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
	Appendices	List of Acronyms	106	Similar comment from pg 46, but you might consider not using two terms for the same acronym (glossary includes transportation demand management and travel demand model as both being TDM). Less acronyms the better, unless it is absolutely imperative for the reader.	<i>As previously stated, the duplication of the abbreviation "TDM" is based on common usage. The use of the acronyms, each within its separate section, aided in minimizing overall text length.</i>
3b	Executive Summary		-	Appreciate that pedestrian, bicycle and public transit are called out upfront in prioritized investment.	
	Transportation Planning	Plan Development	9	Kudos: First round outreach "survey participation was proportionate with the size of the communities and closely matched the characteristics of the population across the region." Evaluating proportionate response is a good technique.	
	Goal-Oriented and Performance-Driven	Vision, Goals, and Objectives	11	Presentation Comment (not a big deal): The vision "pie chart" induces me to look for which element of the vision is more important. The colors make it hard to judge size, but I am guessing they are the same. If the goal was to not make any one element more important than another, the visualization seems to struggle with that. The light color and positions of safety and security seem to dominate.	<i>Great comment! The individual slices of the pie chart were designed to be as equal in size and any color or position advantage was unintentional.</i>
	Goal-Oriented and Performance-Driven	What the Future May Bring	13, 15	Future section calls out: "electric vehicles, rideshare applications, bikeshare systems, and the introduction of automated vehicles, e-bikes, and e-scooters", then the following pages discuss AVs and EVs at length, but lump e-bikes with shared mobility. I think more could be done to educate readers about what an e-bike can do for transportation rather than just pointing out interest in shared mobility. An e-bike could be transformative in how it enables people to handle longer bike rides and hillier bike rides (updating bicycling as much as AVs transform driving). Also, there is a mention of e-bikes and scooters lacking fitness benefits. I think there is evidence to the	<i>Great feedback.</i> The text was updated to reflect physical activity benefits of e-bikes.

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
				contrary. "There was moderate evidence that e-cycling provided physical activity of at least moderate intensity, which was lower than the intensity elicited during conventional cycling, but higher than that during walking." https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-018-0751-8	
	[Multiple]	[Multiple]	1 - 18	Overall, engaging and comprehensive--nice job!	
	Who and What is Moving	People, Employment, Growth, and Travel Patterns	19	Should there be any caveats to this: "Knowledge of the current trip patterns and existing infrastructure enables the WWVMPO/ SRTPO to forecast future travel demand" My understanding is that travel demand modeling is pretty weak for walking and biking and that current trip patterns reflect that system that prioritizes motor vehicles. Is there any forecasting for how walking/biking might change if a high[-]quality walk/bike network were in place? -- just noticed a mention of modeling and active modes on pg 41. Perhaps adding the notion that such modeling should be able to account for existing and future networks. Also, the modeling discussed on pg 41 mentions trip generation tied to work trips, though most short trips are not work related.	<i>You are correct in pointing out that the region's computer application-driven travel demand model does not replicate nor predict walking and biking patterns, as it is focused on vehicular traffic.</i> <i>The term travel demand in this particular section was used in a broader sense, transcending the current computer model.</i> <i>The WWVMPO/SRTPO is actively working to compile walk and bike usage data that, in the future, will allow for a more robust and quantitative discussion of active transportation mode choice and demand. Please stay tuned!</i>
	Who and What is Moving	People, Employment, Growth, and Travel Patterns	20	Is there any estimate for how many students end up staying in WWV after they graduate?	<i>Unfortunately, the percentage of students staying in the area following their graduation is unknown. Based on the size of the next "older" age cohort, the retainment rate appears to be small.</i>
	Who and What is Moving	Walk, Bike, and Roll	23	Great callout point! "It is important to remember that a single missing ADA curb ramp is an insurmountable barrier for someone who depends on a wheelchair."	
	Who and What is Moving	Walk, Bike, and Roll	24	The point "Walking, biking, or rolling is not necessarily stopped, but may be deterred by poor or missing infrastructure" is well made. It gets close	<i>Definitely food for thought! Bicycle usage of sidewalks is allowed in certain areas.</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
				to the point about ADA ramps on pg 23, though it seems there could be a bit more about bicycle infrastructure. We often lump bike lanes in with trails, but is there a consideration for how much of the bicycle using population the bike lane serves? Can bike riders use sidewalks? There could just be a paragraph that suggests how a less confident rider would get around by bike now and in the future, which ties into the traffic stress LOS metric on page 25.	<i>In addition, the WWVMPO/SRTPO is pursuing the development of clearly identifiable level of service metrics, which will be refined after the adoption of the 2045 Plan. Bicycle riders' ability and confidence level will be factored in as well.</i>
Who and What is Moving	Walk, Bike, and Roll		26	Nice work on the sidewalk photos--brings the discussion to the forefront.	
Who and What is Moving	Public Transit		27	Consider noting that paratransit is tied to fixed route offerings (within 3/4 mile of fixed routes). It often seems confused with demand response.	<i>In the Walla Walla Valley, the paratransit service actually covers a larger area than just the obligatory ¾ mile from the fixed routes.</i>
Who and What is Moving	Public Transit		28	How easy is it to find transit options? I am aware of some transit agencies that don't show up on apps, such that you would need to know they are there as options. It might be nice to mention the need for integrated service information if it is not readily available. I noticed that pg 32 comes close to discussing this point--perhaps an added mention?	<i>Great comment! itransitNW regional trip planning resource for public transit partners in SE Washington State and NE Oregon. The real-time passenger information system was initially funded by a grant from the Federal Transit Administration and is managed by Valley Transit - https://www.itransitnw.com Updated text to include itransitNW.</i>
Who and What is Moving	Public Transit		30	Good job noting that transit solutions require sidewalk networks! I might have missed it, but is there a discussion of bikes and transit?	<i>Bikes and transit are briefly discussed in the "Operational Considerations" Section on P. 44. All buses have bike racks.</i>
Who and What is Moving	Roadway System		40	It is hard to get a sense of the pedestrian and bicyclist safety situation here. We are told that in OR there were 243 injuries and 2 fatalities, including one pedestrian. We don't know how many of the injuries involve pedestrians and bicyclists or the number of these compared to their representation among the modes. This is also true for WA. It might be worth also noting the total number of reported collisions with ped/bike and	<i>Among the 243 injuries in the Oregon portion of the planning area, there were two (2) injured pedestrians and four (4) injured bicyclists. The text is selective in the data elements it describes. Among the 1,190 injuries recorded for the Washington portion of the planning area, only "serious" injuries were specifically</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
				mention how often the literature estimates these go unreported. A non-injury crash might be very frustrating for a motorist, but strongly discourage further activity by a pedestrian or bicyclist.	<i>called out for pedestrians (11) and bicyclists (3). The WWVMPO/SRTPO is working with local transportation safety stakeholder groups on the development of a regional traffic safety campaign that will also focus on active transportation safety.</i>
Who and What is Moving	Roadway System		41	It might be good to note tradeoffs of capacity expansion (induced demand, less attractive to use other options vs the automobile) and that free flow is not always an optimal goal.	<i>At this time (and in the foreseeable future), regional congestion is largely tied to inter-sections. For travel demand modeling purposes, intersection improvements are called out as "capacity projects," but do not include the addition of new vehicle lanes.</i>
Who and What is Moving	Roadway System		43	May want to note the higher cost of deferring preservation given the need for full reconstruction that results. (looks like this is on pg 55)	[No changes were made.]
Who and What is Moving	Operational Considerations		44	Walking section should mention crossing improvements. The façade example is good, but availability of low stress crossings (that link well maintained ADA accessible sidewalks) is often the highest need for pedestrian networks. Also, it could be helpful to highlight the development of low-stress "network improvements" under biking. Some people may think that a bike lane is enough, but it may only be acceptable to a small number of users without additional traffic calming measures. (could also point readers to pg 45 traffic calming)	The text was updated to include low-stress pedestrian crossings and low-stress bicycle connections.
Who and What is Moving	Operational Considerations		45	Looking at targeted enforcement, it seems like this would be a good opportunity to bring up automated enforcement as an option.	The text was updated.
Who and What is Moving	Policy and Action Recommendations		46	Perhaps add level of traffic stress assessment to LOS under walk, bike, roll. Also, wayfinding to help active travelers find their network could be a low-cost recommendation.	<i>The intent of the "walk, bike, roll" levels of service is to fully integrate traffic stress assessment. Wayfinding signage is likely to be considered in the next iteration, after a more robust condition assessment.</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
	Sustainability and Stewardship	Access and Equity	47	Given the strong emphasis shown by this section, it occurs to me that accessibility is not a part of the vision statement. For some, "mobility" means lack of motor vehicle congestion. If a bicyclist can use a roadway and experience no congestion, there is no mobility problem. However, the roadway may be far too stressful for most users to consider it as an option. Accessibility [is] included with mobility in the goals on pg 76.	[No changes were made.]
	Sustainability and Stewardship	Access and Equity	48	An example of an equitable transportation investment decision vs an equal one might be helpful here. For example, if a low-income community lacks a complete sidewalk network, but a high[-]income community has one, but wants a crossing improvement giving each a million dollars will not fairly address the disparity. Having a real example from WWV could be powerful.	[No changes were made.]
	Sustainability and Stewardship	Built Environment and Human Health	55	Often potholes are noted with respect to motorists, but it only takes one pothole to cause a serious crash for a bicyclist.	The text was updated to include impact on bicyclists.
	Recommended Investments	Selection of Projects	75	Should the safety goal mention intersection improvements for bicyclists? Also, consider adding "including bike lanes and shoulder space" to Preservation goal.	<i>Through the collision data analysis, intersections have been identified as particular hot spots for pedestrians and bicyclists.</i> [No changes were made.]
	Recommended Investments	Selection of Projects	76 ff.	How can project lists be updated? Sometimes a project that is a priority today, slips lower by the time funding comes along. A fixed list of projects may reduce needed flexibility. Perhaps having the project list connected to the RTIP instead so that it could be adjusted annually as needed would help?	<i>The inclusion of a project in the fiscally constrained list does not prescribe the sequence of subsequent implementation.</i> <i>The list of projects may be amended any time, is reviewed biennially, and will be updated completely during the development of the 2050 Plan, scheduled for 2025.</i>
4	Who and What is Moving	Public Transit	28	CCPT operates a demand service in rural Southeastern Washington State. Columbia County is	<i>Thank you so much for the highly informative paragraph on Columbia</i>

Commenter	Chapter	Section	Page	Observation / Comment	Response Given / Action Taken
				the third smallest county in Washington State with a population of 3,985. CCPT transports residents of Columbia County and the cities of Waitsburg and Dixie in Walla Walla County to the city of Walla Walla, which is the regional multi-model hub. Poverty rate is high in the county with 13.5% of the population living below the poverty level. The age of the population in Columbia County is high with a 27.9% over the age of 65 compared to the state average of 15.4%. Walla Walla is the regional hub for all transportation service with connecting bus service to the Tri-Cities. Walla Walla has a regional airport and is the regional center for medical services. CCPT operates 12 round trips a day to the Walla Walla area with many of these passengers being Medicaid, passengers with disabilities, workers and students. CCPT[']s focus is to facilitate the movement of people to the area's regional hub.	<i>County Public Transportation (CCPT) you provided.</i> The information was included it in the comment register in the final 2045 Plan document.
5	[All]			I've finished the review of the 2045 Plan. Overall, I like the layout and the plan does a good job in presenting the information.	
	[Introductory pages]	Membership and Committee Roster		One minor edit to the Technical Advisory Committee list is that Bob Waldher is now the County Planning Director.	The error was corrected in the document.
	Recommended Investments	Fiscal Constraint	73	I also see reference in the document to projected funding revenues for Oregon but didn't see any projects for fix it or enhance. Please refresh my memory on why there are no projects identified or if there is more information that you need from us. Perhaps this will be covered in the Arterial Throughway plan that is referenced in the document. Just surprised not to see some illustrative projects on OR 11.	<i>The current Oregon Statewide Transportation Improvement Program (STIP) does not include any projects within the study area.</i> <i>The WVMPO/SRTPO will keep a close eye on the developing 2024-2027 STIP to see if a new project should be included in the 2045 Plan, since there is currently unassigned, (anticipated to be) available funding.</i> ODOT identified illustrative projects were added.

Appendix B. System Performance Report

According to [FHWA guidance](#), MPOs must include descriptions of performance measures and targets in their metropolitan transportation plan. Also required is a system performance report that must contain an account of progress made towards the declared targets. This progress description should rely on the same information that has already been reported in compliance [23 CFR 490.107](#). This is of particular importance to the WWVMPO/SRTPO, since the agency has chosen to adopt and support ODOT and WSDOT, as well as Milton-Freewater Public Transportation and Valley Transit performance targets, rather than declare separate metropolitan planning area targets.

Statutory Background

Performance-based planning, programming, and management, focused on national transportation goals, provides the means to the most efficient investment of federal transportation funds, improves project decision-making, and increases accountability and transparency. In 2012, the passage of the Moving Ahead for Progress in the 21st Century (MAP-21) Act first instituted this requirement for performance-based transportation planning. The FAST Act, signed into law in December 2015, continues MAP-21's overall performance management approach, requiring States and MPOs to undertake performance-based planning and programming to collectively make progress toward identified national goals: ([23 USC 150](#))

- ◆ Safety
- ◆ Infrastructure Condition
- ◆ Congestion Reduction
- ◆ System Reliability
- ◆ Freight Movement and Economic Vitality
- ◆ Environmental Sustainability
- ◆ Reduced Project Delivery Delays

The promulgation of rules and associated performance measures began in 2012; the first proposed rules were published in 2014; and the first final rules were established in early 2016. The following table provides an overview of transportation system performance related rulemaking:

<i>Performance Areas</i>	<i>Notice of Proposed Rule Making</i>	<i>Final Rule Published</i>	<i>Final Rule Effective</i>	<i>MPO Action to Date</i>
<i>Safety</i>	March 11, 2014	March 15, 2016	April 14, 2016	Support DOTs' targets
<i>Highway Safety Improvement Program</i>	March 28, 2014	March 15, 2016	April 14, 2016	Assist DOTs
<i>Statewide & Metro and Non-Metro Planning</i>	June 2, 2014	May 27, 2016	June 27, 2016	Performance measures and base line data were added to the 2040 Plan in 2018
<i>Transit Asset Management</i>	September 30, 2015	July 26, 2016	October 1, 2016	Support transit providers' targets
<i>Pavement and Bridge Performance</i>	January 5, 2015	January 18, 2017	May 20, 2017	Support DOTs' targets
<i>System Performance</i>	April 22, 2016	January 18, 2017	May 20, 2017*	Support DOTs' targets
<i>Asset Management Plan</i>	February 20, 2015	October 24, 2016	October 2, 2017	Assist DOTs
<i>Public Transportation Agency Safety Plan</i>	February 5, 2016	July 19, 2018	July 19, 2019	Support transit providers' targets

* The portions of the rule related to tailpipe CO2 emissions (GHG measure) were subsequently repealed on May 31, 2018 (effective July 2, 2018).

Safety

The final rulemaking for safety has two components: Safety Performance Management Measures ([23 CFR 490.209](#)) and the Highway Safety Improvement Program (HSIP) ([23 CFR 924](#)). Five performance measures were established to assess safety performance (5-year rolling average) and carry out the HSIP.

Oregon's Strategic Highway Safety Plan (SHSP) is the basis for setting safety targets in Oregon – with the goal of zero fatalities and serious injuries by 2035. The WWVMPO/SRTPO agreed to support ODOT's targets, which are reviewed and set annually.

Oregon - "Vision Zero" by 2035

Also see: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/or_fy21_hsp.pdf

OREGON STATEWIDE	2013	2014	2015	2016	2017	2018	Trend Line	State Targets 2020
Annual VMT* (1000s)	33,705,846	34,610,071	35,998,505	36,719,189	36,752,900			
Fatalities* (F)	313	356	445	498	439			Fatalities* (F)
5-year Rolling Average (F)		330.8	356.4	389.8	410.2			328.0
Fatality Rate	0.93	1.03	1.24	1.36	1.19			Fatality Rate
5-year Rolling Average (FR)		0.98	1.04	1.11	1.15			0.78
Serious Injuries (A)	1,416	1,495	1,777	1,973	1,764			Serious Injuries (A)
5-year Rolling Average (A)		1,490.4	1,569.4	1,655.8	1,685.0			1,368.0
Serious Injury Rate	4.20	4.32	4.94	5.37	4.80			Serious Injury Rate
5-year Rolling Average (AR)		4.42	4.59	4.74	4.73			4.06
Non-motorist (Ped/Bike) F&A	220	240	267	280	251			Non-motorist F&A
5-year Rolling Average (N-FA)		233.8	245.6	252.4	251.6			215.0

MILTON-FREEWATER Urbanized Area (FAUB)	2013	2014	2015	2016	2017	2018	Trend Line
Annual VMT* (1000s)	--	37,783	40,318	42,436	42,397		
Fatalities* (F)	0	0	0	1	0		
5-year Rolling Average (F)		0.0	0.0	0.2	0.2		
Fatality Rate	--	0.00	0.00	2.36	0.00		
5-year Rolling Average (FR)		0.00	0.00	0.79	0.59		
Serious Injuries (A)	1	0	2	4	1		
5-year Rolling Average (A)		0.2	0.6	1.4	1.6		
Serious Injury Rate	--	0.00	4.96	9.43	2.36		
5-year Rolling Average (AR)		0.00	2.48	4.80	4.19		
Non-motorist (Ped/Bike) F&A	0	0	0	2	0		
5-year Rolling Average (N-FA)		0.0	0.0	0.4	0.4		

* VMT: Highway Performance Monitoring System (HPMS) Estimates; Fatalities & Injuries: ODOT Crash Data System (CDS)

Since 2016, the fatality and serious injury counts for both Oregon and Milton-Freewater have shown incremental improvement across all measures; however, the five-year rolling averages remain at elevated levels. The most recent Oregon traffic safety data can be viewed on ODOT's [Performance](#) web page.

Washington State's Target Zero Strategic Highway Safety Plan is the basis for setting targets in Washington State – with the goal of zero fatalities and serious injuries by 2030. The WWVMPO/SRTPO agreed to support WSDOT's targets, which are reviewed and set annually.

Washington State - Target Zero by 2030

Also see: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/wa_fy21_hsp.pdf

WASHINGTON STATEWIDE	2013	2014	2015	2016	2017	2018	Trend Line	State Targets 2020
Annual VMT* (1000s)	57,211,195	58,059,800	59,652,504	60,851,096	61,419,915	62,366,820		
Fatalities* (F)	436	462	551	536	563	547		Fatalities* (F)
5-year Rolling Average (F)		450.0	468.2	484.6	509.6	531.8		443.2
Fatality Rate	0.76	0.80	0.92	0.88	0.92	0.88		Fatality Rate
5-year Rolling Average (FR)		0.79	0.81	0.83	0.86	0.88		0.73
Serious Injuries (A)	1916	2004	2100	2217	2,221	2,231		Serious Injuries (A)
5-year Rolling Average (A)		2146.8	2071.2	2087.6	2091.6	2154.6		1,795.5
Serious Injury Rate	3.35	3.45	3.52	3.64	3.62	3.58		Serious Injury Rate
5-year Rolling Average (AR)		3.75	3.59	3.57	3.52	3.56		2.97
Non-motorist (Ped/Bike) F&A	404	493	493	594	575	575		Non-motorist F&A
5-year Rolling Average (N-FA)		477.8	481.0	503.6	511.8	546.0		466.5

WALLA WALLA COUNTY (partial) Metropolitan Planning Area (MPA)	2013	2014	2015	2016	2017	2018	Trend Line
Annual VMT* (1000s)	431,642	441,333	448,256	456,563	436,971	470,558	
Fatalities* (F)	4	11	7	5	2	5	
5-year Rolling Average (F)		5.4	6.2	6.2	5.8	6.0	
Fatality Rate	0.93	2.49	1.56	1.10	0.46	1.06	
5-year Rolling Average (FR)		1.24	1.41	1.40	1.31	1.33	
Serious Injuries (A)	16	12	14	20	13	14	
5-year Rolling Average (A)		16.4	15.2	16.4	15.0	14.6	
Serious Injury Rate	3.71	2.72	3.12	4.38	2.98	2.98	
5-year Rolling Average (AR)		3.81	3.48	3.71	3.38	3.23	
Non-motorist (Ped/Bike) F&A	4	3	6	2	6	2	
5-year Rolling Average (N-FA)		3.6	3.8	3.8	4.2	3.8	

* VMT: Highway Performance Monitoring System (HPMS) Estimates; 2018 Fatality data is preliminary ARF data (FARS is not available beyond 2017); Injury data: WSDOT Engineering Crash Database

Since 2016, in terms of fatality and serious injury counts, both the Washington statewide and Walla Walla County-specific safety performance has remained largely stagnant across all measures; the five-year rolling averages improved slightly for fatalities and serious injuries, as well as their respective rates, but remained at an elevated level for the rate of non-motorist (pedestrian- and bicyclist-involved) fatalities and serious injuries.

The most recent assessment of statewide performance was documented in an updated [Traffic Safety Folio](#) developed by WSDOT.

Bridge, Pavement, and System Performance

National Performance Management Measures (23 CFR Part 490.105) require State DOTs to set targets for pavement and bridge conditions, as well as system performance. In addition, the regulations also require MPOs to establish targets no later than 180 days after the State DOTs' target declaration. On October 3, 2018, the WWVMPO/SRTPO resolved to plan and program projects that support the respective targets declared by ODOT and WSDOT. On January 27, 2020, and June 18, 2020, ODOT and WSDOT, respectively, reviewed the 4-year targets for pavement and bridge conditions (PM2) as well as system performance (PM3) in coordination with each state's MPOs, and it was determined that no mid-point changes would be made. According to recently published performance reports, ODOT and WSDOT (Pavement, Bridge,ⁿ and Reliability) are set to meet identified targets.

Oregon Pavement Condition (As defined in 23 CFR 490.307)			
Performance Measure	Performance Target	Base Data	2-yr Mid-Point Data
Percentage of pavements of the Interstate System in Good condition	35%		64.4%
Percentage of pavements of the Interstate System in Poor condition	0.5%		0.2%
Percentage of pavements of the non-Interstate NHS in Good condition	<u>2-Year:</u> 50% <u>4-Year:</u> 50%	63.9%	65.9%
Percentage of pavements of the non-Interstate NHS in Poor condition	<u>2-Year:</u> 10% <u>4-Year:</u> 10%	6.6%	6.6%
Washington State Pavement Condition (As defined in 23 CFR 490.307)			
Performance Measure	Performance Target	Base Data	2-yr Mid-Point Data
Percentage of pavements of the Interstate System in Good condition	30%	32.5%	39.8%
Percentage of pavements of the Interstate System in Poor condition	4%	3.6%	1.7%
Percentage of pavements of the non-Interstate NHS in Good condition	<u>2-Year:</u> 45% <u>4-Year:</u> 18%	47.0%	45.2%
Percentage of pavements of the non-Interstate NHS in Poor condition	<u>2-Year:</u> 21% <u>4-Year:</u> 5%	20%	17.4%
Oregon Bridge Condition (As defined in 23 CFR 490.407)			
Performance Measure	Performance Target	Base Data	2-yr Mid-Point Data
Percentage of NHS bridges classified as in Good condition	10%	12.4%	13.2%
Percentage of NHS bridges classified as in Poor condition	3%	1.9%	1.9%
Washington State Bridge Condition (As defined in 23 CFR 490.407)			
Performance Measure	Performance Target	Base Data	2-yr Mid-Point Data
Percentage of NHS bridges classified as in Good condition	30%	32.9%	34.7%
Percentage of NHS bridges classified as in Poor condition	10%	7.8%	6.4%
Oregon National Highway System Performance (As defined in 23 CFR 490.507)			
Performance Measure	Performance Target	Base Data	2-yr Mid-Point Data
Percent of the person-miles traveled on the Interstate that are reliable	78%	80.9%	83.8%
Percent of the person-miles traveled on the non-Interstate NHS that are reliable	78%	83.9%	87.9%
Washington State National Highway System Performance (As defined in 23 CFR 490.507)			
Performance Measure	Performance Target	Base Data	2-yr Mid-Point Data
Percent of the person-miles traveled on the Interstate that are reliable	68%	73.3%	77.0%
Percent of the person-miles traveled on the non-Interstate NHS that are reliable	61%	77.0%	80.8%

ⁿ In the absence of an updated Bridge Folio, the two-year Mid-Point data was extracted from the Mid Performance Period Report shared by WSDOT staff on September 15, 2020.

Transit Asset Management – State of Good Repair

The Federal Transit Administration (FTA) published the final rule on Transit Asset Management (TAM) on July 26, 2016, requiring public transit providers who receive FTA funding assistance to undertake specific transit asset management activities, including the development of an asset inventory, an asset condition assessment, a decision support tool or management approach, and the prioritization of investments to maintain a state of good repair (SGR) in accordance with [49 USC 5326](#). In addition, [23 CFR 450.306\(d\)](#) requires MPOs to establish transit SGR targets no later than 180 days after the provider of public transportation's target declaration. On April 3, 2019, the WWVMPO/SRTPO resolved to plan and program projects that support the respective targets declared by Milton-Freewater Public Transportation and Valley Transit.

As part of the Group Transit Asset Management Plan (TAMP) developed by the Oregon Department of Transportation in coordination with Tier II transit agencies, the Federal Fiscal Year (FFY) 2020 targets were set for Milton-Freewater Public Transportation.

Milton-Freewater Public Transportation Annual SGR Asset Performance Targets						
Asset Category	Asset Class	Fleet Size	Vehicle Age (Yrs.)	Default ULB** (Yrs.)	SGR Metric FFY 2019 % Exceed ULB	SGR Target FFY 2020
% Exceeding ULB**						
Equipment*	Automobiles					25%
	Bus					25%
	Cutaway					40%
	Van	1	12	5	100%	41%
	Minivan	1	11	4	100%	41%
	SUV					23%
	Rolling Stock - Automobile					63%
% Below 3.0 TERM*** Rating						
Facilities	Passenger / Parking Facilities					0%
	Administrative / Maintenance Facilities					3%

Source: <https://www.oregon.gov/odot/RPTD/RPTD%20Document%20Library/ODOT-TAM-Plan.pdf> and <https://www.oregon.gov/ODOT/RPTD/Pages/Transit-Asset-Management.aspx>, accessed August 15, 2020

* Only the **highlighted** rolling stock equipment applies to Milton-Freewater Public Transportation

** ULB – Useful Life Benchmark

*** TERM – Refers to the five-category rating system used in FTA's Transit Economic Requirements Model (TERM) to describe the condition of an asset: 5 = Excellent; 4 = Good; 3 = Adequate; 2 = Marginal; and 1 = Poor

Although both Milton-Freewater Public Transportation assets have exceeded the useful life benchmark, they have been assessed to be in adequate or better "condition" at the time of their most recent assessment.

As part of the Transit Asset Management Plan completed by Valley Transit, the targets shown on the following pages were adopted for FFY 2020:

Valley Transit Annual SGR Asset Performance Targets Rolling Stock Fixed Route, Rolling Stock Paratransit								
Asset Category	Asset Class	Fleet Size	Vehicle Age (Yrs.)	Default ULB* (Yrs.)	SGR Metric (FFY 2018 Base) % Exceed ULB	SGR Metric FFY 2019 % Exceed ULB	SGR Target FFY 2020 % Exceed ULB	FTA (Default) Performance Metric
Rolling Stock Fixed Route Bus Paratransit Van	Bus 29' Gillig Low Floor	5	14	10	100%	100%	100%	The % of Revenue Service Vehicles that Will Meet / Exceed the ULB
	Bus 29' Gillig Low Floor	4	13	10	100%	100%	100%	
	Bus 29' Gillig Low Floor	3	9	10	0%	0%	0%	
	New Flyer C40LF	2	18	12	100%	100%	100%	
	Champion Challenger Ford E450 Paratransit Van	3	4	5	100%	0%	0%	
	Champion Challenger Ford E450 Paratransit Van	3	2	5	In Service Date	0%	0%	
	Champion Challenger Ford E450 Paratransit Van	4	2	5	In Service Date	0%	0%	

Source: Valley Transit, October 2018 and August 2020

* ULB – Useful Life Benchmark

Valley Transit Annual SGR Asset Performance Targets Non-Revenue Rolling Stock Service Vehicles								
Asset Category	Asset Class	Fleet Size	Vehicle Age (Yrs.)	Default ULB* (Yrs.)	SGR Metric (FFY 2018 Base) % Exceed ULB	SGR Metric FFY 2019 % Exceed ULB	SGR Target FFY 2020 % Exceed ULB	FTA (Default) Performance Metric
Equipment: Non-Revenue Service Vehicle	Administration Support Vehicle 2003 Chevrolet Astro Van	1	16	5	100%	100%	100%	The % of Non-Revenue Service Vehicles (By Type) that meet/exceed ULB
	Road Supervisor Van 2010 Ford E350 / Braun 8-Passenger 1 Wheel Chair	1	9	5	100%	100%	100%	
	Custodian Pickup 2015 2500 4x4 Pickup with Service Box	1	4	14	0%	0%	0%	
	Mechanic Pickup 2008 Dodge 3500 4x4 With Service Box	1	11	14	0%	0%	0%	
	Forklift Clark Cushion Tire 1998 CGG25	1	21	14	100%	100%	100%	
	Tractor, John Deere 210 LE 2005	1	14	14	100%	100%	0%	
	Landscape Excavator for Snow Removal							

Source: Valley Transit, October 2018 and August 2020

* ULB – Useful Life Benchmark

Valley Transit Annual SGR Asset Performance Targets Facilities						
Facility Code	Asset Class	2017 TERM* Condition Rating	SGR Metric (FFY 2018 Base) % Below 3.0 TERM	SGR Metric FFY 2019 % Below 3.0 TERM	SGR Target FFY 2020 % Below 3.0 TERM	FTA (Default) Performance Metric
10	Main Facility Administration, Operations, Parts	2	100%	100%	0%	The % of facilities (by group) that are rated less than 3.0 on the FTA TERM Scale
11	Main Facility: Maintenance Shop	2	100%	100%	0%	
20	Main Facility: Parking Garage	3	0%	0%	0%	
22	Main Facility: Storage Building	4	0%	0%	0%	
21	Main Facility: Bus Wash Building	3	0%	0%	0%	
21	Main Facility: CNG Dispensing Island	2	100%	100%	0%	
21	Main Facility: CNG Compressor Station	2	100%	100%	0%	
6	K Mart: Transfer Center	5	0%	0%	0%	
6	Market Station: Transfer Center	5	0%	0%	0%	

Source: Valley Transit, October 2018 and August 2020

* TERM – Refers to the five-category rating system used in FTA's Transit Economic Requirements Model (TERM) to describe the condition of an asset:

5 = Excellent; 4 = Good; 3 = Adequate; 2 = Marginal; and 1 = Poor

According to the most recently provided performance data, Valley Transit is set to meet most identified targets.

Public Transportation Agency Safety Plan

Milton-Freewater Public Transportation PTASP Targets		
Mode of Transit Service	Safety Target Areas	Safety Targets
Fixed Route	Fatalities	0
	Injuries	0
	Safety Events	0
	System Reliability in number of adverse events	0
Demand Response	Fatalities	0
	Injuries	0
	Safety Events	0
	System Reliability in number of adverse events	0

Source: Milton-Freewater Public Transit, June 30, 2020

Valley Transit PTASP Targets		
Mode of Transit Service	Safety Target Areas	Safety Targets
Fixed Route	Fatalities	0
	Fatalities per 110k Vehicle Revenue Miles (VRM)	0
	Injuries	2
	Injuries per 100k VRM	0.4
	Safety Events	3
	Safety events per 100k VRM	0.33
	System Reliability in miles between failures	130,000
Demand Response	Fatalities	0
	Fatalities per 110k Vehicle Revenue Miles (VRM)	0
	Injuries	2
	Injuries per 100k VRM	0.4
	Safety Events	3
	Safety events per 100k VRM	0.33
	System Reliability in miles between failures	130,000

Source: Valley Transit, June 19, 2020

On February 3, 2021, the WWVMPO/SRTPO resolved to plan and program projects that support the respective PTSAP targets declared by Milton-Freewater Public Transportation and Valley Transit.

On July 19, 2018, FTA published the Public Transportation Agency Safety Plan (PTASP) Final Rule, which requires FTA Section 5307 recipients and certain operators of rail systems to develop safety plans that include the processes and procedures to implement a Safety Management System (SMS) in accordance with [49 USC 5329](#) and [49 CFR 673](#). The PTASP rule became effective on July 19, 2019. The PTASP compliance deadline was originally set for July 20, 2020, by which date the affected agencies had to adopt their PTASP and subsequently share the targets with the state DOT and the MPO. In addition, [23 CFR 450.306\(d\)](#) requires MPOs to establish public transportation safety targets no later than 180 days after the provider of public transportation's target declaration.

With the June 30, 2020, submittal of Milton-Freewater Public Transportation's PTASP and the June 19, 2020, submittal of Valley Transit's PTASP, Federal Fiscal Year 2020 targets were set for their respective operations.

Appendix C. Air Quality Conformity

Background

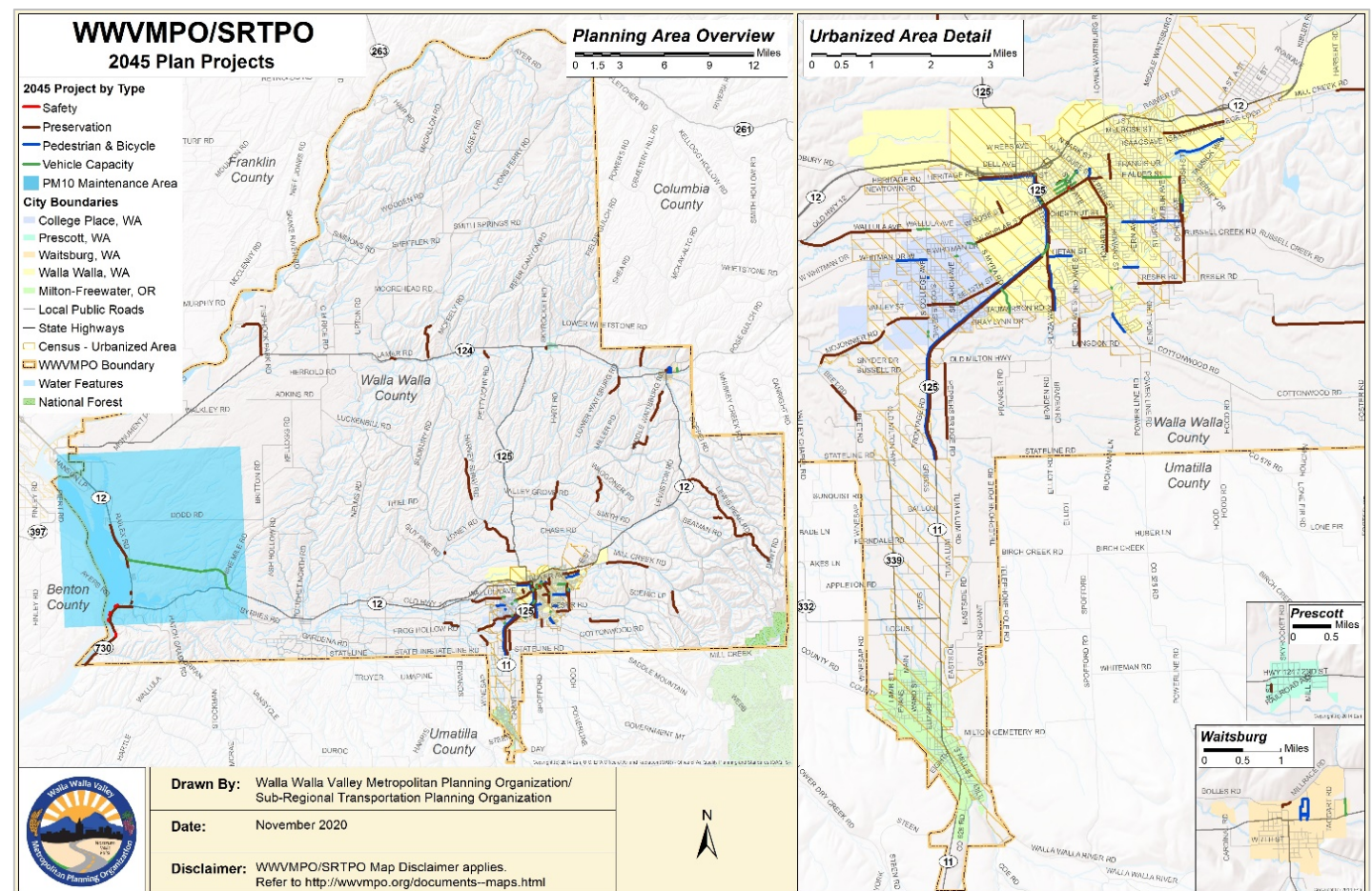
The U.S. Environmental Protection Agency (EPA) sets health-based standards for air quality pollutants. These pollutants include particulate matter – small particles which penetrate deep into the lungs and cause health problems. Originally set in 1987, the current National Ambient Air Quality Standard (NAAQS) for 24-hour concentration of particulate matter with a diameter of ten microns or less (PM₁₀) is 150 micrograms per cubic meter (µg/m³). The Washington Department of Ecology (ECY) operates ambient air compliance monitors in various areas throughout the state, designed to track compliance with the NAAQS. In the late

1980's, the Wallula site violated the PM₁₀ standard and, when the 1990 Clean Air Act Amendments (CAAA) were passed, the EPA designated the Wallula site a nonattainment area – out of compliance with the PM₁₀ standard – first as a moderate non-attainment area and then as a serious non-attainment area in 2001.

In response to the EPA's 1996 Natural Events Policy (NEP) for PM₁₀, the ECY developed a Natural Events Action Plan (NEAP) for High Winds in the Columbia Plateau in 1998 in order to address high wind natural events affecting the site. Following a 2001 evaluation, the ECY's published a revised NEAP in 2003. In 2005, Congress initiated a revision to the Clean Air Act related to air quality monitoring data influenced by exceptional events. This provision,

originally implemented under the EPA's Exceptional Event Rule (EER) and codified in 2007 as the Exceptional Event Rules (EER), was revised in 2016. The EER prescribes the process that must be used to exclude monitored values for extreme weather events beyond anyone's control, which are defined as an exceptional event due to "a natural event or human activity unlikely to recur."

Once the ECY submitted and the EPA approved the Wallula site exceptional event demonstration, it was confirmed that the monitor exceedances of the standard were (and continue to be - 2013 Demonstration, 2015 Demonstration, 2017 Demonstration, and 2019 Mitigation Plan) tied to high-wind and wildfire events.



In 2005, the EPA re-designated the Wallula area to attainment – in compliance with the PM₁₀ standard – and approved the [First 10-year Maintenance Plan](#). The site is now operating under its [Second 10-year Maintenance Plan](#), which was updated in October 2019 and [approved](#) by the Environmental Protection Agency (EPA), effective as of June 1, 2020.

As part of its final rule making, the EPA noted that the Walla Walla Valley MPO/SRTPO region has to demonstrate air quality conformity for its transportation plans and transportation improvement programs. Although the Wallula site was redesignated to a maintenance area in 2005, this need for air quality conformity determination by the WWVMPO/SRTPO was specifically triggered when the site moved from being “an isolated rural area” to becoming part of the expanded Metropolitan Planning Area in March 2017, which occurred one year after the adoption of the WWVMPO/SRTPO’s first long-range transportation plan. The map on the preceding page shows the Wallula PM₁₀ maintenance area alongside the current 2045 Plan projects and the WWVMPO/SRTPO boundary. Through the remainder of the Wallula site’s maintenance period, the WWVMPO/SRTPO will, in concert with FHWA and FTA, fulfill the air quality conformity determination requirements, which are laid out in [40 CFR 93](#):

- ◆ Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP) elements –
 - ◆ Clear declaration of the latest planning assumptions related to current and future population, employment, travel, and congestion
 - ◆ Current and anticipated transit operating policies, fares, and service levels
 - ◆ Information related to effectiveness of any transportation control measures (not applicable, as the maintenance plan does not identify any transportation control measures for our region)

- ◆ Potential Hotspot Analysis for non-exempt projects, including
 - a) new highway projects and b) congested intersections above a certain level of service, coupled with a significant presence of diesel-fueled vehicles (all but one of the region’s projects are exempt since they do not add system capacity)

A regional emissions analysis is not mandatory for the Walla Walla Valley area, as it was specifically determined that “Motor vehicles are an insignificant source of PM₁₀ emissions and [this] justifies exclusion from regional analysis for transportation conformity.”^o

The main sources of dust at the Wallula site include agriculture, a pulp and paper mill, a compost facility, and a cattle feedlot. Control measures for these sources were included in both the First and Second 10-year Maintenance Plans and ensure that the area remains in compliance with the 24-hour PM₁₀ NAAQS.



Latest Planning Assumptions and Documentation

As required by [40 CFR 93.110](#), the conformity determination is based on the latest planning assumptions – both for regionwide growth as well as transit service provision.^p Collaboratively developed with local entity staff, the growth assumptions were determined during the early development phase of the 2045 Plan.

^o ECY made a demonstration in the 2004 Serious Area Plan for Attainment (Section 4.7) that motor vehicles do not now, or in the future, contribute significantly to nonattainment and requested an exemption from regional analysis for transportation conformity. Although, EPA granted this exemption, project-level transportation conformity requirements still apply.

^p Only growth and transit assumptions are included, since the Wallula Maintenance Plan does not contain transportation-specific control measures and the Walla Walla Valley planning area does not include roadway or bridge infrastructure for which any tolls are assessed.

WALLA WALLA VALLEY METROPOLITAN PLANNING AREA POPULATION AND EMPLOYMENT

– WHICH INCLUDES A PORTION OF UMATILLA COUNTY AND
THE CITY OF MILTON-FREEWATER IN OREGON –
ARE EXPECTED TO GROW BETWEEN 2019 AND 2045:

THE REGION’S POPULATION IS PROJECTED TO GROW
BY 0.63% PER YEAR – FROM 69,100 TO 81,380.

THE REGION’S EMPLOYMENT IS PROJECTED TO GROW
BY 0.40% PER YEAR – FROM 29,300 TO 32,480.

These growth assumptions were used in the newly updated travel demand model (TDM). For the 2045 Plan, three TDM scenarios were developed – *Present-plus-Committed*, *[fiscally constrained] Build*, and *Arterial Build-Out*. The forecasted traffic volumes for the *2045 Build* scenario indicate a modest 0.7% per year increase, which aligns with expected population and employment growth projections. Furthermore, planning assumptions related to the provision of transit services and associated operating policies have not undergone any significant changes since the 2040 Plan - this plan’s predecessor - was adopted in March 2016.

The new 2045 Plan, along with the latest planning assumptions, can be accessed from the agency’s website: <https://wwwvmppo.org/plans--programs.html>.

Consultation

Also required is an ongoing Interagency Consultation, which includes the Washington State Department of Transportation, the Washington Department of Ecology, the Federal Highway Administration, the Federal Transit Administration, the Environmental Protection Agency, and the Walla Walla Valley MPO/SRTPO.

A first interagency consultation meeting was held on July 9, 2020. At that time, the nature of the language was determined that must be included in both the 2045 Plan and the new Transportation Improvement Program in order for those documents to demonstrate air quality conformity. The following conclusions, resulting from this early Interagency Consultation, were subsequently documented:

- ◆ The existing PM₁₀ Maintenance State Implementation Plan (SIP) is sufficient and does not need to be replaced with a Limited Maintenance Plan (LMP).
 - ◆ Due to ECY’s 2004 demonstration that motor vehicles do not significantly contribute to PM₁₀ at the Wallula site, no regional emissions analysis or VMT demonstration is required.
- ◆ Demonstrating conformity for WWVMPO/SRTPO MTPs and TIPs starts in 2021 with the new 2045 Plan and TIP.

Findings

Based on the projected, slow annual growth rate for the regionwide population, employment, and traffic volumes, the WWVMPO/SRTPO finds that the projects included in this 2045 Plan – most of which are exempt according to [40 CFR 93.126](#) – will not cause or contribute to any new violation of the federal air quality standard for PM₁₀.

STATEMENT OF CONFORMITY

THE 2045 PLAN ACHIEVES AND MAINTAINS THE NATIONAL AMBIENT AIR
QUALITY STANDARDS AS REQUIRED BY THE CLEAN AIR ACT
AMENDMENTS OF 1990.

IT ALSO MEETS THE REQUIREMENTS SET FORTH IN [WAC 173-420](#) AND
THE WALLULA SITE’S SECOND 10-YEAR MAINTENANCE PLAN FOR PM₁₀.

Appendix D. Endangered Species

Endangered or Threatened Species, Candidate Species, or Species of Concern in the Walla Walla Valley Region

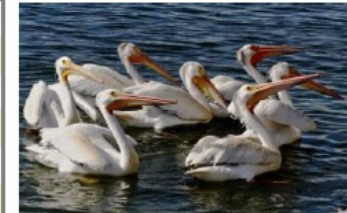
			Status Designation		
			Umatilla Co.	Walla Walla Co.	Federal
Common Name	Scientific Name				
Mammals	Black-tailed Jackrabbit	<i>Lepus californicus</i>	-	C	-
	Canada Lynx	<i>Lynx canadensis</i>	T	E	T
	Gray Wolf	<i>Canis Lupus</i>	E*	E*	- *
	Washington Ground Squirrel	<i>Urocitellus washingtoni</i>	E	C	-
	White-tailed Jackrabbit	<i>Lepus townsendii</i>	-	C	-
Birds	American White Pelican	<i>Pelecanus erythrorhynchos</i>	-	T	-
	Black-backed Woodpecker	<i>Picoides arcticus</i>	-	C	-
	Burrowing Owl	<i>Athene cunicularia</i>	SC	C	-
	Ferruginous Hawk	<i>Buteo regalis</i>	SC	T	-
	Flammulated Owl	<i>Otus flammeolus</i>	-	C	-
	Golden Eagle	<i>Aquila chrysaetos</i>	-	C	-
	Loggerhead Shrike	<i>Lanius ludovicianus</i>	-	C	-
	Northern goshawk	<i>Accipiter gentilis</i>	-	C	-
	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	C	-
	Sage Thrasher	<i>Oreoscoptes montanus</i>	-	C	-
	Sagebrush Sparrow	<i>Artemisiospiza nevadensis</i>	-	C	-
	Tricolored Blackbird	<i>Agelaius tricolor</i>	SC	-	-
	Vaux's Swift	<i>Chaetura vauxi</i>	-	C	-
	Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	-	E	T
Insects	Columbia River Tiger Beetle	<i>Cicindela columbica</i>	-	C	-
Amphibians and Reptiles	Columbia Spotted Frog	<i>Rana luteiventris</i>	-	C	-
	Rocky Mountain Tailed Frog	<i>Ascaphus montanus</i>	-	C	-
	Sagebrush Lizard	<i>Sceloporus graciosus</i>	SC	C	-
	Striped Whipsnake	<i>Masticophis taeniatus</i>	-	C	-
	Western Toad	<i>Anaxyrus boreas</i>	-	C	-



	Common Name	Scientific Name	Status Designation		
			Umatilla Co.	Walla Walla Co.	Federal
Fish	Bull Trout	<i>Salvelinus confluentus</i>	T, CH	C	T
	Chinook Salmon	<i>Oncorhynchus tshawytscha</i> pop. 2 & 8	T	C	T
	Coho Salmon	<i>Oncorhynchus kisutch</i> pop. 1	-	-	T
	Margined Sculpin	<i>Cottus marginatus</i>	-	S	SC
	Mountain Sucker	<i>Catostomus platyrhynchus</i>	-	C	-
	Pacific lamprey	<i>Lampetra tridentata</i>	SC	-	-
	Sockeye Salmon	<i>Oncorhynchus nerka</i>	-	C	E
	Steelhead	<i>Oncorhynchus mykiss</i> pop. 13 & 17	-	C	T
	White Sturgeon	<i>Acipenser transmontanus</i>	SC	-	E
Mollusks	Ashy (Columbia) Pebblesnail	<i>Fluminicola columbiana</i>	SC	C	-
	California Floater	<i>Anodonta californiensis</i>	SC	C	-
	Columbia Oregonian (snail)	<i>Cryptomastix hendersoni</i>	-	C	-
	Shortface Lanx	<i>Fisherola nuttalli</i>	-	C	-
	Western Pearlshell	<i>Margaritifera falcata</i>	SC	-	-
Plants	Annual sandwort	<i>Sabulina pusilla</i>	-	T	-
	Beaked cryptantha	<i>Cryptantha rostellata</i>	-	T	-
	Blue Mountain penstemon	<i>Penstemon pennellianus</i>	-	T	-
	Coyote tobacco	<i>Nicotiana attenuata</i>	-	S	-
	Douglas' Clover	<i>Trifolium douglasii</i>	SC	-	SC
	False monkeyflower	<i>Mimetanthe pilosa</i>	-	S	-
	Gray cryptantha	<i>Cryptantha leucophaea</i>	-	T	-
	Great Basin gilia	<i>Aliciella leptomeria</i>	-	T	-
	Lawrence's milkvetch	<i>Astragalus collinus</i> var. <i>laurentii</i>	T	-	SC
	Northern Wormwood	<i>Artemisia campestris</i> var. <i>wormskioldii</i>	E	-	-
	Pauper milkvetch	<i>Astragalus misellus</i> var. <i>pauper</i>	-	S	-
	Plumed clover	<i>Trifolium plumosum</i> var. <i>plumosum</i>	-	T	-
	Pulsifer's monkeyflower	<i>Erythranthe pulsiferae</i>	-	S	-
	Sabin's Lupine	<i>Lupinus sabinianus</i>	-	E	-
	Snake Canyon desert-parsley	<i>Lomatium serpentinum</i>	-	S	-



		Status Designation		
Common Name	Scientific Name	Umatilla Co.	Walla Walla Co.	Federal
Plants (cont.)				
Spalding's catchfly	<i>Silene spaldingii</i>	E	-	T
Stalked moonwort	<i>Botrychium pedunculosum</i>	SC	-	-
Thistle milkvetch	<i>Astragalus kentrophyta</i> var. <i>douglasii</i>	-	X	-
Twin-spike moonwort	<i>Botrychium paradoxum</i>	SC	-	-
Yellow wildrye	<i>Leymus flavescens</i>	-	S	-
Yeti phlox	<i>Phlox solivaga</i>	-	E	-



* : Oregon has proposed delisting the Gray Wolf; the Gray Wolf has been delisted east of Highway 395 federally, though the Washington State status still applies in that area

Note: The absence of a species in a county does not denote the lack of an official state ranking - only that the species is not present in the area. Likewise, the status designation is not applied by the county administration but the state in which the respective county resides.

Key:

- X - Possibly extinct or extirpated. Documented to have previously occurred in the area, but no longer thought to be present.
- E - Endangered. In danger of becoming extinct or extirpated.
- T - Threatened. At risk of becoming endangered in the near future if population decline or habitat loss continues.
- S - Sensitive. A vulnerable or declining species that could become endangered or threatened without help.
- C - Candidate. A species with well-documented threats which has not yet been proposed for official conservation.
- SC - A species known to have threats or status concerns that requires further study in order to establish official conservation status.
- CH - Critical Habitat. A specific geographic area with natural features that are essential to the conservation of an endangered or threatened species.

Information for this table was compiled using data from:

Aliso: A Journal of Systematic and Evolutionary Botany, Allaboutbirds.org, Amphibiaweb.org, Audubon Society, Birdweb.org, Ebird.org, Encyclopedia of Life, Fishmap.org, Freshwater Mollusk Conservation Society, National Oceanic and Atmospheric Administration, Nature Mapping Foundation, Oregon Department of Agriculture, Oregon Department of Fish and Wildlife, Oregon Flora Project, Oregon State University, PacifiCorp, Pnwflowers.com, Pnwherberia.org, Portland State University, Roughfish.com, United State Bureau of Land Management, United States Department of Agriculture, United States Fish and Wildlife Service, United States Forest Service, University of Utah, University of Washington, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Xerxes Society for Invertebrate Conservation

Appendix E. Acronyms and Glossary

ACS - American Community Survey
ADA - Americans with Disabilities Act (1990)
ADT - Average Daily Traffic
AV - Autonomous Vehicle
BFCG - Benton-Franklin Council of Governments
BMRT - Blue Mountain Region Trails Plan
BNSF - Burlington Northern Santa Fe Railroad
CAA - Clean Air Act (1970)
CEMP - Washington State Comprehensive Emergency Management Plan
CFR - Code of Federal Regulations
CNG - Compressed Natural Gas
COVID-19 - Coronavirus Disease of 2019
CPT-HSTP - Coordinated Public Transit-Human Services Transportation Plan
CRAB - County Road Administration Board
CTUIR - Confederated Tribes of the Umatilla Indian Reservation
CWA - Connecting Washington
ECY - Washington State Department of Ecology
EMD - Washington State Military Department Emergency Management Division

EOC - Washington State Emergency Operations Center
EOP - Emergency Operations Plan
EPA - United States Environmental Protection Agency
ESA - Endangered Species Act
EV - Electric Vehicle
FAA - Federal Aviation Administration
FAF4 - Freight Analysis Framework Version 4
FAST - Fixing America's Surface Transportation Act (2015)
FAUB - Federal Aid Urban Boundary
FFY - Federal Fiscal Year
FGTS - Freight and Goods Transportation System
FHWA - Federal Highway Administration
FTA - Federal Transportation Administration
GIS - Geographic Information System
GMA - Washington State Growth Management Act
HSD - Washington State Patrol Homeland Security Division
HSIP - Highway Safety Improvement Program
ITS - Intelligent Transportation Systems
LEP - Limited English Proficiency
LOS - Level of Service
MAP-21 - Moving Ahead for Progress in the 21st Century Act (2012)

MPA - Metropolitan Planning Area
MPO - Metropolitan Planning Organization
M/RTIP - Metropolitan and Regional Transportation Improvement Program
MTP - Metropolitan Transportation Plan
MUTCD - Manual on Uniform Traffic Control Devices
NAAQS - National Ambient Air Quality Standards
NHS - National Highway System
NRHP - National Register of Historic Places
OAR - Oregon Administrative Rule
ODOT - Oregon Department of Transportation
OFM - Washington State Office of Financial Management
PB - Policy Board
PM - Particulate Matter
PTASP - Public Transportation Agency Safety Plan
RCW - Revised Code of Washington
RTPO - Regional Transportation Planning Organization
RTSP - Regional Thoroughfare System Plan
SAO - Washington State Auditor's Office
SGR - State of Good Repair
SHSP - Strategic Highway Safety Plan (WA)
SIP - State Implementation Plan
SOV - Single-Occupancy Vehicle

SRTPO - Sub-Regional Transportation Planning Organization

STBG - Surface Transportation Block Grant Program

STIP - State Transportation Improvement Program

TA - Transportation Alternatives

TAC - Technical Advisory Committee

TAMP - Transit Asset Management Plan

TAZ - Traffic Analysis Zone

TBD - Transportation Benefit District

TDM - Travel Demand Model

TDM - Transportation Demand Management

TERM - Transit Economic Requirements Model

TIM - Traffic Incident Management

TIP - Transportation Improvement Program

Title VI - Title VI of the Civil Rights Act of 1964

TSAP - Transportation Safety Action Plan (OR)

TSMO - Transportation System Management & Operations

UGA - Urban Growth Area

UGB - Urban Growth Boundary

UPRR - Union Pacific Railroad

USACE - United States Army Corps of Engineers

USC - United States Code

USDA - United States Department of Agriculture

USDOT - United States Department of Transportation

UZA - Urbanized Area

V/C - Volume to Capacity Ratio

VMT - Vehicle Miles Traveled

WAC - Washington Administrative Code

WISAARD - Washington Information System for Architectural and Archaeological Records Data

WSDOT - Washington State Department of Transportation

WWVMPO - Walla Walla Valley Metropolitan Planning Organization

WWVMPO/SRTPO - Walla Walla Valley Metropolitan Planning Organization/ Sub-Regional Transportation Planning Organization

YOE - Year of Expenditure



Access Management - Altering the available access points along a roadway corridor to improve safety and throughput.

Accessibility - In the context of transportation planning, this refers to the provision and design of services and facilities that are usable by all persons, regardless of disability.

Alternative Fuels - Non-standard fuels used to power motor vehicles, such as compressed natural gas (CNG) or hydrogen fuel cells, which aim to replace the standard petroleum-based fuels that are currently used.

Americans with Disabilities Act of 1990 - Federal legislation that prohibits discrimination against any person with a disability.

Arterial - The designation for largest-volume, highest-speed, and lowest-access roadways, which can include highways. Arterials meet the demands of moderate to long trips. (See: *Collector, Local Roadway*)

At-Grade Crossing - A crossing where different directions or modes of travel are at the same height, as in most standard intersections. (See: *Grade-Separated Crossing*)

Attainment Area - An area that meets or beats the National Ambient Air Quality Standards and is the opposite of a nonattainment area. (See: *National Ambient*

Air Quality Standards (NAAQS), Nonattainment Area)

Autonomous Vehicle - A vehicle that is able, with the help of sensors and on-board computers, to perform driving maneuvers with limited or no human input.

Average Daily Traffic (ADT) - An estimation of the daily vehicle traffic along a roadway segment or at an intersection.

Carbon Monoxide - This gas is created by burning fossil fuels for heat or motor vehicles and is harmful to humans in high concentrations.

Channelization - A low-cost safety and access management technique that encourages or restricts certain traffic behaviors. A classic example of channelization would be a right-turn-only lane. (See: *Access Management*)

Clean Air Act of 1970 - Federal legislation which authorizes the EPA to establish National Ambient Air Quality Standards (NAAQS). STIP/TIPs and MTPs must conform to NAAQS to receive approval. (See: *Metropolitan Transportation Plan, National Ambient Air Quality Standards, State Transportation Improvement Program, Transportation Improvement Program*)

Climate Change - The large-scale shifts in climates driven by human emissions and the greenhouse effect. (See: *Greenhouse Gas*)

Collector - A medium-access, moderate-speed roadway that links local roadways to arterials. (See: *Arterial, Local Roadway*)

Complete Streets - An approach to planning, design, and operation of streets that includes support for all modes of transportation and focuses on safety, mobility, and livability.

Comprehensive Plan - A planning document that incorporates a community's public policies for land use, recreation, housing, transportation, and utilities.

Connected Vehicle - A vehicle that can connect to the internet and communicate with other cars or roadway infrastructure elements to inform the driver of potentially dangerous situations or conditions. Connected vehicles are not inherently autonomous.

Endangered or Threatened Species - Species that are in danger of becoming extinct due to habitat destruction, poaching, or invasive species. Endangered or threatened species are federally protected under the Endangered Species Act of 1973.

Environmental Justice - The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

(Environmental Protection Agency, 2020.
<https://www.epa.gov/environmentaljustice>)

Equality - Giving everyone in a society the same treatment and access to opportunities.

Equity - Distribution of resources based on people's needs.

First Mile/Last Mile - Terms that are used to describe the problem of connecting transit stops or hubs to the destinations where people live, work, or play.

Fixed Route - Transit service that is provided along a set route with scheduled times. (See: *Paratransit*)

Greenhouse Gas (GHG) - Any gas that contributes to the Greenhouse Effect, which traps heat and warms the planet. (See: *Climate Change*)

Growth Management Act (GMA) - Washington State legislation requiring the state and local governments to coordinate and plan areas for future growth to limit urban sprawl and protect natural resources.

Grade-Separated Crossing - A crossing where the travel lanes of one direction or mode are elevated or submerged under another direction's travel lanes. (See: *At-Grade Crossing*)

Ground-Level Ozone (O₃) - A gas that is harmful to plant and animal life, created when sunlight interacts with emissions from motor vehicles, industrial processes, and solvents.

Infrastructure - A basic facility, service, or installation necessary for a community or society.

Intelligent Transportation Systems (ITS) - Any system which uses digital technology to improve safety and efficiency on a roadway. (See: autonomous vehicle, connected vehicle)

Lead (Pb) - This dangerous metal is present in emissions from leaded aviation fuel and ore processing and is extremely dangerous to human health.

Level of Service (LOS) - A determination of the throughput and quality of a transportation facility using letter grades ranging from A (best operation) to F (worst operation).

Local Roadway - A high access, low speed roadway that supports short trips connecting to collectors and arterials. (See: *Arterial, Collector*)

Maintenance Area - A former nonattainment area that has been redesignated as an attainment area and has a maintenance plan in place to keep air quality within acceptable levels. (See: *Attainment Area, Nonattainment Area*)

Metropolitan Planning Organization (MPO) - An organization that coordinates the transportation planning efforts within an urbanized area.

Metropolitan Planning Area (MPA) - A designated region of urbanized and planned urban growth areas for which an MPO conducts transportation planning work. (See: *Metropolitan Planning Organization (MPO)*)

Metropolitan Transportation Improvement Program (MTIP) - A fiscally constrained list of transportation projects and strategies requesting federal funding over a four-year period, adopted by an MPO. (See: *Metropolitan Planning Organization (MPO)*, *Transportation Improvement Program (TIP)*)

Metropolitan Transportation Plan (MTP) - A fiscally constrained long-range plan which fosters mobility and access for people and goods, efficient system performance and preservation, and a good quality of life, adopted by an MPO. (See: *Metropolitan Planning Organization (MPO)*).

Micromobility - Small-sized transportation modes, such as bikes, e-bikes, e-scooters, and other similar mobility options. When used as part of a shared system, these modes can have significant transportation system benefits.

Multi-modal - A term that describes an approach or condition which incorporates several different modes of transportation.

National Ambient Air Quality Standards (NAAQS) - Standards set for various air pollutants to protect public health, sensitive

populations, public welfare, and the environment from harmful conditions. (See: *Clean Air Act of 1970*)

National Highway System (NHS) - The series of highways and principal arterials that are important to the economy, defense, and mobility of the United States.

Nitrogen Dioxide (NO₂) - A gas created when fuels are burned to power vehicles, industry, and machinery that is very harmful to respiratory health.

Nonattainment Area - An area that fails to meet, or contributes to an area nearby that fails to meet, the national primary or secondary ambient air quality standard for a NAAQS. (See: *Attainment Area, National Ambient Air Quality Standards (NAAQS)*)

Paratransit - Transportation service that is provided for transit riders whose disabilities prevent them from using regular bus service. (See: *Fixed Route*)

Particulate Matter (PM) - Solid or liquid particulates suspended in the air, classified into particulates of 10 micrometers (PM₁₀) or smaller and particulates of 2.5 micrometers (PM_{2.5}) or smaller.

Performance Measure - A data-driven criterion that can be used to gauge the success or failure of a plan, policy, project, or program.

Policy - A set guideline or principle that helps direct future plans and decisions.

Policy Board - A group representing the local civic leadership of an MPO's member organizations that makes decisions for the MPO. (See: *Metropolitan Planning Organization (MPO), Technical Advisory Committee (TAC)*)

Regional Transportation Improvement Program (RTIP) - A fiscally constrained list of transportation projects and strategies requesting federal funding over a six-year period, adopted by an MPO or RTPO. (See: *Regional Transportation Planning Organization (RTPO), Transportation Improvement Program (TIP)*)

Regional Transportation Plan (RTP) - A fiscally constrained long-range plan which fosters mobility and access for people and goods, efficient system performance and preservation, and a good quality of life within a region, adopted by an MPO or RTPO. (See: *Metropolitan Planning Organization (MPO), Regional Transportation Planning Organization (RTPO)*)

Regional Transportation Planning Organization (RTPO) - An organization that performs transportation planning activities for a nonmetropolitan area, linking local governments to the statewide transportation planning process. (See: *Metropolitan Planning Organization*)

Resilience - The capability of an asset or idea to resist outside influences or changes.

Revised Code of Washington (RCW) - A collection of all the permanent laws currently enforced in Washington State.

Right-of-Way (ROW, RW, R/W) - The legally designated space that a route is permitted to use through an area for the transportation of people and goods.

Roundabout - An alternative intersection design consisting of a raised center circle that provides for a constant, circuitous traffic flow while preventing the most dangerous intersection maneuvers.

Single Occupancy Vehicle (SOV) - A privately owned vehicle that is used to transport only one person from one location to another.

Statewide Transportation Improvement Program (STIP) - A fiscally constrained list of all the transportation projects from the MPOs and non-MPO rural areas in the state. (See: *Metropolitan Planning Organization (MPO), Transportation Improvement Project (TIP)*)

Stormwater - Rain or melting snow and ice that has not yet percolated into the groundwater supply (water table, rivers, streams, lakes, and oceans). Stormwater that does not have proper drainage facilities can

pond or flow over roadways, potentially making them hazardous.

Surface Transportation Block Grant

(STBG) - Federal grant funding for a range of transportation projects.

Sulfur Dioxide (SO₂) - A harmful gas that is created when sulfur or materials containing sulfur are burned, including fuels for vehicles and industry.

Sustainability - A term that can mean two things: one, to preserve an ecological balance and two, to ensure that something can be maintained at the current level or rate in perpetuity.

Target Zero - The name of Washington State's policy to reduce all traffic fatalities to zero by the year 2030.

Technical Advisory Committee (TAC) - A group of technical professionals from the MPO member entities who lend their expertise and advice to improve decisions made by an MPO's Policy Board. (See: *Metropolitan Planning Organization (MPO)*, *Policy Board (PB)*)

Telework - Using telecommunications (phone or internet) to perform work-related tasks from a remote location.

Title VI of the Civil Rights Act of 1964 - Federal legislation that forbids the exclusion of anyone based on race, color, or national

origin for any program or activity that receives federal funding.

Traffic Analysis Zone (TAZ) - A geographic region created solely for the purpose of predicting future travel patterns within a travel demand model. (See: *Travel Demand Model (TDM)*)

Transportation Alternative Program

(TAP, or TA) - Federal grant funding that is available for projects that seek to improve active transportation modes, such as projects for pedestrians and cyclists.

Transportation Demand Management

(TDM) - Strategies and policies that attempt to improve transportation system efficiency by reducing or altering the nature of transportation demand.

Travel Demand Model (TDM) - A software program that uses current traffic counts and land use data to create a location-specific algorithm that is used to predict future transportation system conditions based on assumed growth.

Transportation Improvement Program

(TIP) - A fiscally constrained list of transportation projects and strategies requesting federal funding over a certain timeframe, adopted by an MPO or RTP. (See: *Metropolitan Planning Organization (MPO)*, *Regional Transportation Improvement Program (RTIP)*)

Urban Growth Area (UGA) / Urban

Growth Boundary (UGB) - An area immediately adjacent to an existing city or community, identified to accommodate future development and designed to limit urban sprawl.

Urbanized Area (UZA) - A Census-designated, contiguous urban area with at least 50,000 residents.

Vehicle Miles Traveled (VMT) - A measurement of the total miles driven within a certain area and timeframe.

Vision Zero - The name of Oregon's policy to reduce all traffic fatalities to zero by the year 2035.

Volume-to-Capacity Ratio (V/C Ratio) - Common measure for vehicle volumes relative to the estimated roadway capacity.

Washington Administrative Code (WAC) - A codified set of all the regulations that support government administration across the state.

Year of Expenditure (YOE) - A term to describe the estimated future cost of a project or program using historic and anticipated figures for inflation, market prices, and costs.

Zoning - The designation of an allowed land use and/or structure(s) for a specific property or area by the administering government entity.

Appendix F. Credits and Sources

Transportation Planning Where/Who/What/Why/How

Statutes and Policies

Federal Level

Icons made by Freepik from www.flaticon.com

State Level

Washington State and Oregon shapes from Census - [American Community Survey](https://www.census.gov/data/tables/2010/americancommunitysurvey/) data

Goal-Oriented and Performance Driven

What the Future May Bring

Demographics

¹ National Academies of Sciences, Engineering, and Medicine, 2018. Critical Issues in Transportation 2019. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25314>

² Federal Transit Administration, 2020. Mobility Performance Metrics (MPM) For Integrated Mobility and Beyond. Washington, DC: Federal Transit Administration. <https://www.transit.dot.gov/about/research-innovation>

³ National Academies of Sciences, Engineering, and Medicine, 2016. Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services. Washington, D.C.: The National Academies Press. <https://doi.org/10.17226/21875>

⁴ Federal Transit Administration, 2020.

⁵ National Academies of Sciences, Engineering, and Medicine, 2018.

Autonomous Vehicles

⁶ Federal Highway Administration, 2019. Integrating Shared Mobility into Multimodal

Goals

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Goal-Oriented and Performance Driven

Performance Targets

Orange Target Icon made by Freepik from www.flaticon.com

Who and What is Moving Now and in the Future

Icons made by Freepik from www.flaticon.com

People, Employment, Growth, and Travel Patterns

Icons made by Freepik from www.flaticon.com

Transportation Planning: Metropolitan Area Case Studies. Washington, DC: Federal Highway Administration.

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⁸ J.D. Power, 2019. Mobility Pipe Dreams? J.D. Power and SurveyMonkey Uncover Shaky Consumer Confidence About the Future. Retrieved on August 21, 2019, from https://www.jdpower.com/system/files/legacy/assets/2019182_mobility_confidence_index.pdf

⁹ Litman, Todd, 2020. Autonomous Vehicle Implementation Predictions: Implications for Transport Planning. Victoria B.C., Canada: Victoria Transport Policy Institute. <https://www.vtpi.org/avip.pdf>

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¹¹ National Academies of Sciences, Engineering, and Medicine, 2018.

¹² Litman, Todd, 2020.

¹³ Lewis, R. & Steckler, R., 2020. Emerging Technologies and Cities: Assessing the Impacts

Sustainability and Stewardship

Access and Equity

Access

Icons made by Freepik from www.flaticon.com

Maintenance and Preservation

Pothole icon by Iconathon, US from thenounproject.com/search/?q=pothole&i=753

Recommended Investments

Selection of Projects

Icons made by Freepik from www.flaticon.com

of New Mobility on Cities. Portland, OR: National Institute for Transportation and Communities (NITC). nitc-utc.net

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¹⁵ Corwin, S., Willigmann, P. & Jameson, N., 2016. The Future of Mobility: What's Next? Tomorrow's Mobility Ecosystem—And How to Succeed In It. London, UK: Deloitte University Press.

¹⁶ Lewis, R. & Steckler, R., 2020.

¹⁷ Litman, Todd, 2020.

¹⁸ Fagnant, D. & Kockelman, K., 2013. The Travel and Environmental Implications of Shared Autonomous Vehicles, Using Agent-Based Model Scenarios. Austin, TX: Elsevier Ltd. <http://dx.doi.org/10.1016/j.trc.2013.12.001>

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²⁰ Patel, V.J., 2017. Think Your Cellphone Uses a lot of Data? Report Claims Autonomous Cars Will Use 4,000 GB in one Day. Retrieved June 10, 2020, from <https://www.futurecar.com/876/Think-Your-Cellphone-Uses-a-lot-of-Data-Report-Claims->

[Autonomous-Cars-Will-Use-4000-GB-in-one-Day-](#)

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