The Regional Transportation Plan — 2018



May 2018

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Puget Sound Regional Council Information Center

1011 Western Avenue, Suite 500

Seattle, Washington 98104-1035

206-464-7532 · info@psrc.org · psrc.org

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INTRODUCTION

The regional Active Transportation Plan (ATP) outlines actions to implement bicycle and pedestrian planning, projects and programs for the central Puget Sound region. This plan is meant to inform the PSRC work program to meet four primary goals. The ATP:

- includes federal, state and regional policy and funding information
- makes the case for active transportation regarding the needs and benefits
- highlights the region's investments in active transportation and existing conditions
- introduces design guidance information on state of the practice
- promotes the implementation of the Regional Bicycle Network
- outlines an ACTION PLAN with steps the region will take to implement active transportation in the central Puget Sound region with suggested local actions

FOUR PRIMARY GOALS

- 1. Support social equity in active transportation projects and programs
- 2. Improve safety and comfort for people walking and bicycling
- 3. Increase the percentage of people walking and biking
- 4. Improve access to opportunity for people walking and bicycling

THE PURPOSE OF THE **ACTION PLAN** IS TO:

- Outline regional implementation actions to meet each goal and to inform the PSRC Work
 Program
- Inform local implementation with suggested local actions
- Provide a framework for evaluation

Emphasis is placed on:

- the completion of networks and connection to destinations
- commitment to supporting data collection efforts
- promoting high-quality and high-comfort facility design
- providing opportunities to learn about and share best practices in local planning

EXECUTIVE SUMMARY

OVERVIEW

The Regional Active Transportation Plan (ATP) provides a framework for how the region and its local communities can provide better connected and safer options for people to walk and bike to their destinations. This plan seeks to increase the health and well-being of residents in the central Puget Sound region through walking and bicycling. Research has shown that these transportation modes help create more livable communities and provide desirable economic, environmental, and health outcomes. With improved safety, connectivity, and comfort of active transportation infrastructure, more people will experience the many benefits of physical activity, social cohesion, and increased transportation options.

WHAT IS ACTIVE TRANSPORTATION?

Active transportation

refers to multimodal

ages and abilities to

where they need to go

using active modes such

as walking and bicycling.

transportation solutions

that connect people of all

PURPOSE OF THIS PLAN

The purpose of the ATP is to advance many of VISION 2040's policies through the advancement of active transportation in the Puget Sound region. This plan describes the need for active transportation, highlights its many benefits, provides guidance for local jurisdictions on their role in implementing active transportation, and provides an action plan for how the region can work to support active transportation policies, programs, and projects.

THE NEED

The active transportation system includes a network of facilities for to access their jobs, transit, services, and community activities on foot or by bicycling are needed to

as the region is expected to add another million people by 2040.

both people who walk and bike such as off-road multi-use trails, on-road bicycle facilities, and sidewalks. Well-connected and complete networks that allow people of all ages, abilities and geographic locations complete this system. The need for more and improved bicycle and pedestrian infrastructure will grow

Safety, comfort and network connectivity of active transportation infrastructure is a key concern of users and jurisdictions in the central Puget Sound region. The number of fatalities and serious injuries for bicyclists and pedestrians has not seen a decrease in the trend as is the case with motor vehicles. Non-motorized serious injuries and fatalities increased from 21% to 27% of the total between 2010 and 2016 in the central Puget Sound region. In addition to behavior change, separating people from automobiles or applying other design solutions can help to reverse this trend.

BENEFITS OF ACTIVE TRANSPORTATION

Active transportation benefits people, the environment, and the transportation system. People who walk, bike, and take transit are often likely¹ to get the physical activity they need every day. Walking and bicycling causes less strain on the roadways, is carbon neutral, and serves as an inexpensive way for

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Appendix L: Active Transportation Plan

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¹ Lawrence D. Frank, James F. Sallis, Terry L. Conway, James E. Chapman, Brian E. Saelens & William Bachman Journal of the American Planning Association Vol. 72, Iss. 1,2006, Many Pathways from Land Use to Health: Associations between Neighborhood Walkability and Active Transportation, Body Mass Index, and Air Quality

people to get to where they need to go. There are many other economic benefits to active transportation. See Chapter 2 for more details.

POLICY FRAMEWORK

VISION 2040 is the region's long-range growth management, economic, and transportation strategy to accommodate the 5 million people expected to live in the region by 2040. The strategy focuses on integrating land use and transportation strategies that focus growth in urban areas while preserving natural resource land and agricultural resources. The multicounty planning policies (MPP) adopted in VISION 2040 include a focus on increasing transportation choices and for a system that serves all users safely and efficiently. This includes improving the region's pedestrian and bicycle infrastructure which creates a more comfortable environment for people who walk and bike while helping to reduce congestion. Active transportation supports many of the VISION 2040 MPP's. The Regional Transportation Plan (RTP) is the implemenation strategy for VISION 2040.

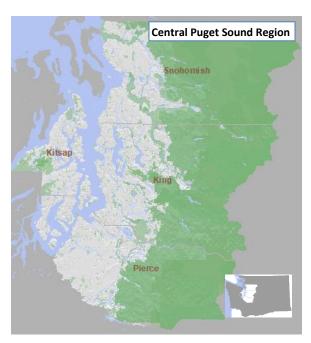


PSRC's Bicycle and Pedestrian Advisory Committee (BPAC) worked closely with PSRC staff in forming the recommendations that guided the development of the ATP. The near-term implementation actions for both the BPAC and PSRC staff will guide the development for the BPAC work program. These implementation actions are outlined later in this document.

GEOGRAPHIC EXTENT AND EXISTING CONDITIONS

The central Puget Sound region is home to four counties - King, Kitsap, Pierce, and Snohomish - and their 82 cities and towns stretching from the crests of the Cascade Mountains to the shorelines of Puget Sound. It covers an area of nearly 6,300 square miles (16,300 square kilometers). The region's geography is diverse, with urban, rural, and natural resource lands. Numerous hills, mountains, and lakes provide significant variety to the topography of the region.

Currently, the region is continuing to expand and improve its bicycle and pedestrian infrastructure, but there are still significant gaps in the regional trail system and a need for better connected networks in urban areas for both pedestrians and bicyclists.



IMPLEMENTATION

The Action Plan provides a framework to implement active transportation policies in the central Puget Sound Region. This plan includes suggested local actions, and is designed for PSRC's work program to support local activity.

ACTION PLAN:

Goal 1: Support social equity in active transportation projects and programs

- Objective 1: Identify critical needs and gaps in areas of low opportunity or in communities of concern.
- Objective 2: Engage with PSRC's policy and plan updates to better integrate equity goals related to active transportation.

Goal 2: Improve safety and comfort for people walking and bicycling

- Objective 1: Engage with PSRC's Policy Boards, committees, members and departments to better integrate implementation of active transportation in projects and programs
- Objective 2: Promote best practices for safety and comfort that accommodate all ages and abilities
- Objective 3: Foster regional partnerships on data collection activities

Goal 3: Increase the percentage of people walking and biking

- Objective 1: Identify barriers that keep people from walking or bicycling. Encourage/incentivize local jurisdictions to address them.
- Objective 2: Promote high quality facilities, complete networks and walkable communities that people want to enjoy.
- Objective 3: Bring together jurisdictions to listen and learn from implementation of best practices across the region

Goal 4: Improve access to opportunity for people walking and bicycling

- Objective 1: Encourage the integration of transit and ferries with active transportation modes.
- Objective 2: Promote the regional bicycle network and local bike and pedestrian networks
- Objective 3: Support the integration of active transportation into local plans, polices, programs and projects

Chapter 1: BACKGROUND

In recent years, there has been a growing call to link active transportation with land use and transportation decisions and an increasing understanding of the benefits of active transportation. Through VISION 2040 and the Regional Transportation Plan, the region has committed to provide a more efficient and accessible public transportation system serving compact, walkable, and livable communities. Reaching this goal requires an increase active transportation investments and is supported by regional, state and federal policy.

FEDERAL POLICY GUIDANCE

Federal policy only relatively recently started to recognize needs to plan for bicycle and pedestrian facilities. Some watershed legislation in this arena occurred with passage of the Americans with Disability Act (ADA) in 1990 and the Transportation Equity Act for the 21st Century (TEA-21) in 1998, both of which recognized the need to plan for bicycle and pedestrian modes of transportation as part of the transportation system.

The passage of TEA-21 provided the funding opportunities, planning processes, and policy language to help transportation agencies achieve national goals of increasing non-motorized transportation to at least 15 percent of all trips and reducing the number of non-motorized users killed or injured in traffic crashes by at least 10 percent⁴. TEA-21 called for bicycle and pedestrian facilities to be considered in conjunction with all new federally funded construction and reconstruction transportation projects, where appropriate and permitted.

In response to TEA-21, in 1999 the USDOT's Federal Highway Administration (FHWA) worked with its partners to develop the *Policy Statement on Accommodating Bicyclists and Pedestrians in Transportation Projects.*² The purpose of the Policy Statement is to recommend an approach that can be used by transportation agencies to develop transportation infrastructure that is "safe, convenient, accessible, and attractive to motorized AND non-motorized users alike."

Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act (ADA) of 1990³ require public rights-of-way and facilities to be accessible to persons with disabilities. Under Section 504, FHWA monitors the compliance of federal aid recipients with these statutory requirements. As part of its oversight role, FHWA works to ensure that accessibility is accommodated in all state and local transportation policy, planning, and projects.

In 2010, the USDOT provided the *USDOT Policy Statement on Bicycle and Pedestrian Accommodation*Regulations and Recommendations⁴ to reflect the department's support for the development of walking

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² U.S. Department of Transportation. Federal Highway Administration (2013, March 8). *Accommodating Bicycle and Pedestrian Travel: A Recommended Approach*. Retrieved from: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design.cfm

³ U.S. Department of Transportation. Federal Highway Administration. *Americans with Disabilities Act (ADA)/Section 504 of the Rehabilitation Act of 1973 (504)*. Retrieved from: https://www.fhwa.dot.gov/civilrights/programs/ada.cfm

⁴ U.S. Department of Transportation. Federal Highway Administration (2013, March 8). *United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations*. Retrieved from: https://www.fhwa.dot.gov/environment/bicycle pedestrian/guidance/policy accom.cfm

and bicycling networks as part of federally funded projects. With this statement, the USDOT encouraged transportation agencies to "go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by people who walk and bike of all ages and abilities, and utilize universal design characteristics when appropriate."

Title 23 contains planning regulations for how states and Metropolitan Planning Organizations (MPOs) are to accommodate walking and bicycling throughout the planning process. State transportation agencies and MPOs are required to integrate walking and bicycling facilities and programs into their long-range transportation plans and Transportation Improvement Programs (TIPs). MPOs are also required to develop a documented participation plan which demonstrates that representatives of non-motorized users and representatives of the disabled are provided with opportunities to be involved in the metropolitan planning process.

STATE POLICY GUIDANCE

The Washington State Growth Management Act (GMA), adopted in 1990, requires communities in the state to develop comprehensive plans to manage their population growth. In 2005, the legislature amended the transportation planning requirements under the GMA (RCW 36.70a.070)⁶ to require a pedestrian and bicycle component that includes "collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles" as one of the mandatory elements for community comprehensive plans.

The Washington Administrative Code (WAC 365-196-430)⁷ provides more specific requirements for the pedestrian and bicycle transportation elements of comprehensive plans including:

- References to local, regional, and state pedestrian and bicycle planning documents;
- Planned improvements for bicycle facilities and corridors, including a map of bicycle facilities;
- Planned improvements for pedestrian facilities and corridors, including a map of pedestrian facilities;
- Plan for a network that connects residential and employment areas with community and regional destinations, schools, and public transportation services;
- Review of existing pedestrian and bicycle collision data; and a
- Multiyear financing plan.

State law (RCW 47.06.100) requires a bicycle transportation and pedestrian walkways plan as part of the statewide multimodal transportation plan. The statewide goal of the *Washington State Bicycle Facilities*

⁵ U.S. Department of Transportation. Federal Highway Administration. FHWA Guidance: Bicycle and Pedestrian Provisions of Federal Transportation Legislation. Retrieved from: https://www.fhwa.dot.gov/environment/bicycle pedestrian/guidance/guidance 2015.cfm

⁶ Washington State Legislature (n.d.). *RCW 36.70a.070: Comprehensive plans - Mandatory elements*. Retrieved from: http://apps.leg.wa.gov/rcw/default.aspx?cite=36.70a.070

⁷ Washington State Legislature (2010). WAC 365-196-430: Transportation element. Retrieved from: http://apps.leg.wa.gov/wac/default.aspx?cite=365-196-430

and Pedestrian Walkways Plan⁸ is to "increase bicycling and walking five percent per year for the next 20 years while reducing injuries and deaths." This plan establishes objectives and performance measures in each of the state's five transportation policy areas⁹: Preservation, Safety, Mobility, Environment, and Stewardship.

In 2011, the Washington State Legislature passed the Complete Streets Act¹⁰ encouraging local governments to adopt their own complete streets ordinances. This resulted in the Complete Streets Grant Program to encourage local governments within the state to retrofit streets to "provide safe access to all users, including bicyclists, pedestrians, motorists, and public transportation users."

THE TEN ELEMENTS OF A COMPLETE STREETS POLICY

Regardless of a policy's form, the National Complete Streets Coalition has identified ten elements of a comprehensive Complete Streets policy, as discussed below.

An ideal Complete Streets policy:

- Includes a vision for how and why the community wants to complete its streets
- Specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes
- Is adoptable by all agencies to cover all roads
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs
- Directs that Complete Streets solutions will complement the context of the community
- Establishes performance standards with measurable outcomes
- · Includes specific next steps for implementation of the policy

⁸ Washington State Department of Transportation (n.d.). State Bicycle Facilities and Pedestrian Walkways Plan. Retrieved from: http://www.wsdot.wa.gov/bike/bike_plan.htm

⁹ Washington State Legislature (2002). RCW 47.04.28001.012: Transportation system policy goals. Retrieved from: http://app.leg.wa.gov/RCW/default.aspx?cite=47.04.280

Washington State Legislature (2011). RCW 47.04.257: Complete streets grant program. Retrieved from: http://apps.leg.wa.gov/RCW/default.aspx?cite=47.04.320

REGIONAL POLICY GUIDANCE



A core concept of VISION 2040 is improving the safety of the transportation system for drivers, freight, transit riders, pedestrians, bicyclists and others. Multicounty planning policies¹¹ adopted in VISION 2040 call for designing transportation facilities to serve all users safely and efficiently. The plan focuses on integrating land use and transportation strategies, and on building and improving the region's pedestrian and bicycle infrastructure. These strategies reduce the need for driving alone and create a better environment for walking and bicycling.

Active Transportation supports many of the VISION 2040 MPPs, with particular relevance to the following transportation policies:

- MPP-T-5: Foster a less polluting system that reduces the negative effects of transportation infrastructure and operation on the climate and natural environment.
- MPP-T-7: Develop a transportation system that minimizes negative impacts to human health.
- MPP-T-11: Prioritize investments in transportation facilities and services in the urban growth area that support compact, pedestrian- and transit-oriented densities and development.
- MPP-T-25: Ensure mobility choices for people with special transportation needs, including persons with disabilities, the elderly, young, and low-income populations.

PSRC works with countywide planning groups, local jurisdictions, transit agencies and others, to ensure that regional and local planning efforts are coordinated, and that regional policies and provisions are addressed in local plans. The PSRC Policy and Plan Review Process¹² is designed to further this coordination and to satisfy federal and state requirements. Certification of local plans by PSRC is a requirement for jurisdictions and agencies that intend to apply for PSRC funding.

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¹¹ Puget Sound Regional Council (n.d.). Part III: Multicounty Planning Policies. In VISION 2040. Retrieved from https://www.psrc.org/sites/default/files/part iii multicounty planning policies.pdf

¹² Puget Sound Regional Council (2003, September). Puget Sound Regional Council Adopted Policy and Plan Review Process. Retrieved from: https://www.psrc.org/sites/default/files/process.pdf

Chapter 2: MAKING THE CASE

Benefits of Walking and Bicycling

Active transportation provides communities with a wide variety of benefits. These benefits include reduced traffic congestion, environmental benefits from reduced emissions, and increased health outcomes due to more people being physically active while providing other economic benefits.

In 2015, the Surgeon General released a *Call to Action to Promote Walking and Walkable Communities*¹³ to make walking a national priority. Only one-half of U.S. adults and about one-quarter of high school students meet the minimum guidelines for physical activity. Regular physical activity can reduce the burden of chronic diseases and walking is one of the easiest ways for people to achieve a daily physical and active lifestyles. Communities can benefit from safe and convenient places to walk and walkable communities make it easier for people of all ages and abilities to be physically active. The Center for Disease Control(CDC)¹⁴ has drawn connections between active transportation and a reduction in obesity, diabetes, osteoporosis, cancer, and pulmonary and cardiac diseases. The CDC¹⁵ has also documented the connection between improved air quality and the potential for reductions in adverse birth outcomes, asthma, diminished lung function, and cancer, all of which have been linked to exposure to traffic emissions.

Studies have also shown the economic benefits of active transportation. In 2017, the National Association of Realtors devoted their entire quarterly winter publication, On Common Ground, ¹⁶ to the topic of walkability. This publication cites that "a clear majority of people – 60 percent – favor neighborhoods with a walkable mix of houses and stores" based on their most recent survey. This report also cites a recent study that analyzed 30 large metropolitan areas and concluded that, over the last five years, walkable urban locations have outperformed sprawling suburban locations in terms of rent premiums as well as retail and commercial properties sales. Walk Score is now commonly used as a real estate investment tool. A recent study that explores the connection between home values and walkability demonstrates that walkability improves housing values in almost all metropolitan markets. ¹⁷

Smart Growth America and the National Complete Streets Coalition released a publication in 2015 called Safer Streets, Stronger Economies.¹⁸ This report reviewed over 35 complete streets projects from

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U.S. Department of Health and Human Services. Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities. Washington, DC: U.S. Dept of Health and Human Services, Office of the Surgeon General; 2015. http://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/call-to-action-walking-and-walkable-communities.pdf

 ¹⁴ Centers for Disease Control and Prevention (2014, January 23). Designing and Building Healthy Places. Retrieved from: http://www.cdc.gov/healthyplaces/

¹⁵ Centers for Disease Control and Prevention (2009, October 15). Respiratory Health and Air Pollution. Retrieved from: http://www.cdc.gov/healthyplaces/healthtopics/airpollution.htm

¹⁶ National Association of Realtors (Winter 2017). *Realtors and Smart Growth, On Common Ground: Walkable Neighborhoods*. Retrieved from: http://www.oncommonground-digital.org/oncommonground/winter 2017 walkable neighborhoods?pg=1#pg1

¹⁷ CEOs for Cities (2009). Walking the Walk. Retrieved from: https://nacto.org/docs/usdg/walking_the_walk_cortright.pdf

¹⁸ Smart Growth America, National Complete Streets Organization (March 2015). Safer Streets, Stronger Economies: Complete Streets project outcomes from across the country. Retrieved from: https://smartgrowthamerica.org/resources/evaluating-complete-streets-projects-a-guide-for-practitioners/

around the nation and found that about 70 percent of the complete streets projects experienced a reduction in collisions (in some cases a significant amount). Twelve of the thirteen projects that collected pedestrian counts showed an increase in walking trips, 22 out of 23 projects that collected bicycle counts showed an increase in bicycle trips, and of the seven that showed transit ridership information, six of those projects showed an increase in ridership.

VISION 2040 calls for reducing vehicle miles traveled by increasing alternatives to driving alone while the RTP calls for increasing travel choices. Increased walking and bicycling reduces the reliance on driving and therefore reduces emissions from automobiles. Improving pedestrian and bicycle "first and last mile" links to public transit increases access to the transit system and reduces vehicle congestion at transit stops and stations. Investing in active transportation provides a significant opportunity to leverage limited resources to produce multiple public health benefits and reduce health care spending.

Demonstrating the Need

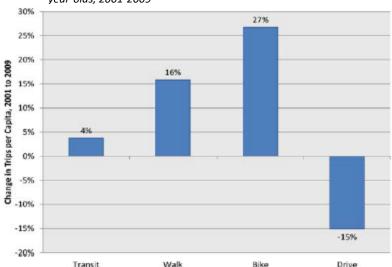
The central Puget Sound region is experiencing tremendous growth and with that growth comes higher demands on the transportation system. When planning for active transportation facilities,

transportation planners and traffic engineers consider not only current usage

data, but also mode shift trends, latent and future demand.

According to a recent study,¹⁹ people between the ages of 16-34 have changed their travel behavior toward walking and bicycling. This chart represents the change in the number of trips per capita between 2001-2009 for these populations. The study also reported that the average number of miles driven by 16 to 34-year-olds dropped by 23 percent as a result of young people taking

Chart 1: Change in the number of trips per capita among 16 to 34-year-olds, 2001-2009



Source: Millennials in Motion: Changing Travel Habits of Young Americans, 2015

fewer trips, shorter trips, and a larger share of trips by modes other than driving. Young Americans drive less than older Americans and use public transportation more, and often use multiple modes of travel during a typical day or week, according to this study.

¹⁹ U.S. PIRG Education Fund, Frontier Group (2014, October). *Millennials in Motion: Changing Travel Habits of Young Americans and the Implications for Public Policy*. Retrieved from: https://uspirg.org/sites/pirg/files/reports/Millennials%20in%20Motion%20USPIRG.pdf Regional Transportation Plan

The Regional Transportation Plan results in an increase in the percent of people walking and bicycling for transportation purposes. For the region as a whole, this rate is expected to grow by 14% by 2040 and for people with low-income, this rate is expected to grow by 26%.

 Table 1: Percent of People walking and biking for transportation,

Today vs. 2040

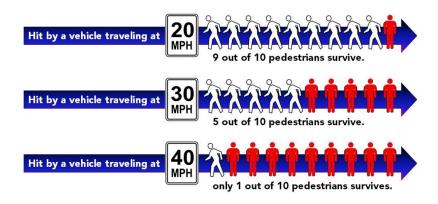
	Today	2040	Change
Region	31%	36%	+14%
People of Color	32%	39%	+22%
People with Low Income	35%	44%	+26%

Source: PSRC Activity Based model output

Despite the increased demand for active transportation options, there are currently barriers for people interested in walking and biking, including access, cost, safety, and mobility. A study²⁰ conducted by Portland State University shows that 60% of respondents are interested in bicycling but have concerns, particularly about safety. This population is known as the "interested but concerned."



Higher speeds increase the probability²¹ of a fatal or serious injury when a vehicle collides with a person walking or biking. Motor vehicle traffic crashes are the leading cause of unintentional injury-related death in the United States, and pedestrians represent 13% of these fatalities²².



²⁰ Dill, Jennifer, Portland State University (2012, 15 November). Four Types of Cylists? Examining A Typology to Better Understand Bicycling Behavior and Potential. Retrieved from: http://docs.trb.org/prp/13-5213.pdf

²¹ SafetyNet (2009) Pedestrians & Cyclists, retrieved from http://ec.europa.eu/transport/road_safety/specialist/knowledge/pdf/pedestrians.pdf

²² Centers for Disease Control and Prevention (2013, April 19). Motor Vehicle Traffic-Related Pedestrian Deaths — United States, 2001–2010. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6215a1.htm

In the central Puget Sound region, the number of fatalities and serious injuries for bicyclists and pedestrians has not seen a decrease in the trend as is the case with motor vehicles. The share of total fatalities and serious injuries for bicyclists and pedestrians is significantly higher in the central Puget Sound region than it is for Washington State overall, highlighting that travel safety for these users is a particularly important issue for this region. Non-motorized serious injuries and fatalities increased from 21% to 27% of the total between 2010 and 2016 in the central Puget Sound.²³

It is also important to note that when comparing the share of collisions to the share of total trips, the share of collisions exceeds the share of total trips made by pedestrians and bicyclists whereas the opposite is true for motor vehicle only crashes²⁴.

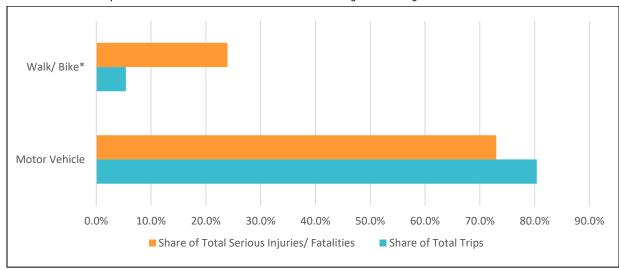


Chart 2: 2015 Comparison - Mode Share to Crash Rates in central Puget Sound region

Source: U.S. Census American Community Survey (ACS) 5-Year Data: Means of Transportation to Work, 16 Years and Over and the Washington Traffic Safety Commission Fatality Analysis Reporting System (FARS) data and WSDOT Serious Injuries *Share of total trips includes the 'other' category from ACS to capture bicyclists.

Many pedestrian and bicycle crashes that involve pavement conditions, weather or other factors unrelated to an automobile are not included in crash data sets because this data is reported through police reports. The injury rate for pedestrians and bicyclists is likely higher due to these unreported incidences.

Because of the high correlation between vehicle speed and the severity of injuries for vulnerable users, the ATP emphasizes engineering strategies that separate people walking and bicycling from vehicles as much as possible. NOTE: WSDOT crash data records contain data from the Police Traffic Collision Reports (PTCRs), data derived from PTCR data (e.g., officer's narrative and diagram), and data identified and included to support safety analysis and engineering.²¹ The Washington Traffic Safety Commission manages the Fatality Analysis Reporting System (FARS), a census of all traffic-related fatalities occurring

²³ Washington State Department of Transportation Traffic Data Office. WA FARS Analytical File (2016Q4 release on 04/11/2017) and WSDOT Engineering Crash Database (snapshot: 04/08/2017).

²⁴ Source: U.S. Census American Community Survey (ACS) 5-Year Data: Means of Transportation to Work, 16 Years and Over and the Washington Traffic Safety Commission Fatality Analysis Reporting System (FARS) data and WSDOT Serious Injuries Regional Transportation Plan

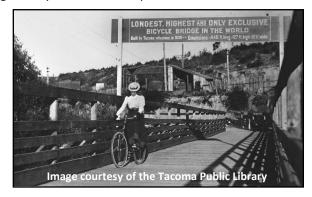
in Washington State. Because the crash data is derived from collision reports, these two terms are used interchangeably in this report.

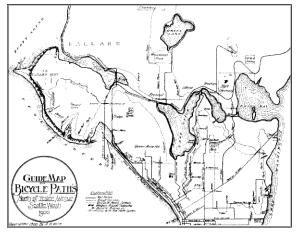
Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

Chapter 3: ACTIVE TRANSPORTATION IN THE PUGET SOUND REGION

The central Puget Sound region has a long and evolving history of active transportation. In the 1890s,

walking, bicycling, and public transit were primary modes of daily transportation along with the maritime industry. There were more than 65 miles of bike paths, with additional connections from Tacoma to Puyallup and Lakewood. The region had a "dedicated bicycle toll road²⁵ connecting Seattle to other Puget Sound communities." The bike path system connected public roadways and provided some of the "first public access to some of the





undeveloped areas of the city." Seattleites would take their bikes onto the ferry to Tacoma to ride the "longest, highest and only exclusive bicycle bridge in the world," then bike to American Lake.

This era was then followed by decades of prioritizing the public right of way for automobile use, causing bicycling and walking to become less integrated into the transportation system. However, in the 1970's, abandoned rail corridors began to be converted into what is now a vast regional trail/ shared use path

system.

The first of these 'rails-to-trails' projects was the iconic Burke-Gilman Trail that connects Seattle along the Lake Washington Ship Canal heading north of Lake Washington. Northeast of the lake it connects to the Sammamish River Trail. The original twelve miles of the Burke-Gilman Trail was dedicated on August 19, 1978 along a former abandoned rail line. This was one of the first examples in the nation of converting former rail lines to a bicycle and pedestrian corridor. The Burke-Gilman Trail is now one of the most heavily used trails in the region and considered such an amenity that the trail is noted in nearby real estate advertisements and has attracted businesses to locate along the trail such as Brooks Sports, Inc. which relocated its



²⁵ Berger, K. (2013, September 24). How bikes led Seattle's first roads renaissance. Retrieved from http://crosscut.com/2013/09/24/roots-of-tomorrow/116180/seattles-first-golden-age-bikes/
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company headquarters in 2011 citing²⁶ their location across from the Burke-Gilman. One last missing link in the Ballard neighborhood is under development as this trail continues to change. The segment that traverses through the University of Washington has experienced capacity issues, and the University is undertaking an ambitious upgrade to increase capacity and safety on the heavily used corridor through campus.

Other 'rails-to-trails' projects have been developed over several decades. The 20-mile Burke-Gilman Trail was extended by the 10.9-mile-long paved Sammamish River Trail from Bothell to Marymoor Park in Redmond, which offers extraordinary views of the river, the broad Sammamish Valley, Cascade foothills, and Mt. Rainier. Continuing from Redmond the East Lake Sammamish Trail provides an

additional 11 mile paved path on the historic railroad route along the eastern shore of Lake Sammamish to Issaquah. The regional trails network then continues east into the Cascade foothills. These paths are used for recreation, but they are also used by commuters between suburban cities and Seattle.



Photo courtesy of Don Willott

REGIONAL TRAILS/SHARED USE PATHS

The region now has over 450 miles of regional trails/shared use paths, and more are under development throughout the region. Their development not only provides recreational opportunities but significant connectivity as regional active transportation amenities. Besides the Burke-Gilman, Sammamish River, and East Lake Sammamish trails, other important paths include:

King County:

• The <u>Green River Trail</u> is one of the longest contiguous regional trails in the Central Puget Sound region at 19 paved miles from South Park in Seattle to the City of Kent along with segments in Auburn. This path follows the Duwamish and Green rivers and provides an excellent commuting corridor. The landscape is predominantly riparian but it also traverses commercial, industrial, and agricultural lands as well as older urban neighborhoods in the river valley. Future plans anticipate continuing trail development through Auburn and out the upper Green River Valley.

²⁶ https://www.brooksrunning.com/en_us/10-20-2011.html Regional Transportation Plan Appendix L: Active Transportation Plan

• The Interurban Trail (South) – this paved path connects cities south of Seattle along the historic route of the Puget Sound Electric Railway. The trolley ran between Tacoma and Seattle from 1902 to 1928. The 18.1-mile facility runs nearly straight and level along the length of the Green River Valley from Tukwila to south King County. The route connects the cities of Tukwila, Kent, Auburn, Algona, and Pacific and is popular with commuters.



- The <u>Snoqualmie Valley Trail</u> this path is King County's longest greenway paralleling the Snoqualmie River for more than 31 miles from the City of Duvall through the cities of Carnation, Snoqualmie, and North Bend. The trail continues southeast to Rattlesnake Lake where it connects to the Washington State John Wayne Pioneer Trail that crosses the Cascades and eastern Washington. The path is gravel, but popular and well-used by people who bike.
- The <u>Lake to Sound Trail</u> – development continues on this 16-mile active transportation facility
 that will combine shared use path segments with on-road strategies to create a continuous
 dedicated multiuse route from Lake Washington to Puget Sound through the cities of Renton,
 Tukwila, SeaTac, Burien, and Des Moines.
- Other regional trails in King County include the Mountains to Sound (I-90) and SR520 trails that
 cross Lake Washington from Seattle to Eastside cities, the Issaquah-Preston and PrestonSnoqualmie trails that extend the path network through the Mountains to Sound Greenway, the
 Soos Creek Trail, Cedar River Trail, Elliot Bay Trail, Alki Trail, and others.

Kitsap County

• The <u>Sound to Olympics Trail</u> is a planned regional trail crossing Kitsap County. It will connect the trails of the Mountains to Sound Greenway from King County, across both the Winslow and Kingston ferries, to the Olympic Discovery Trail beyond the Hood Canal Bridge. An 800-foot section has been built on Bainbridge Island close to the ferry terminal.



• The <u>Kitsap Forest & Bay Project</u> is a visionary effort to conserve over 4,000 acres of forest surrounding Port Gamble Bay in north Kitsap County. The project provides a unique opportunity to preserve lands for habitat but also for public recreation such as regional trails. Part of this acquisition would support the alignment of the Sound to Olympics trail.

Pierce County:

• The Foothills Trail is a 30-mile collection of six unconnected segments of the old Burlington Northern Railway that served the farming, coalmining, and logging economies near the base of Mount Rainier. The longest section is a 15.1-mile segment of paved trail that connects the outskirts of Puyallup to South Prairie through the town of Orting. Other paved, gravel, and dirt segments are located in Wilkeson while the White River separates the completed portions in Enumclaw and Buckley. Local



plans call for connecting all these pieces and extending the trail to connect with the cities of Tacoma and Sumner as well as to the Interurban Trail.

- The <u>Interurban Trail</u> has two unattached segments in Edgewood and Milton following the old railway corridor toward Tacoma. The cities of Edgewood, Milton, Pacific and Sumner have been coordinating to complete the missing links and connect their jurisdictions.
- The <u>Prairie Line Trail</u> project converts one mile of the historic Prairie Line railroad corridor through downtown Tacoma into a signature public space integrating a multi-use trail, historic/cultural interpretation, public art, multimedia, and green features. This trail links Tacoma's waterfront, downtown, University of Washington Tacoma campus, and Brewery Districts. Future plans are to extend the trail to Dock Street along the Thea Foss Waterway with a vision to have a connected waterfront to downtown Tacoma.





• The <u>Cushman Trail</u> is a 6.2 mile trail utilizing a utility corridor that connects Gig Harbor to the Scott Pierson Trail which is a 5-mile trail that crosses the Puget Sound on the new Tacoma Narrows Bridge and connects to central Tacoma.

Snohomish County:

- The <u>Centennial Trail</u> is a 30-mile paved multi-use path that connects the town of Snohomish north to Skagit County. Built on an old Burlington-Northern railroad line, more than 400,000 citizens utilize the trail each year as a recreational trail and commuter corridor.
- The <u>Interurban Trail</u> (North) is a hard-surfaced, regional trail which begins in North Seattle and continues north through Shoreline, Edmonds,



- Mountlake Terrace, Lynnwood, unincorporated Snohomish County, and Everett. The Interurban Trail follows the route once used by the electric Interurban Railway that ran between Seattle and Everett from 1910 to 1939. Puget Power converted the Interurban corridor to a power line corridor and titled segments to Seattle City Light and Snohomish County Public Utility District #1. In the mid-90s, cities along the corridor between Seattle and Everett began developing portions of the Interurban Trail for bicycle and pedestrian recreational and commuter use.
- The North Creek Trail will result in a continuous connection between the Sammamish
 River/Burke Gilman Trail in King County and the Interurban Trail at McCollum Park in Snohomish
 County connecting the cities of Bothell, Mill Creek and Everett. This trail has been under
 development in segments over the last decade and the last missing piece is currently under
 development.

Spanning 27 miles between the City of Arlington and the Town of Darrington, the Whitehorse Regional Trail follows the path of the former BNSF railroad through the North Stillaguamish River Valley. The trail meanders through the valley from its junction with the Centennial Regional Trail in Arlington, frequently paralleling SR 530 and the North Fork Stillaguamish River. The only open section runs for 6 miles near Darrington but the trail is currently being redeveloped in phases.





The Eastside Rail Corridor (ERC) connects some of King County's largest and fastest growing communities on the east side of Lake Washington. In its entirety, the ERC is a 42-mile rail corridor that stretches from Renton to Snohomish, passing through Renton, Bellevue, Kirkland, Woodinville, Redmond, and portions of unincorporated King and Snohomish counties. This Master Plan includes the railbanked sections of the ERC Main Line between Renton and Kirkland, between Kirkland and Woodinville, and along the Spur from Woodinville to Redmond. Originally, the rail line was known as the Lake Washington Belt Line and supported development along the eastern shore of Lake Washington. After over 100 years in service for freight rail, the corridor has been brought into public ownership to

TRAIL PLANNING AREAS

OTHER OWNERSHIP

MILE MARKER

KING COUNTY-OWNED

CITY OF WOODINVILLE
CITY OF KIRKLAND
CITY OF REDMOND
SNOHOMISH COUNTY

provide a potential route for trail, transit, and utilities.

The Master Plan is focused on approximately 16.7 miles of the 42-mile corridor. King County owns approximately 15.6 miles of the corridor covered in the Master Plan, and Sound Transit owns a 1.1-mile segment located within the City of Bellevue.

The City of Kirkland has completed the first 5.7-mile segment of the ERC as an interim trail and Redmond



has completed segment of the 'spur' called the Redmond Central Connector. In the future, through coordination and partnerships with the City of Woodinville, City of Snohomish, and Snohomish County, the ERC trail may continue from Woodinville north through Snohomish County where it would connect with the Centennial Trail in the City of Snohomish.





Redmond Central Connector

Although the central Puget Sound region is fortunate to take advantage of these corridors for regional trails, other strategies for both pedestrians and bicycles are being implemented across the region. One such strategy is known as 'place-making.' Place-making creates places that incentivize people to enjoy communities that incorporate art and design elements for people to enjoy while walking, exploring and supporting local economies.

WALKABILITY AND PLACE-MAKING

Burien Town Square is the new heart of Downtown Burien. Town Square Park is located at the center of Town Square, immediately adjacent to the Burien Library and City Hall in the midst of Burien's shopping district. This investment in an open, public space in the heart of downtown provides Burien residents the opportunity to explore downtown on foot and enjoy community events. This strategy, which was part of the development of a new city hall, provides the placemaking opportunities that incentivize residents to enjoy their community on foot.





Downtown Everett has an abundance of art installations and includes an arts district which coincides with the Schack Art Center, an admission-free visual art center dedicated to promoting and celebrating the arts for the enhancement of community life. The center shares a building with Artspace Everett Lofts which provides 40-units of affordable housing for artists and their families. The Hoyt Avenue pedestrian scape incorporates artistic street lights and includes other elements along the streetscape

identifying the arts district from the rest of downtown where old town style lighting fixtures identify downtown. Mid-block crossings, pedestrian bulb-outs, landscape and streetscape improvements along sidewalks contribute to a pleasant and walkable downtown Everett.





In 1890, **Port Orchard** was incorporated as Kitsap County's first city. Today the busy waterfront is adjacent to the historic downtown Bay Street. A short ride on the historic foot ferry connects to







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downtown Bremerton and to the Washington State ferry terminal. The foot ferry utilizes one of the oldest of only two operational boats that was once part of the Mosquito Fleet which were once a large fleet of small passenger and freight carrying ships that linked the islands and ports of Puget Sound in Washington State in the late 19th and early 20th centuries. A separated bicycle and pedestrian path allows people visiting the waterfront a corridor separate from the park and summer festivals. The amenities of the historic downtown, active waterfront, pedestrian and bicycle accommodation and the foot ferry combined with the natural beauty of the Puget Sound provide Port Orchard with a great equation for walkability.

ACCESS TO TRANSIT

With many transit investments coming online and increasing ridership in the central Puget Sound region, walk and bike access to transit is becoming ever important. Below are examples of pedestrian and bicycle transit access projects that have coincided with new transit investments.

A new land bridge connects the University of Washington's Rainier Vista to a new bicycle and pedestrian bridge built over Montlake Boulevard. This bridge accesses the new light rail station at Husky Stadium. This project transforms how people cross Montlake Boulevard and access the Burke-Gilman trail from the station.





The city of Lynnwood is planning for walk and bike access to the future light rail station. The purpose of the City Center Station is to provide more convenient walk access in the growing center, encouraging a higher level of transit use and aiding economic development of the City Center. The plan includes two pedestrian plazas, bike lanes, cutting large block sizes by adding new roadways and paths, development of a nearby local trail, pedestrian amenities and access to the regional Interurban Trail.

The City of Tukwila, in partnership with King County Parks, completed the Southcenter Pedestrian Bridge which provides a pedestrian and bicycle connection between the Tukwila Station and the Southcenter Mall. The Tukwila Station is served by Sounder and Amtrak train service as well as Metro RapidRide. The Southcenter area is a regional destination for employment, retail, dining and entertainment.





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ALL AGES AND ABILTIES BICYCLE FACILITIES

Greater emphasis is being made on the implementation of more comfortable bicycle facilities that serve people of all ages and abilities. Due to dense urban networks and lack of space, regional trails separated from roadways may not be feasible in some areas. Therefore, new designs have been piloted that provide a more comfortable environment while also separating people who walk and bike from fast moving motor vehicles. The City of Seattle was the first city to pilot and expand new facility types considered more comfortable to people of all ages and abilities such as neighborhood greenways and protected bike lanes. These types of facilities are currently being planned or are under development in many other jurisdictions in the central Puget Sound region such as in the cities of Kirkland and Tacoma.

Seattle **Neighborhood Greenways** began as a volunteer group and has now worked with the City of Seattle to implement a network of neighborhood greenways across the city. Volunteers help with public engagement, identifying and advocating local routes and help to gain neighborhood support. The City has implemented seven neighborhood greenway routes and another eleven in planning, design or construction phases. Chapter 5 describes more information about the design elements involved with Neighborhood Greenways.







Protected Bike Lanes are another facility type being implemented by the City of Seattle but are also being planned in many other jurisdictions in the central Puget Sound region. These facilities provide a comfortable network in high traffic and more urban areas by providing a physical barrier between people who bike and motor vehicles.





COMPLETE STREETS

Many of the region's jurisdictions are also adopting **Complete Streets** policies. The City of Redmond, in 2008, was one of the first jurisdictions in the central Puget Sound region to adopt a Complete Streets ordinance. The city ranges from congested urban blocks to quiet residential streets. As stated in Redmond's Transportation Master Plan, it is City policy to "routinely accommodate bicyclists as part of roadway improvement projects." Redmond's Complete Streets Ordinance²⁷ also requires that all new transportation projects will ". . .provide appropriate accommodations for bicyclists, pedestrians, transit users, and persons of all abilities in comprehensive and connected networks."

Since 2015, the Washington State Transportation Improvement Board (TIB) has been providing Complete Streets Grant funding to cities or counties in Washington state that adopt complete streets ordinances. Since that time, the region has seen a significant up-tick in the number of jurisdictions adopting Complete Streets policies.

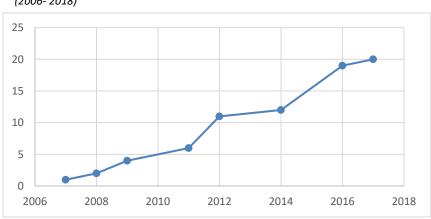


Chart 3: Central Puget Sound - Jurisdictions Adoption of Complete Streets Policies (2006- 2018)

As of August 2017, the following jurisdictions have adopted Complete Streets policies: Algona, Auburn, Bellevue, Bremerton, Burien, Carnation, Darrington, Des Moines, Duvall, Edmonds, Everett, Federal Way, Fircrest, Issaquah, Kenmore, Kent, Kirkland, Lake Forest Park, Lakewood, Marysville, Mountlake Terrace, Pierce County, Redmond, Renton, Ruston, Seattle, Shoreline, Snoqualmie, Sumner, Tacoma, Tukwila.



Grandview, University Place WA (before/ after)

EXISTING CONDITIONS

PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, access ramps, crosswalks and furnishings that create pedestrian-friendly streets such as benches and lighting. The presence of a sidewalk network and other developed pedestrian paths is an important ingredient for a walkable environment.

An accurate inventory of existing pedestrian facilities would help to assess the state of walkability in the central Puget Sound region and would provide the opportunity to identify critical needs and gaps. However, attaining regional pedestrian facilities data is difficult due to inconsistent or non-existent data across jurisdictions. The Action Plan includes strategies for how the region will work toward attaining regional pedestrian level data.

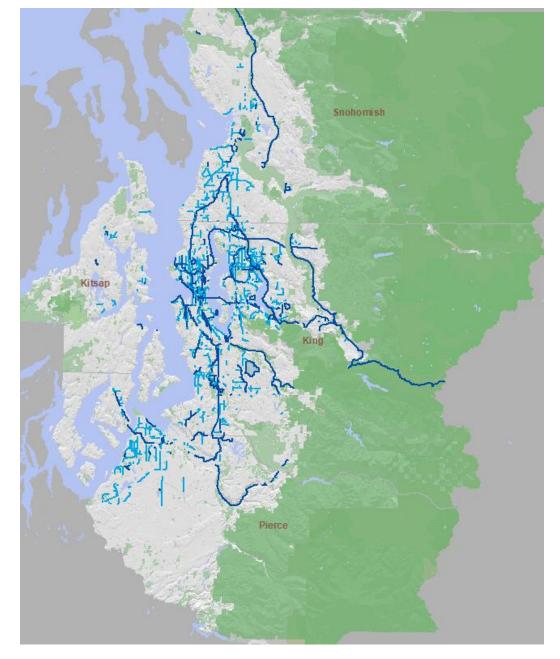


EXISTING BICYCLE FACILIITIES

The bicycle network in the central Puget Sound region includes traditional bike lanes, as well as some emerging facility types that are considered more comfortable for people who bike including shared use paths, neighborhood greenways, protected and buffered bike lanes, and sidepaths. So far, the region has built:

- 923 miles of on-road bicycle facilities (up from 736 miles in 2014)
 - o 878 miles of bike lanes
 - Almost 15 miles of separated bike lanes (up from two miles in 2014) measured for each direction for two-way separated bicycle lanes
 - Over 30 miles of neighborhood greenways, mostly on local roads (up from 0 miles in 2014)
- 450 miles of regional trails/ shared use paths (up from 418 in 2014)

This regional inventory of bicycle facilities is one measure of how well the region is providing safe accommodation for people who walk and bike and to measure the completeness of the active transportation system.



Map 1: EXISTING BICYCLE TRANSPORTATION NETWORK MAP

This map reflects all of the shared use paths, neighborhood greenways and bike lanes (including protected bike lanes) in the central Puget Sound region where the data is available. As such, it constitutes the existing bicycle transportation network. A detailed version of this map can be found in the following webmap on the PSRC website.

Rates of Walking and Bicycling

According to the 2014 PSRC Household Travel Survey, 1,626,000 daily trips were taken by people walking. These trips, averaging about 0.5 miles a trip, brings the daily region total to 813,000 miles

walked. Young adults between the ages of 18 and 34 walked for leisure or for commuting 15% of the time which is higher than the regional average of 12% based on the survey. Also, people in regional growth centers walked and bicycled more than the region as a whole. More than 22% of trips made within PSRC's designated regional growth centers were on foot and 2.4% of trips were made by people who bike. Notable examples include Seattle's First Hill/ Capitol Hill regional growth center where more than 40% of all trips were walking trips, 38% in Seattle's downtown and 37% in Everett's growth center.

In addition to the number of people walking, 181,000 daily trips are made by bicycle, averaging about 3.3 miles a trip according to this survey. This brings the daily regional total to 597,000 miles biked. About 65% of these trips are made by males, with people ages 25-34 representing the highest proportion of bike riders. Although less than 3% of trips involve using a bicycle in the region, rates of bicycling are high in certain regional growth centers. In Seattle's University District, just over 6% of the trips taken were on a bicycle, 4% in Tacoma Downtown and 3.8% in Seattle South Lake Union.

The numbers reported in this section primarily come from survey data that is representative of the population, but not actual daily counts.

Mode Share

Transit Access Mode Share

Transit access for people walking and bicycling is becoming more important as more regional transit investments come on-line. Ridership is increasing and it

is important to note how people are accessing their transit service. According to the 2014 PSRC Household Travel Survey, more than 88% of people who board transit (light rail, bus or commuter rail) walked to access their transit service.

Even though auto travel is still integral to the region's transportation system, survey results²⁸ suggest significant shifts are taking place, especially toward transit and walking. Transit shares increased by over

Table 2: Transit access mode share (boardings)

Walked or jogged	88.1%			
Drove a personal vehicle	7.2%			
Got dropped off	2.6%			
Rode a bike	1.4%			
Other	0.6%			
Drove a carshare vehicle	0.2%			
Took a taxi	0.0%			

Source: PSRC 2014 Household Travel Survey

60% between 1999 and 2014. The percent of trips made by walking increased 25% between 1999 and 2006 and increased by over 40% between 2006 and 2014. However, there are some differences in the survey methods that likely exaggerate the changes in walking shares between 2014 and previous surveys, so changes might not be quite as dramatic as suggested by the results in this table, though the general trend in increased walking shares is still evident. In 2014, the survey was first offered in a web-based format and also included interactive mapping and travel diary features that might have spurred respondents to remember and record additional walk trips or walk components of other trips that may have been excluded from the previous phone surveys.

Regional Transportation Plan

²⁸ Puget Sound Regional Council (2015, June). Regional Travel Study: Key Comparisons of 1999, 2006, and 2014 Travel Survey Findings.
Retrieved from: http://www.thefuturestaskforce.org/wp-content/uploads/2015/11/PSRC-2014-Regional-Travel-Study.pdf

Commute Mode Share by Poverty Status

The rate of people who walk varies significantly by income groups. People below the federal poverty level are three times more likely to walk than people not in poverty.

Table 3: Commute Mode Share by Poverty Status

	Commute Mode Share					
Poverty Status	Drove	Carpooled	oled Transit	Walked	Other	Worked at
	Alone	Carpooled				Home
Below 100% of the poverty level	57.0%	11.6%	12.8%	9.1%	2.9%	6.6%
100 to 149% of the poverty level	63.9%	11.1%	12.5%	5.5%	2.6%	4.3%
At or above 150% of the poverty level	71.3%	10.0%	8.3%	2.9%	2.1%	5.4%

Source: 2014 American Community Survey 5-year Estimate

Commute Mode Share by Race

Commute patters by race are different than those by income:

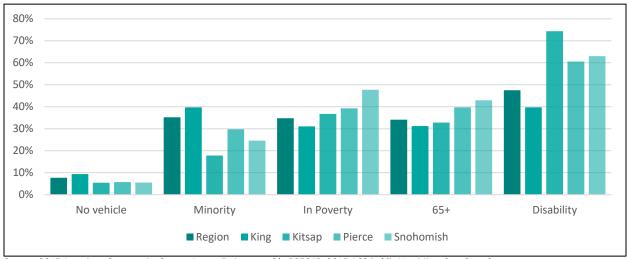
- Black workers have the highest transit commute mode share.
- Asian, Other, and Hispanic/Latino workers have the highest carpool shares.
- White workers have the highest drive alone and work at home commute mode shares.
- Commute by walking is similar for all races.

Table 4: Commute Mode Share by Race

	Commute Mode Share					
Race	Drove	Carpool	Transit	Walked	Other	Worked
	Alone					at Home
White Alone	71.2%	9.1%	7.6%	3.6%	2.4%	6.1%
Black Alone	66.8%	9.8%	14.4%	3.5%	1.6%	3.9%
Asian Alone	63.7%	14.7%	12.5%	3.7%	1.4%	3.9%
Some Other Race Alone	67.3%	14.7%	9.3%	3.7%	1.8%	3.2%
Two or More Races	64.3%	14.2%	11.9%	4.0%	1.6%	4.0%
Hispanic or Latino Status						
White Alone, Not Hispanic or Latino	71.4%	8.8%	7.6%	3.6%	2.4%	6.3%
Hispanic or Latino	67.0%	14.9%	9.1%	4.5%	1.5%	3.0%

Source: 2014 American Community Survey 5-year Estimate

Chart 4: Households with No Vehicles, 2015



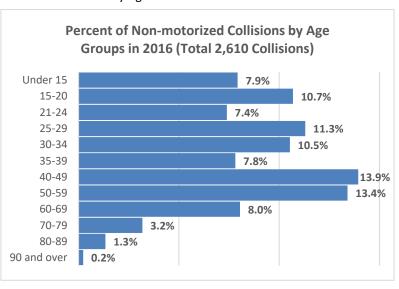
Source: 2015 American Community Survey 1-year Estimate, table B25045, 2015 ACS Public Use Microdata Samples

US Census data shows that, in 2015, people of color (referred to as minority by the Census Bureau), people in poverty, those with a disability and those over the age of 65 are more likely to not own a vehicle in than the region as a whole. It should be noted that some people may be double-counted in the above categories. More information for travel patterns by race and income can be found in the Regional Equity Analysis Report, Appendix B.

Crash Rates

Safety continues to remain a key concern for people walking and bicycling. In 2016, more than 63 pedestrians and bicyclists were killed in collisions with motor vehicles, 324 were seriously injured and more than 2,000 were injured in central Puget Sound.²⁹ These numbers that involved pedestrians or bicyclists represent more than 32% of all regional traffic fatalities and serious injuries.³⁰ Improving road safety, particularly at intersections, and providing more separated facilities for people walking and bicycling can begin to reduce these crash rates.

Chart 5: Collisions by Age



²⁹ WA State Crash Data Portal, WSDOT, 2016 (Access: https://remoteapps.wsdot.wa.gov/highwaysafety/collision/data/portal/public/)

³⁰ Safety Performance Metrics by County and for MPA Boundaries that Closely Align with County Boundaries, 2017 Regional Transportation Plan

Chapter 4: REGIONAL BICYCLE NETWORK

The Regional Bicycle Network (RBN) is a planning effort that facilitated regional coordination and cross-jurisdictional cooperation across the four-county region to identify a complete network of bicycle routes that connect regional destinations. The purpose is to highlight key gaps and missing links with the goal of creating a comfortable network of bicycle facilities that accommodate people of all ages and abilities to access regional destinations using active transportation.

This is a future, vision network made up of completed and future facilities. It is built from the existing networks of trails, bike lanes and neighborhood greenways and includes future planned projects and some aspirational links which are defined later in this chapter.

The development of this network implements one of the VISION 2040 Actions (T-Action-19) which states that:

The Puget Sound Regional Council will work with member jurisdictions and others to establish a safe and efficient regional non-motorized network that provides connections to and within centers and along corridors connecting centers.

Development

PSRC staff worked with the Bicycle and Pedestrian Advisory Committee (BPAC) to develop initial criteria for the development of the Regional Bicycle Network which are guided by policies in VISION 2040. Then staff worked with jurisdictions from around the region to vet the network and align it with local plans.



Criteria:

Emphasis is based on connecting a continuous and connected network across jurisdictional boundaries which connect to the following locations:

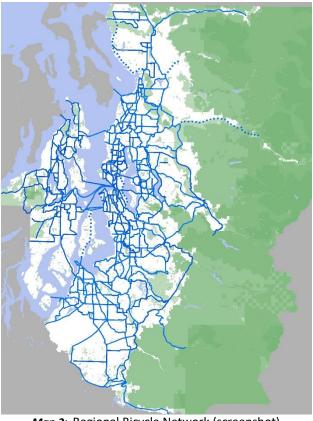
- regional centers
- regional transit locations
- high employment zones
- higher education institutions and high schools with high enrollment rates
- regional parks
- major trails in surrounding counties
- military bases
- connecting towns and cities of the central Puget Sound region

Built-in Flexibility

The Regional Bicycle Network is a framework within which local jurisdictions and regional agencies plan to develop more specific route alignments and facility types.

Segments of the Regional Bike Network are comprised of:

- Completed Segments include trails, protected bike lanes, traditional bike lanes, neighborhood greenways, sidepaths, and in some cases, paved and striped shoulders on rural roadways.
- Planned Segments have been identified within an adopted plan; actual alignments may change during design and construction.
- Aspirational Routes would complete gaps in the regional network or are popular scenic routes, and are either:
 - highly conceptual with less defined alignment, or
 - o not identified in agency plans, or
 - difficult to implement due to funding and/or design challenges such as limited right-of-way, topography, etc.



Map 2: Regional Bicycle Network (screenshot)

Addressing All Ages and Abilities

Greater emphasis is being placed on design that accommodates all ages and abilities. The BPAC has recommended that shared use paths, protected bike lanes and neighborhood greenways are the preferred facility types for implementing the RBN because they meet a level of comfort that accommodates people of all ages and abilities.

Ongoing Bicycle Network Improvements

Segments of the Regional Bicycle Network are continuously under improvement to provide greater all ages and abilities bicycling opportunities. While the RBN illustrates a network of existing completed segments, these links may also be slated for important planned improvements or redevelopment along with the planned segments identified on the RBN map.

Map and link information

The Regional Bicycle Network map can be found on the <u>PSRC website</u>. This is an interactive <u>on-line web map</u> that shows both the current existing system of bicycle facilities as well as the future regional vision for a connected network to regional destinations. Each link has information regarding completed or planned status and other relevant information.

Chapter 5: DESIGN GUIDANCE

Designing for Pedestrians

The first step to creating attractive and useful pedestrian networks that encourage active transportation is to ensure a sidewalk, trail and walkway system that connects destinations to and from where people live, shop, play, exercise and work, while also providing places that feel safe and comfortable such as the inclusion of lighting, safe crossings and accessible amenities for people of all ages and abilities. Cumulatively, this is known as "walkability."

Pedestrian networks that have gaps, barriers (physical and situational), few or no street crossings, poor maintenance, or provide limited, if any, separation from automobiles may hinder whether a person chooses to walk or may make a walk trip unfeasible. These situations are particularly hazardous along bus routes where people need to walk to access transit. Regional and local centers, near



transit stops and near schools are ideal locations for investments in pedestrian facilities to support more active transportation. Well-used, connected systems facilitate public support for future improvements to upgrade and connect facilities, through public projects and private development.

To create comfortable and safe walking environments, communities can develop pedestrian scale neighborhoods by planning for small block sizes, contiguous, well-maintained sidewalks, trails and walkways and enhanced street crossings. Incorporating sidewalks and walkways into roadway construction and maintenance projects is one method to address barriers in the pedestrian network. Creating pedestrian connections that cut through large blocks or connect cul-de-sacs help to create complete networks while shortening walking distances. These connections typically have complete



separation from motorized transportation, appealing to a wider audience of ages and abilities. Pedestrian connections improve suburban and rural walking environments in neighborhoods that have few access roads. In urban environments, an attractive pedestrian network is affected by the location and orientation of buildings (facing and close to pedestrian facilities, not behind parking lots), pedestrian-scale street lighting, building and destination density, crosswalks, and the availability of urban-scale open spaces.

Real or perceived concerns for safety (situational barriers) can be a significant contributor to choosing active transportation, especially among some age and ability groups. To address these concerns related to motor vehicles, environment and public safety which affect the pedestrian network, communities can:



- Implement engineering solutions, such as traffic calming measures and roadway geometric changes which can reduce operational and posted speed limits addressing concerns with vehicle speeds;
- Add warranted marked crossings and improve visibility at all crossings, add refuge islands, increase crossing times, consider lead pedestrian interval or pedestrian-only phases at signals;
- Provide painted or physical curb extensions which narrow vehicle lanes, calming vehicle speeds, and shorten crossing distances and reduce pedestrian conflicts with traffic;
- Install pedestrian actuated flashing beacons which increase visibility of and compliance with crosswalks by motor vehicle drivers, especially at night;
- Add adequate lighting, at both street- and pedestrian-scale, to address safety concerns for visibility at crossings and along walkways and sidewalks;
- Incorporate targeted police enforcement strategies to address public safety concerns;
- Implement public advocacy and education campaigns to highlight the benefits of walking, raise
 awareness of pedestrians and crossings among drivers and
 promote attentive walking by pedestrians.

Each of these elements works in concert with a well-connected network to address situational barriers to active transportation.



Designing for People Who Bike

Similar to pedestrian networks, an attractive and useful bicycle network minimizes gaps in physical infrastructure and connects destinations where users live, shop, play, exercise and work, to accommodate cyclists of all ages and abilities. The most attractive bicycle facilities are routes with slow motor vehicle speeds or those that have some physical separation from motor vehicle traffic. These facilities, referred to as "high comfort" facilities, include shared use paths, separated bike lanes, neighborhood greenways, and buffered bike lanes.³¹ Wayfinding signage, end-of-trip facilities (such as showers), bike parking (including covered parking and high-volume bike corrals), and bike maintenance stations make bike



travel more feasible and increase the number of people who choose to bike. Electric bikes are a new technology that can increase bicycle ridership by easing the physical requirements of bicycle trips.

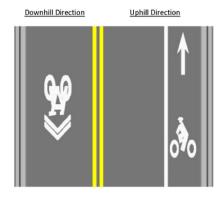
³¹ National Association of City Transportation Officials (2016, 20 July). *High-Quality Bike Facilities Increase Ridership and Make Biking Safer*. Retrieved from: https://nacto.org/2016/07/20/high-quality-bike-facilities-increase-ridership-make-biking-safer/
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Jurisdictions interested in facilitating the growth of electric bike usage could provide charging stations, especially near hilly areas and along bicycle networks connecting significant centers and transit stops.

The average bike trip is generally *about three miles*, so network connectivity to and from local and regional centers and transit stops or hubs should be evaluated for this range. Network connectivity for cyclists, like pedestrians, is affected by physical barriers, such as steep hills and roadways with high speeds that are daunting to cross. Network gaps also include bike lanes that start and stop, forcing users, especially those unfamiliar with a route, into busy traffic or onto shoulders to complete trips. When significant barriers exist, planners should evaluate the best route for connecting users to their destinations, while also considering how far people will need to go out of their way to avoid these barriers. Bicycle networks can also be completed using other modes, such as walking connections or transit connections. Transit connections require outreach and education to ensure availability of and training on the use of bike racks as well as cyclist awareness of complimentary transit routes and payment methods.

Neighborhood Greenways are residential streets that generally parallel main arterials which are generally calmer with low volumes of cars going slowly enough so that people who walk or ride bicycles feel safe and comfortable. Implementation can be less expensive relative to other facility types and are most often utilized in urban areas with grid-like systems that allow for alternate routes. Design elements³² include

- Signage or wayfinding
- Pavement markers (also known as 'sharrows')
- Speed reduction treatments such as roundabouts or speed-bumps
- Stop signs for side streets crossing the greenway
- Easier crossings of busy streets with crosswalks, flashing beacons, or crossing signals.



The hilly topography in the central Puget Sound region represents a significant challenge for cyclists, particularly outside of urban areas where streets have narrow lanes and few parallel facilities along major roadways.³³ Hilly terrain slows uphill bicycle speeds, creating a potential for conflicts with motor vehicles where a separated bike facility is not provided. Alternate routes that minimize hills, uphill climbing lanes, bike passing lanes, or buffered bike lanes can mitigate these conflicts and increase comfort for cyclists of varying ability levels. On narrow roadways with limited

right of way, uphill separated facilities with downhill shared lanes are one potential treatment to address hilly terrain.

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³² City of Seattle Department of Transportation. Neighborhood Greenway Design Elements. Retrieved from: http://www.seattle.gov/lmages/Departments/SDOT/GreenwaysProgram/ngw-greenways-design-elements.png

³³ National Association of City Transportation Officials (2013, August). Urban Bikeway Design Guide. Retrieved from: https://nacto.org/publication/urban-bikeway-design-guide/

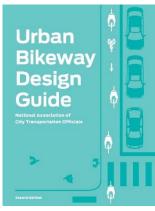
Urban vs. Rural Context

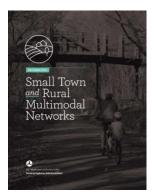
It is important to note that the implementation of these concepts may look different in urban vs. rural environments in the region. For instance, small block sizes are sometimes not feasible in rural areas and roadways may have physical constraints. As noted in the resource table below, the Small Town and Rural Multimodal Networks Guide recently released by FHWA includes some strategies for more rural environments.

Pedestrian and Bicycle Design Resources

Three guides are cited in the Active Transportation Plan as the current state of best practices, along with the national engineering guidelines of the American Association of State Highway and Transportation Officials' *Guide for the Development of Bicycle Facilities*, ³⁴ the Institute of Transportation Engineers' *Design and Safety of Pedestrian Facilities*, ³⁵ and the *Manual on Uniform Traffic Control Devices* (MUTCD).

The NACTO Urban Street Design Guide and NACTO Urban Bikeway Design Guide³³ are produced by the National Association of City Transportation Officials as a resource on the latest modern techniques for addressing pedestrian and bicycle network design in an urban setting. These guides have been endorsed by the Washington State Department of Transportation and are nationally recognized for their multimodal approach to transportation design.





While the NACTO guides are a great resource for

urban streets and significant capital improvement projects, many smaller cities, suburban and rural areas or smaller scale projects may find other applicable design techniques in FHWA's recently released Small Town and Rural Multimodal Networks Guide.³⁶ It applies existing national design guidelines in a rural setting where narrow roadways, a lack of curbs and sidewalks, and less dense development create unique challenges to providing effective and attractive pedestrian and bicycle networks. The guide focuses on opportunities to make incremental improvements despite the geographic, fiscal, and other

challenges that many smaller, suburban and rural communities face.

The Washington Traffic Safety Commission utilizes the Pedestrian Safety Guide and Countermeasure Selection System³⁷ for their Traffic Safety Annual Grants. This guide is intended to provide practitioners with the latest information available for improving the safety and mobility of those who walk. The online

³⁴ AASHTO, Guide for the Development of Bicycle Facilities, 4th Edition.

³⁵ Institute of Transportation Engineers, *Design and Safety of Pedestrian Facilities*.

³⁶ U.S. Department of Transportation. Federal Highway Administration (2016). *Small Town and Rural Multimodal Networks Guide* Retrieved from: https://altaplanning.com/resources/small-town-rural-multimodal-networks-guide/

³⁷ University of North Carolina Highway Safety Research Center, Vanasse Hangen Brustlin, Inc., & Toole Design Group (2013, August). *Pedestrian Safety Guide and Countermeasure Selection System*. Retrieved from http://www.pedbikesafe.org/PEDSAFE/index.cfm

tools provide the user with a list of possible engineering, education, or enforcement treatments to improve pedestrian safety and/or mobility based on user input about a specific location. These resources provide a wealth of information for communities planning for safety.

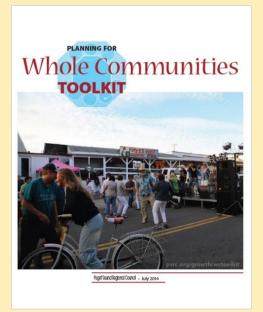
The table below lists several additional national and Washington-specific tools and resources for bicycle and pedestrian network and infrastructure development.

Table 5: Additional Pedestrian and Bicycle Resources

TOOLS/RESOURCES	PRODUCED BY	LINK	
Urban Street Design Guide	National Association of City	https://nacto.org/publication/urban-street-	
	Transportation Officials	design-guide/	
Urban Bikeway Design Guide	National Association of City	https://nacto.org/publication/urban-bikeway-	
	Transportation Officials	design-guide/	
Transit Street Design Guide	National Association of City	https://nacto.org/publication/transit-street-	
	Transportation Officials	design-guide/	
Small Town and Rural Multimodal	Federal Highway Administration	https://www.fhwa.dot.gov/environment/bicycle	
Networks Guide		_pedestrian/publications/small_towns/	
Pedestrian Safety Guide and	Federal Highway Administration	http://www.pedbikesafe.org/PEDSAFE/index.cf	
Countermeasure Selection System		m	
AASHTO Guide for the Development of	American Association of State	https://bookstore.transportation.org/item_deta	
Bicycle Facilities	Highway and Transportation	ils.aspx?ID=1943	
	Officials		
A Resident's Guide for Creating Safer	USDOT Federal Highway	safety.fhwa.dot.gov/ped_bike/	
Communities for Walking and Biking	Administration	ped_cmnity/ped_walkguide/index.cfm	
Bikeability Checklist	USDOT National Highway Traffic	www.nhtsa.gov/sites/	
	Safety Administration	nhtsa.dot.gov/files/bikabilitychecklist1.pdf	
General national bicycle planning	League of American Bicyclists	www.bikeleague.org/	
resources			
General national bicycle planning	Association of Pedestrian and	www.apbp.org/	
resources	Bicycle Professionals		
General WA-based bicycle planning	Washington Bikes	wabikes.org/	
resources			
Walkability Checklist	USDOT National Highway Traffic	www.nhtsa.gov/sites/	
	Safety Administration	nhtsa.dot.gov/files/walkingchecklist.pdf	
Walking Audits	Feet First	www.feetfirst.org/what-we-do/walking-audits	
WSDOT Design Manual, Division 15 -	Washington State Department	www.wsdot.wa.gov/	
Pedestrian and Bicycle Facilities	of Transportation	Publications/Manuals/M22-01.htm	
Reducing Speeding Related Crashes	National Transportation	https://www.ntsb.gov/safety/safety-	
Involving Passenger Vehicles	Safety Board	studies/Documents/SS1701.pdf	

The <u>Planning for Whole Communities Toolkit</u> is a planning resource, including topical resource guides, helpful links, and best practices that local jurisdictions can use to promote health, equity, and sustainability in plans, programs, and policies.

The Toolkit is divided into 25 resource guides describing specific tools and how to put them to work at the local level. Some of the tools include information on Safe Routes to School, Complete Streets, Multimodal Concurrency, Community Engagement and others that are related to active transportation implementation. The resource guides help to connect the dots between planning and health, equity, and sustainability efforts, and provide new and innovative ways to think about plans and policies in relation to health.



Pedestrian and Bicycle Facility Typology

The BPAC adopted a Regional Bicycle Facility Typology, based on current best practices, which is used to base map the existing conditions and as a recommended set of definitions for data collection at the local level. This typology is also intended to be a resource guide for local jurisdictions to determine the most appropriate treatments to complete an attractive, usable network for non-motorized active transportation modes.

Further details on the design and implementation of these types of facilities can be found in the guides, standards and manuals referenced in the Pedestrian and Bicycle Design Resources section of this Chapter.

	Pedestrian Facility Typology				
Facility Type	Definitions	Example			
Sidewalks	Sidewalks separate pedestrians from motor vehicle traffic. Sidewalks allow pedestrians comfortable access to destinations in all settings.				
Pedestrian Corridors	Pedestrian Corridors are places which separate pedestrians from motor vehicle traffic. These spaces limit and/or completely restrict motor vehicle traffic to allow pedestrians safe and comfortable access to destinations on both sides of the street. Pedestrians can move with ease and without obstruction along the corridor.				
Leading Pedestrian Interval	A Leading Pedestrian Interval (LPI) typically gives pedestrians a head start when entering an intersection crosswalk with a corresponding green signal in the same direction of travel.				
Rectangular Rapid Flashing Beacon / HAWK Signal	Pedestrian activated lights and signs alert drivers and improve pedestrian crossings. They can be activated by pedestrians manually by a push button or passively by a pedestrian detection system, and should be unlit when not activated.	Rectangular Rapid Flashing Beacon HAWK Signals			

Curb extensions, bulb-outs, chokers and chicanes	Curb Extensions are the horizontal extension of the edge of roadway (sidewalk, walkway, curb, etc.) into the street. Extensions visually and/or physically narrow the roadway creating shorter crossings for pedestrians. Extensions create space and an opportunity for street furniture, benches, plantings and street trees. Off-set curb extensions are called chicanes, mid-block extensions are referred to as chokers and extensions at corners are often called bulb-outs.	
Pedestrian Refuge/ Safety Islands	A pedestrian safety island (also referred to as a "refuge island") gives pedestrians a stopping point mid-crossing. This reduces exposure time to traffic and shortens crossings. This can increase safety while reducing the time a pedestrian must wait for an adequate gap in the traffic stream at an unsignalized crossing.	
Midblock Crosswalks, Paths & "Cut- throughs"	Midblock crosswalks facilitate pedestrian networks that do not match roadway intersections. Midblock crossings are most commonly used at locations with high rates of activity and long distances between controlled intersections. Cut-through paths can provide connections to roadways, schools and parks that cut-through residential areas where no other route exists, shortening walking distances. Cut-throughs can also provide pathways across center medians at a mid-block crossing.	

	Regional Bicycle Facility Typology					
Facility Type	Definitions	Urban/ Suburban/ Rural	For All Ages and Abilities	Example		
Shared Use Paths	Shared Use Paths are for the exclusive use of pedestrians, bicyclists and other active transportation users. They are separated from motorized vehicular traffic by an open space, barrier or curb, or exist in an independent corridor.	Urban/ Suburban/ Rural	√			
Neighborhood Greenways	Neighborhood Greenways are low speed, low volume local streets that prioritize pedestrian and bicycle travel with traffic calming treatments and improved arterial crossings. These oftenparallel nearby arterials and typically include a combination of treatments and aesthetics. Neighborhood Greenways are also known as Bike Boulevards.	Urban/ Suburban	✓			
Protected Bike Lanes (one way, two-way, raised)	Protected Bike Lanes are an exclusive bicycle facility within or adjacent to the roadway but separated from motor vehicle traffic by a physical barrier or change in elevation. Also known as Cycle Tracks.	Urban/ Suburban	✓	OFO		
Buffered Bike Lanes	Buffered Bike Lanes are conventional bike lanes paired with a designated buffer space separating the bike lane from the adjacent motor vehicle travel lane and/or parking lane.	Urban/ Suburban/ Rural		ofo		

Bike Lanes	Bike Lanes are a portion of the roadway designated for preferential use by bicyclists. Bike lanes include pavement markings indicating oneway bike use.	Urban/ Suburban/ Rural		090
Sidepaths	A sidepath is a bidirectional shared use path located immediately adjacent and parallel to a roadway. Sidepaths can offer a high-quality experience compared to on-roadway facilities in heavy traffic environments, allow for reduced roadway crossing distances, and maintain rural and small-town community character.	Suburban/ Rural	✓	
Paved, Striped and Connected Shoulders	Paved shoulders on the edge of roadways can be enhanced to serve as a functional space for bicyclists and pedestrians to travel in the absence of other facilities with more separation.	Suburban/ Rural		

Chapter 6: ACTION PLAN

This Active Transportation Plan builds upon four major goals that support **equity**, improve **safety and comfort**, **complete networks** and **access to opportunity** while increasing the **number of people** walking and bicycling.

THE PURPOSE OF THE ACTION PLAN IS TO:

- Outline regional implementation actions to inform the PSRC Work Program
- Inform local implementation with suggested local actions
- Highlight local examples
- Provide a framework for evaluation

REGIONAL GOALS:

- Goal 1: Support social equity in active transportation projects and programs
- Goal 2: Improve safety and comfort for people walking and bicycling
- Goal 3: Increase the percentage of people walking and biking
- Goal 4: Improve access to opportunity for people walking and bicycling

The suggested local actions noted in these sections do not denote an exhaustive list but are meant to highlight some local implementation actions that address each goal. This Action Plan also includes measures that can be monitored over time to see how well the region is meeting these goals.

Goal 1: Support social equity in active transportation projects and programs

This Action Plan begins with a goal focusing on equity because some communities, many with historic underinvestment, often experience greater health impacts and have more transit dependent people than better resourced communities. PSRC has identified areas with high concentrations of people with low-income and people of color that the region will continue to monitor in terms of access and benefits of regional transportation investments. More information related to impacts on people of color and people with low-incomes can be found in Appendix B: Equity Analysis Report.

Good pedestrian and bicycle facilities enable cost effective and sustainable transportation for low-income families, who are less likely to own cars due to the high costs of vehicle ownership. Low-income families on average spend a higher percentage of their monthly income on transportation than higher income families³⁸ and people in poverty and people of color are much more likely than the regional average to not own a car (see chart 4).

Additional transit service coming to the region will provide benefit to many transit dependent communities, but the walk and bike infrastructure to connect to existing and future transit locations must accompany these investments to ensure safety and accessibility to transit.

The following objectives and actions have been identified as those that the region can take to support equity goals when implementing active transportation.

Objective 1: Identify critical needs and gaps in areas of low opportunity or in communities of concern.

Regional Actions

- Identify critical gaps in the regional bicycle network within areas of concern identified in the equity analysis report
- Communicate other critical needs in these areas and the need for the completion of links for pedestrians

Objective 2: Engage with PSRC's policy and plan updates to better integrate equity goals related to active transportation.

Regional Actions

- Continue to improve public engagement efforts that reach more marginalized groups
- Support the integration of equity concepts in active transportation

Appendix L: Active Transportation Plan

³⁸ Smart Growth America (n.d.). Complete Streets Lower Transportation Costs. Retrieved from: https://smartgrowthamerica.org/resources/lower-transportation-costs-benefits-of-complete-streets/ Regional Transportation Plan

Objective 1: Identify critical needs and gaps in areas of low opportunity or in communities of concern.

As noted in Chapter 4, the Regional Bicycle Network was created to highlight a vision for a comprehensive bicycle network that connects regional destinations across jurisdictional boundaries for all people. To support the implementation of this action plan, PSRC will conduct an analysis of the RBN to identify critical gaps and needs both for the entire network but specifically to highlight gaps or barriers within the areas of noted in the maps below.

Two equity groups (people of color and people with low income) are defined based on geographical analysis of Census (American Community Survey) data. Census tracts where more than 50% of the households are non-white are grouped and analyzed together and compared against regional averages. Similarly, a low-income area includes only tracts where more than half of residents earn 200% the federal poverty level (a number that varies based on household size). From this process, unique geographies are generated, as shown below in maps 3 and 4.

These are areas that will be evaluated for how they benefit from transportation investments as compared to the region as a whole.



Map 3: Zones where share of people of color is greater than 50%.



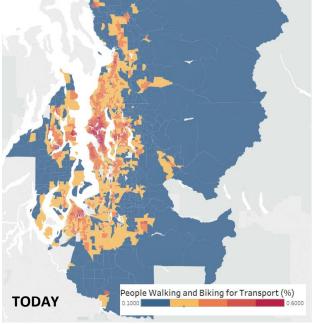
Map 4: Zones where share of people with low income is greater than 50%.

Objective 2: Engage with PSRC's policy and plan updates to better integrate equity goals related to active transportation.

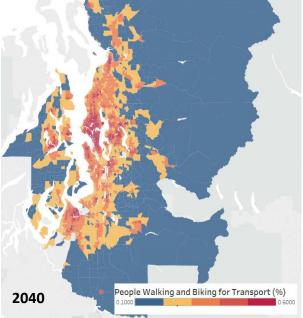
PSRC has been improving methods of **public engagement** to incorporate best practices when plans are being updated. Some of these best practices include working with community based organizations (CBOs) that are often well known within neighborhoods and communities or to find opportunities where people are already gathering instead of asking people to take additional time to attend a separate meeting. As PSRC's plans and policies are updated, these methods for improving engagement will continue to be evaluated. The BPAC will continue to advise PSRC on improvements for public engagement and equitable active transportation implementation. More information about the public engagement process for the RTP can be found in the Public Engagement Plan and Outreach Summary.

In addition to improving public engagement efforts, PSRC continues to improve modeling and evaluation tools to not only better address equity issues but also to better evaluate active transportation. Recent improvements to the model include features to better address levels of stress and mode choice for modeling bike travel such as volume, facility type and slope. Future improvements to the model may include modeling the future regional bicycle network and better pedestrian level data. More information about the PSRC activity based model can be found in Appendix R: Analysis Tool Documentation.

The following maps show the percent of people walking and bicycling for transportation purposes both today and in the year 2040 which is expected to increase by 16%.



Maps 5 and 6: Percent of People Walking and Biking for Transportation



SUGGESTED LOCAL ACTIONS

PUBLIC ENGAGEMENT strategies:

- Provide opportunities to engage outside of traditional 9-5 working hours
- Meet people where they are instead of asking them to come to an event
- Coordinate with trusted local community groups
- When hosting events, consider providing childcare, food or other incentives
- Ensure people have a chance to share their thoughts and are heard if they have committed time
- Ask personal safety questions during public involvement meetings

WALKING AUDITS are a great way to collect information for pedestrian planning but also for community engagement. They are facilitated walks meant to both educate people about various aspects of walkability but also for data gathering. These are fantastic opportunities to learn about critical needs from local community members who experience their walking environment daily while engaging with city staff, decision makers and other community leaders. This is a great tool to fold into other community engagement efforts.

IDENTIFY STRATEGIES TO ADDRESS EQUITY IN LOCAL PLANS such as:

- Identify political structures and institutional practices that assure fairness and opportunity for all
- Prioritize investments in areas with the greatest need and fewest historical investments
- Ensure images are representative of the community

CONSIDER THAT IN SOME COMMUNITIES SAFETY FROM HARM IS AN IMPORTANT ISSUE

Separate from the concern related to crashes, safety from crime is an important issue for some communities more than others.

- Consider crime prevention through environmental design
- Prioritize crime with crash statistics

LOCAL HIGHLIGHTS

The Major Taylor Project (MTP) is a year-round, youth development bicycling program of the Cascade Bicycle Club. This program is focused on introducing youth from diverse communities in low-income and disadvantaged neighborhoods to bicycling, and creating an inclusive culture of bicycling that will continue to future generations. The program was named after Marshall "Major" Taylor who was the first African American professional cyclist. The MTP provides young people with the means to explore their neighborhoods and promotes integrating bicycling, healthy living, bicycle maintenance, road safety awareness, and the importance of working toward individual goals, along with bicycling as a form of exercise, recreation, and transportation.



EVALUATING GOAL 1

For the purposes of evaluating whether the region is supporting social equitable outcomes, PSRC will:

- continue to track increases in physical activity from transportation for different populations
- assess accessibility for the areas identified with high concentrations of people of color and people with low-income (general accessibility, population with access to a bike facility)
- report on the difference in the travel patterns for these populations.

Goal 2: Improve safety and comfort for people walking and bicycling

Bicycle and pedestrian infrastructure has steadily increased in the central Puget Sound region but there is a long way to go to create networks that feel safe and comfortable for people. Pedestrians not close to crosswalks will often jaywalk or may avoid walking altogether in some environments. Many people may choose not to bike if it requires sharing a lane with motor vehicles or using facilities adjacent to high-speed traffic without a buffer. However, in order to reach destinations, some of these environments are unavoidable for people walking and biking.

Speed is the number one factor for survival of a collision with a pedestrian or a person biking. In the Puget Sound region, collision rates are not improving for people walking and bicycling. With increased demand, consideration of safety and comfort is the first step toward achieving a transportation system that serves all ages and abilities for people who want or need to walk or bike.



The following objectives and actions outline how the region plans to achieve this goal. This is accompanied by suggested local actions as much of the implementation happens through local jurisdictions.

Objective 1: Engage with PSRC's Policy Boards and committees to better integrate implementation of active transportation in projects and programs.

Regional Actions

- Engage with the PSRC policy boards to advise the project selection criteria on evolving best practices
- Continue to evolve performance monitoring and performance measures

Objective 2: Promote best practices for safety and comfort that accommodate all ages and abilities.

Regional Actions

- Promote the implementation of the regional bicycle network to support all ability levels
- Update / contribute to the Planning for Whole Communities Toolkit and facility type guidance to keep in-line with best practices on various topics

Objective 3: Foster regional partnerships on data collection activities.

Regional Actions

- Promote data collection standards for regional integration of data
- Conduct and partner on data collection activities such as collecting counts, facility tracking
- Coordinate with WSDOT on promoting the State's Target Zero program and on improving the access and reporting on crash data for bicycles and pedestrians

Objective 1: Engage with PSRC's Policy Boards and committees to better integrate implementation of active transportation in projects and programs.

This Active Transportation Plan highlights best practices for implementation noted specifically in Chapter 5: Design Guidance. These guides are encouraged to be used as best practices locally but will also be communicated with regional decision-makers responsible for informing the criteria for regional funds which are re-evaluated each funding cycle.

The BPAC will also inform PSRC on best practices for performance monitoring on evolving performance measures for plan updates and other planning processes.

Objective 2: Promote best practices for safety and comfort that accommodate all ages and abilities.

As previously stated under Chapter 4, the BPAC has identified facility types that would be comfortable for people of all ages and abilities. These facility types, which include regional trails (shared-use paths), protected bike lanes and neighborhood greenways, are encouraged for the missing links of the Regional Bicycle Network.

As part of promoting best practices, the BPAC's work program includes keeping the **Planning for Whole**Communities Toolkit up to date for the tools related to active transportation as they evolve over time.

Objective 3: Foster regional partnerships on data collection activities.

Data collection is one of the most important implementation activities of this action plan because additional information allows for analysis of critical gaps, the ability to communicate the benefits and number of users of the system and informs PSRC modeling and analysis tools.

One critical missing element is regional coordination of pedestrian level data. Inconsistent data across jurisdictions and lack of inventory data create a huge challenge when assessing walkability at a regional scale. Data that is sharable regionally and across jurisdictions is beneficial for assessing critical gaps, transit access and applying analysis tools consistently across the four-county region. Therefore, as part of the implementation of this action plan, PSRC will coordinate with member jurisdictions to develop recommendations for pedestrian level data collection. This body of work will seek to meet the following outcomes:

- consistent data for pedestrian facilities across member jurisdictions
- pedestrian level data that informs regional and local asset management as well as ADA Accessibility Plans
- regionally consistent data that can integrate into new analysis tools such the <u>Non-Motorized</u>
 <u>Transit Access Tool</u> created by King County Metro and Sound Transit or other open source tools
 such as OpenStreetMaps

In addition to pedestrian level data, PSRC has been collecting data for **completed bicycle facilities** since 2013 and will continue to maintain this data set. This data set is based on the bicycle facility typology discussed in Chapter 6 and is shared through an on-line web-map along with the regional bicycle network. **Pedestrian and bicycle count data** is another data set that informs PSRC's activity based model and additional efforts to support periodic and permanent count data efforts should be supported.

LOCAL HIGHLIGHTS

In May 2011, Governor Chris Gregoire signed the <u>Vulnerable User Bill</u> into law which establishes a larger fine, revokes driving privileges and requires community service for drivers who seriously injure or kill a more vulnerable road user. Vulnerable users include bicyclists and pedestrians as well as moped riders, equestrians and tractor drivers.

The <u>Neighborhood Safe Streets Bill</u>, recently signed into Washington State Law, authorizes cities and towns to set speed limits to 20 miles per hour on non-arterial streets. The bill does not provide a mandate but gives cities and towns the local flexibility to set local speed limits absent engineering and traffic studies. This change allows cities and towns to improve the safety of non-arterial streets without the longer process that formerly required additional funding and staff.

SUGGESTED LOCAL ACTIONS:

Employ best practice engineering solutions. Chapter 5 suggests design solutions and offers state of the practice guides as a resource for local jurisdictions as they consider active transportation implementation. Local implementation should consider additional measures that go beyond minimum standards to increase separation, facilitate safer interactions with automobiles and the address safety and comfort of all users. Speed reduction is also one of the most effective methods for increasing safety beyond physical separation. Additional design solutions for speed reduction are also noted in chapter 5.

Data Collection and mapping

Invest in data collection related to bicycle and pedestrian infrastructure and counts. Bicycle and pedestrian count data before and after project development helps the region understand the success of implementation and design efforts. Permanent or seasonal counts are beneficial for assessing the number of people using the system.

In addition to data collection, consistent mapping helps the users of the system understand what to expect when using maps to guide walk and bike routes. Terms such as 'bike routes' are less useful without other context such as facility type, signage or traffic volumes. Highlighting 'bike routes' or 'signed routes' over facility type data is encouraged. Pedestrian maps that include information about slope and accessibility also help people with limited mobility better understand the most appropriate routing for their needs.

Policy Solutions

Adopting policies that support safety outcomes such as Complete Streets policies can increase the impact at the local level. These policies influence designs and plans and in some cases, funding eligibility.

Implement Safe Routes to School (SRTS) programs which are designed to enhance the opportunity for more children to walk and bike to school safely through a variety of education, engineering and enforcement strategies that help make routes safer and more appealing. SRTS programs have grown popular in recent years with increasing emphasis on:

- benefits children receive from increased physical activity
- growing congestion issues around schools
- the increasing cost to operate school buses

More information for SRTS programs and links to resources can be found in the <u>Planning for Whole</u> Communities Toolkit.

EVALUATION OF GOAL 2

This goal will be evaluated by:

- monitoring crash rates over time
- assessing the increase in the number and percentage of bicycle facilities that serve 'all ages and abilities'
- monitoring how many jurisdictions in the central Puget Sound region are adopting complete streets policies.

Goal 3: Increase the percentage of people walking and biking

The central Puget Sound region is experiencing tremendous growth and with that comes future demand and new users to the transportation system. Transportation planners and traffic engineers often seek *current* usage data when planning for active transportation facilities. However, future demand and mode shift trends should be considered when making decisions for the design of the transportation system.

According to PSRC's 2014 Household Travel Survey, 40% of all single occupancy vehicle trips in the region were less than three miles long and 5.4% of these were less than a half-mile. Many of these trips could be made by bike, and some of the shorter trips could be done on foot. However, real or perceived barriers exist that can prevent active transportation from being a viable choice. Physical barriers such as freeways, rail lines or waterways are prohibitive without passageways around or over them. Other barriers related to various ability levels also exist.

Addressing people of all ages and abilities is a method to increase people who choose to walk or bike. This includes providing places to rest such as benches, ensuring safe crossing times across busy roadways and ensuring sidewalks are free of clutter and objects such as utility poles or signage. New innovations in accepted facility types, such as neighborhood greenways and protected bike lanes have become tools for attracting new users to the system, particularly for the large number of 'interested but concerned' people. While some people may never make a trip by transit or by bike, almost everyone is, at one point or another, a pedestrian. Encouraging more people to get where they need to go on foot is a key component of this active transportation plan.

Objective 1: Identify barriers that keep people from walking or bicycling. Encourage/incentivize local jurisdictions to address them.

Objective 2: Promote high quality facilities, complete networks and walkable communities that people want to enjoy.

Objective 3: Bring together jurisdictions to listen and learn from implementation of best practices across the region.

Regional Actions

- Identify opportunities for people to overcome barriers to walking and bicycling
- Provide opportunities in public engagement and outreach activities to discuss and learn what those barriers are
- Coordinate with transit agencies and jurisdictions to ensure safe access to transit and adequate bike parking at transit stations

Regional Actions

- Encourage dense walkable urban and local centers
- Promote creative placemaking strategies that support walkability and build community character through TOD and other implementation efforts
- Develop guidance for creating walkable regional and local centers

Regional Actions

- BPAC and peer networking speakers on emerging topics
- Support local capacity for planning and project development in underserved communities (Walkability Action Team)
- Organize outreach activities on current best practices in walking and bicycling design such as the Education and Workshop Series, August Walk and Bike Tours

Objective 1: Identify barriers that keep people from walking or bicycling. Encourage/incentivize local jurisdictions to address them.

Barriers are prohibiting factors that either prevent or discourage people from walking or bicycling. These can include physical barriers such as a river, highway or railroad but also can be factors such as lack of sidewalks, disconnected networks, exposure to traffic without pedestrian or bicycle facilities or more subtle factors such as few opportunities to cross a busy street. PSRC will continue to work with local jurisdictions to identify places with challenging physical barriers and missing links. Asking what barriers people experience will also be an improvement to future public engagement efforts.

Transit access refers to the ability of people to easily get to and use public transportation. Making sure as many people as possible can easily get to and use transit will be fundamental to the success of the policy and planning decisions and major capital and operational investments in transit that the central Puget

Sound region has made and will continue to make over the coming years. PSRC has developed the <u>Transit Access Checklist & Toolkit</u> which includes active transportation recommendations for transit and ferry access. As this plan is implemented, PSRC encourages and will work with partners to utilize this checklist and toolkit as a planning tool.



Objective 2: Promote high quality facilities, complete networks and walkable communities that people want to enjoy.

Addressing best practice in design that serves 'all ages and abilities' has been stated throughout this action plan. The focus of this objective is to address what it means to go beyond minimum standards and consider design elements that encourage active transportation. In addition to providing increased separation between modes, amenities such as street trees, lighting and other aesthetics such as landscaping create spaces that people want to be in and contribute to creating high-quality facilities. When places are aesthetically pleasing, people will use those spaces. Aesthetics and place-making strategies can be transformative for a community. Implementation of this plan will include the support, promotion and encouragement of strategies that support walkable and livable communities.

Regional implementation actions will focus on evaluating centers for walkability and safety. As data collection efforts proceed, the priority for data collection and evaluation will be for regional centers, transit oriented development locations and local centers as the data becomes available. Growth centers and Transit Oriented Development locations are places slated to increase housing and employment density with increased transit services. Walkability is critical for this synthesis and these places will be the focus of further evaluation related to walkability.

Objective 3: Bring together jurisdictions to listen and learn from implementation of best practices across the region.

Many jurisdictions within the central Puget Sound region have spearheaded innovative projects that provide unique opportunities to showcase different implementation strategies and investments. PSRC facilitates opportunities to showcase these investments and provide learning opportunities for local planners, engineers and transportation professionals. These opportunities include bringing speakers to BPAC meetings or topics to the <u>Toolbox Peer Networking Series</u> to continue ongoing dialogue and regional information sharing.

PSRC also hosted an Active Transportation Workshop Series in 2015 where workshops were held in each of the four counties at no cost for transportation professionals. These were three-hour workshops that provided speakers addressing key topics such as design recommendations, funding opportunities, etc. Similar workshops or educational events may be held periodically as one of the many tools to encourage and educate local jurisdictions on active transportation implementation.

Seattle's

vntown Everett's

Neighborhood

Greenway Tour

The August Walk and Bike tours are an on-going activity that began in 2014 where the BPAC hosts one walk and one bike tour in lieu of their August meeting. These are to showcase innovative projects, to learn from local planners and engineers about lessons learned and new strategies.





LOCAL HIGHLIGHTS – Building local Capacity

The Step It Up! Action Institute to Increase Walking and Walkability was hosted and funded by the Centers for Disease Control and Prevention (CDC) and the National Association of Chronic Disease Directors (NACDD). A team from Pierce County took the lead on applying and the Puget Sound team was one of 10 out of 30 to be awarded this opportunity which was held in Decatur, GA in April 2017. The team included a representative from Tacoma-Pierce County Health Department, the City of Tacoma, Pierce County, Downtown on the Go! and the Puget Sound Regional Council. This team also included a Tacoma City Councilmember. The Action Institute charged each team to develop an Action Plan outlined below:

Step It Up! Action Plan to Increase Walking and Walkability

- increase the number and diversity of walkability partnerships, advocates and champions
- support Pierce Transit in implementing an equitable High Capacity Transit plan for Pacific Avenue/SR-7 by encouraging an equitable public engagement process and informing the technical advisory team about walkability to the HCT line
- broaden the Safe Routes to School concept to include Safe Routes to other destinations including transit, parks, grocery stores and other locations
- promote the implementation of complete streets, especially in regional and local centers
- coordinate the development of local and regional trails, sidewalks and other active transportation facilities

Since this action plan was created, the team has taken several steps toward implementation. Action Team members from PSRC, Pierce County and the City of Tacoma sit on the Pacific Avenue/SR 7 Corridor HCT Feasibility Study Technical Advisory Committee.

This Action Plan has garnered additional funding from public health that helped to implement an event on August 7th in Tacoma called Connecting Our Community Through Walking. The purpose of this event was to garner new champions for walkability from a diverse range of people from decision-makers to local community members.



Healthy Community by Design Workshop

SUGGESTED LOCAL ACTIONS

Local agencies can encourage more people to walk and bike by:

- closing gaps, create connected networks
- building high quality, separated facilities
- building age friendly facilities and facilities for people with disabilities/ mobility assisted devices
- maintaining connecting pathways to networks
- working with transit agencies and ferries on first/ last mile connectivity
- addressing barriers people have to walking and bicycling
- considering aesthetics, lighting and other amenities that encourage people to walk and bike

Create Friendly and Inviting Environments

Cities and counties can play an important role for providing pedestrian and bicycle friendly environments. Good lighting, reduced speed limits and compact density with more residents often provides for safer environments while aesthetics such as street trees and public art attract pedestrians and enhance the walking experience.



Host Events or Public Information Campaigns

Public information campaigns can help to shift perceptions about the benefits of walking and bicycling such as the health benefits or encourage people to consider a different mode. Providing opportunities for people to 'give it a try' such as closing streets for a day or hosting events can provide a cultural shift that encourage more people to walk and bike.



Build High Quality, Separated Facilities

A 2014 study³⁹ of protected bike lanes across the country shows a a substantial increase in ridership across all facilities within the first year of installation. Before and after video counts at 12 locations show that ridership increased, on average, by 96% for six of the protected facilities analyzed within one year of building the protected lanes. The increases appear to be greater than overall increases in bicycle commuting in each city.



EVALUATION OF GOAL 3

This goal will be evaluated by evaluating the mode share increases of people walking and bicycling.

Appendix L: Active Transportation Plan

National Institute for Transportation and Communities (2014, June). Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S. Retrieved from: http://ppms.trec.pdx.edu/media/project_files/NITC-RR-583_ProtectedLanes_FinalReport.pdf
Regional Transportation Plan

Goal 4: Improve access to opportunity for people walking and bicycling

Complete streets alone do not make complete networks. Connectivity to transit and ferries, schools and community locations and a system of connected networks provides access to opportunity through walking or bicycling.

Even in urban centers, old infrastructure requires many improvements to become ADA compliant and to provide safe and separate facilities for all users. Connected networks to access local and regional destinations allow people increased mobility options.



Objective 1: Encourage the integration of transit and ferries with active transportation modes.

Regional Actions

- Work closely with transit providers and local jurisdictions to improve transit access
- Raise awareness regarding the importance of safe crossings and access to local transit stops
- Support the development of planning tools such as the non-motorized transit access toolkit
- Coordinate with WA State Ferries when they update their long-range plan in 2019

Objective 2: Promote the regional bicycle network and local bike and pedestrian networks.

Regional Actions

- Raise awareness and continue to foster collaboration of the regional bicycle network
- Collaborate to seek funds for the regional bicycle network
- Coordinate and promote crowdsourcing data collection or other data collection activities for sidewalks and accessible facilities.

Objective 3: Support the integration of active transportation into local plans, polices, programs and projects.

Regional Actions

- Inform the comp plan certification process on best practices for active transportation in local plans.
- Encourage complete streets implementation
- Foster a culture of encouraging and evaluating walking and bicycling for all trips for transportation, health and economic (tourism) purposes

Opportunity Mapping

In 2012, PSRC partnered with the Kirwan Institute for the Study of Race and Ethnicity in Ohio to develop <u>Opportunity Maps</u>⁴⁰ building off the Institute's work on "Communities of Opportunity" across the country. The partnership with Kirwan has enabled a thorough regional look at equity and opportunity in the Puget Sound region. "Opportunity" is a situation or condition that places individuals in a position to be more likely to succeed or excel. Opportunity maps illustrate where opportunity-rich communities exist, assess who has access to those neighborhoods, and help to understand what needs to be remedied in opportunity-poor neighborhoods.

These thematic maps show U.S. Census Tracts (2010 geography) shaded by level of access to opportunity ("levels of opportunity": very low, low, moderate, high, and very high) as defined by a series of 20 indicators that represent five major categories of opportunity: education, economic health, housing and neighborhood quality, transportation/mobility, and health and environment.

Education

- math test scores
- reading test scores
- student poverty
- teacher qualification
- graduation rates

Economic Health

- access to living wage jobs
- job growth trends, 2000—2010
- unemployment rate

Housing and Neighborhood Quality

- vacancy rate
- foreclosure rate
- high cost loan rate
- housing stock condition
- · crime index

Mobility and Transportation

- cost per commute
- proximity to express bus stops
- average transit fare
- percent of commuter who walk

Health and Environment

- distance to nearest park or open space
- proximity to toxic waste release
- percent of area that i within a food desert

⁴⁰ Growing Transit Communities, & Kirwan Institute (n.d.). Equity, Opportunity, and Sustainability in the central Puget Sound region. Retrieved from Puget Sound Regional Council website: http://www.psrc.org/assets/7831/EquOppSusReport2.pdf

Objective 1: Encourage the integration of transit and ferries with active transportation modes.

Walk and bike access to transit is key to ensuring people will benefit from the increased transit investments coming to the region in the coming years.

According to the PSRC 2014 Household Travel Survey, over 88% of people who took transit walked to access that transit service. In addition to developing the Transit Access Checklist and Toolkit, PSRC continues to coordinate with transit agencies on access to transit and has conducted case studies for several major transit locations across the region.

This plan encourages local jurisdictions and transit agencies to emphasize the importance of safe crossings at all transit stops and will continue to communicate this emphasis in various forums.

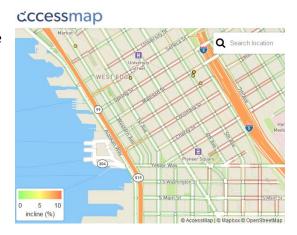
In addition, PSRC will continue to support the development of planning tools such as the Non-motorized Transit Access Tool developed by Sound Transit and King County Metro. For this tool to be used regionally, the data needs to be consistent across the region. PSRC will continue to coordinate on data collection efforts, particularly for pedestrian data.

In addition to supporting tools and encouraging best practice for access to transit, the region has an opportunity to work with Washington State Ferries when they update their long-range plan in 2019. Some challenges for bicyclists when bringing bikes on ferries include smooth access and egress, capacity on the boats and ensuring bike racks fit all types of bicycles.

Objective 2: Promote the regional bicycle network and local bicycle and pedestrian networks.

As stated in Chapter 4, the regional bicycle network was developed to promote connections to regional destinations. The region will continue to communicate the need for this network and encourage implementation.

In addition to developing a vision for a future Regional Bicycle Network, pedestrian level data continues to pose a challenge for assessing walkability in the central Puget Sound region. The Taskar Center for Accessible Technology (TCAT) at the University of Washington Department of Computer Science & Engineering is working on tools to both collect crowdsource pedestrian and accessibility data into Open Street Maps (OSM) but is also working on better map and routing technology that can assist a person walking with options to plan a route based on ability, called AccessMap.



PSRC is interested in this data because OSM provides a platform that can help to make regional pedestrian level data consistent across jurisdictional boundaries. OSM networks can also be integrated into other tools that also uses the OSM platform.

In May 2017, PSRC hosted the Taskar Center staff and graduate student developers for a Map-n-Learn event for transportation professionals. This event was well attended and garnered a lot of interest in



this work. PSRC was able to link developers of this tool to agencies that may be most interested in utilizing this technology. PSRC will continue to coordinate with the Taskar Center on this topic. Pedestrian data in OSM is not the only method or platform for collecting pedestrian level data so as PSRC evaluates pedestrian data collection recommendations, there will need to be consideration of local legacy data sets and other needs for this data.

Objective 3: Support the integration of active transportation into local plans, polices, programs and projects.

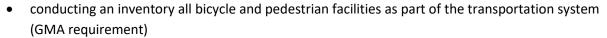
As noted in Chapter 1, PSRC works with countywide planning groups, local jurisdictions, transit agencies and others, to ensure that regional and local planning efforts are coordinated and that regional policies and provisions are addressed in local plans through the Policy and Plan Review Process. PSRC will highlight and communicate the requirements under GMA for local bicycle and pedestrian planning and work with jurisdictions to meet them.

Transportation plans generally have a primary focus on trips for transportation related purposes. Federal transportation funds do not fund recreational projects. However, it is important to note that with increased emphasis on physical activity and health, these recreational trips are important to recognize, highlight and include when evaluating the number or types of trips for walking and bicycling. Most infrastructure projects that benefit people walking and bicycling have both a transportation and a recreation benefit that could be described better as a health benefit for communities. As part of the evaluation of this goal, PSRC will report on walk and bike trips for all purposes.

SUGGESTED LOCAL ACTIONS

Local agencies can increase access to opportunity for people who walk and bike by:

- prioritizing the first and last mile to transit, particularly to high capacity transit and light rail
- ensure all transit routes, particularly high capacity transit routes, have adequate sidewalks and safe crossings at busstops
- ensuring local networks connect to employment centers, schools, medical institutions, grocery



- adopting measures to assess multimodal level-of-service (LOS)
- working with local schools to implement Safe Routes to School programs

LOCAL HIGHLIGHTS

Kitsap Transit has made bicycle hooks and personal lockers available for commuters who desire to commute part way by bike at the Bainbridge Island Ferry terminal. A select number of hooks and lockers are being made available, by reservation, on a first come first serve basis and are intended and only available to commuters over age 18 who regularly and consistently commute (three or more days in aggregate per week) part way by bike.



EVALUATION OF GOAL 4

This goal will be evaluated by:

- monitoring the increases in walk and bike facilities completed
- report on walk and bike trips for all trip types
- assess how well the region is completing gaps in the system.

Regional Transportation Plan

Appendix L: Active Transportation Plan

Chapter 7: Leveraging and Funding Opportunities

The following sections provide an overview for developing active transportation plans and policies, leveraging opportunities for project development, and securing federal, state, and local funding for active transportation.

Policy and Planning

The first step in implementing active transportation is creating strong local comprehensive plans and policies. Policy statements in local plans that support multimodal activities and emphasize the importance of safety will help map out future active transportation project planning and development. In addition, when local jurisdictions apply for federal or state funding sources for their active transportation projects, some funding sources require or prioritize jurisdictions that have local plans with policy statements supportive of active transportation, or that specifically list their planned active transportation projects. Another way to facilitate adequate provisions for active transportation is to include strong supportive language in local and regional ordinances, resolutions, code citations, design manuals, executive orders, and agency internal policies. Smart Growth America has definitions and model language that can assist jurisdictions with defining and implementing Complete Streets and other active transportation policies. ⁴¹

Partnerships in Project Development

Once jurisdictions have active transportation plans and policies in place, the next step in project development is to identify potential opportunities for partnerships. During project development, transportation departments can help maximize the success of their projects by working with other agencies within their local government, as well as external public and private partners. At the same time, they should coordinate across different subsectors within the transportation department to ensure that planners consider all modes of travel and other important aspects of the transportation planning process during project development. Roadway and transit projects should also consider walking and bicycling access when planning for improvements, both for new facility construction and the maintenance and preservation of existing facilities.

Another way to maximize funding resources and improve the robustness of projects is to coordinate interdepartmentally. Other agencies can help inform project planning and scheduling, provide cross promotional opportunities, and enhance projects features and amenities. The following are examples of agencies that can serve as useful partners in project development:

• **Utilities**: Timing transportation projects with utility maintenance can save effort when reconstructing roadways. There are also opportunities for the shared use of space. For example, power line corridors can provide available connected parcels for trail alignments, particularly in

⁴¹ Smart Growth America (n.d.). *Model Language*. Retrieved from https://smartgrowthamerica.org/resources/complete-streets-local-policy-workbook/

dense urban environments where little available right-of-way remains for shared use pathways. Trails can sometimes be placed on top of levees for public use when planning for flood management. Off-road trail corridors are often great places to lay fiber-optic cable because the pavement is not disturbed as often as it is along paved roadways.

- **Education**: Schools can play a significant role when educating young people and parents about safe transportation alternatives.
- Parks and Recreation: Parks and open spaces are important amenities for recreational facilities, as well as destinations for people bicycling and walking.
- Public Health: With an increased emphasis on the health benefits of bicycling and walking,
 Public Health departments are a great resource when promoting increased bicycling and walking within communities, particularly when planning for safety, education, and promotional activities.

In addition to working with other agencies on an individual basis, jurisdictions can create more formal project planning and review committees with representatives from multiple agencies. This allows project developers to coordinate scheduling, maximize resources, and demonstrate interdepartmental coordination, which can be helpful when applying for funding. As an example, the City of Tacoma coordinates interdepartmentally with their *Design Integration Review Team*, which has representation from several different departments, including Transportation, Public Works, Historic Preservation, Environmental Services, and Health.

For external partnerships, working with neighboring jurisdictions on projects is a great way to maximize resources and coordinate different project segments, especially for larger projects. As an example, the cities of Edgewood, Pacific, Milton, and Sumner worked together to create a plan for the gaps in the Interurban Trail that is planned to go through each of their respective communities.

In addition to working with other public entities, jurisdictions can work with local residents, community groups, and the private sector to leverage opportunities. *Interlocal agreements* are an important tool for projects that involve multiple public and private entities. These agreements are used to facilitate project coordination and establish roles for each entity involved. For instance, an Interlocal Agreement for a new trail facility could be between land-owners, local jurisdictions, and a party responsible for facility maintenance. Further examples of community partnerships include:

- Transportation planners can work with land owners on property easements for facilities through private properties.
- Community "steward groups" or "friends of" groups are often willing to help with maintenance of active transportation facilities.
- Mile markers or name plates can be sold to help fund trails or other amenities, such as benches.

Private sector partnerships are a great resource for facilitating and enhancing active transportation components of new developments. Transportation planners can work with private developers to put together *development agreements*. These agreements require developers to contribute to active

transportation and transit systems near new developments as part of the mitigation process. There are numerous examples in the Puget Sound region, including:

- Microsoft contributed in kind right-of-way to help build the 36th Street Bridge in Redmond.
- Amazon provided a public benefits package that included the purchase of a new streetcar for the South Lake Union line, along with designing a new protected bike lane and other pedestrian amenities near their campus in downtown Seattle.

Funding Opportunities

There are a wealth of opportunities and resources available for jurisdictions looking to fund their active transportation projects. The following sections provide an overview of the different federal, state, and local funding sources available for active transportation projects in the Puget Sound region, as well as how they are administered and distributed to jurisdictions. Detailed information for each federal and state funding source mentioned is provided in the "State and Federal Funding Sources" table at the end of this chapter.

Federal Funds

The majority of federal funding for active transportation projects comes to the region through the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration. Funding originates from legislatively passed transportation acts, which authorize programs and funding for a specific period, usually five or six years. The most recently passed federal transportation act, Fixing America's Surface Transportation Act (FAST Act), was enacted in 2015. Active transportation projects are eligible for almost all the funding programs under the FAST Act, to various degrees.

Federal transportation dollars are categorized as either apportioned, also known as formula funds, or allocated, also known as formula discretionary funds. Formula funds are distributed to states using a formula provided in law. They are then distributed to local jurisdictions by states and regional MPOs. The U.S. Congress, FHWA, FTA, and other federal agencies have primary responsibility for selecting transportation projects to receive funds from federally managed discretionary funding programs. Examples of these programs include the New Starts program and Transportation Investment Generating Economic Recovery (TIGER) grant program.

Outside of the U.S. Department of Transportation, a number of other federal agencies provide funding and other resources that can be used to construct or enhance active transportation projects. The National Parks Service provides technical assistance around trails, and supports community-led natural resource conservation and outdoor recreation projects across the nation. The Environmental Protection Agency (EPA) also provides technical assistance to communities planning for smart growth, including planning for multimodal community streets. The EPA also has grant opportunities related to water management and projects near wetlands, streams, rivers or along watersheds.

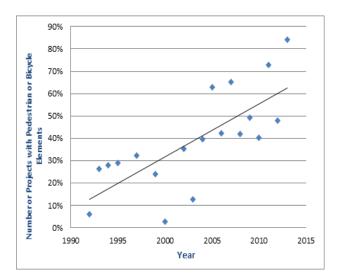
⁴²U.S. DOT FHWA. *Funding Federal-Aid Highways* (January 2017). Retrieved at: https://www.fhwa.dot.gov/policy/olsp/fundingfederalaid/03.cfm Regional Transportation Plan

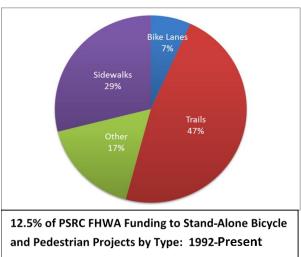
As mentioned, states and regions have a shared responsibility for distributing funds from federal formula funding programs. The state of Washington has responsibility for selecting projects to receive funds from many federal programs, including the Highway Safety Improvement Program, National Recreational Trails Program, and Pedestrian and Bicycle Safety Program. This funding is primarily managed and distributed through the Washington State Department of Transportation.

PSRC is responsible for selecting projects to receive FHWA and FTA funds under the following programs:

- Surface Transportation Program (STP)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Transportation Alternatives Program (TAP)
- Federal Transit Administration (FTA) formula program funding (sections 5307, 5337, 5339, and 5310)

Funding is distributed approximately every two to three years through PSRC's project selection process. For FHWA funds, PSRC conducts a shared regional and countywide process to recommend and select projects to receive PSRC's STP and CMAQ funds. The total estimated amount of both STP and CMAQ funds is split between the regional and countywide forums based on a regionally adopted funding split. Competitive processes are used by all forums to recommend projects to receive the funds. Since 1993, 10% of the combined estimated total of STP and CMAQ funding has been set aside for non-motorized priorities. The Non-Motorized Set-aside is assigned to the countywide processes for distribution.





Transportation Alternative Program funding is awarded through a regionally competitive process conducted by PSRC. This competition is held approximately every three or four years, contingent upon federal transportation legislative updates, changes, or continuing resolutions. FTA formula funds are programmed using a process coordinated with FTA and the public transit agencies in the region.

Appendix L: Active Transportation Plan

⁴³ Puget Sound Regional Council. *Project Selection*. Retrieved at: https://www.psrc.org/our-work/funding/project-selection Regional Transportation Plan

Federalizing Bicycle and Pedestrian Projects

When applying for federal funding, it is important to note that meeting federal funding requirements can be onerous and time consuming. Project sponsors should plan accordingly for both scheduling and budgeting when choosing to "federalize" a bicycle or pedestrian project. The scale and cost of projects should be a factor when choosing to apply for federal funds. Some federal requirements, depending on the specific program, include:

- State/local match requirements
- Delivery requirements
- Compliance with the National Environmental Policy Act (NEPA)
- Buy America program requirements
- Disadvantaged Business Enterprise (DBE) program requirements

Some requirements have waivers or apply only to specific funding sources. It is important to research and understand the rules and requirements depending on the specific funding source or program and project type prior to accepting and eventually obligating any federal funding.

State and Local Funds

Federal dollars are not the only source of funds for supporting active transportation projects. Active transportation projects are eligible for several state funding programs, including the Pedestrian and Bicycle Safety Program and Washington Wildlife and Recreation Program. State agencies responsible for managing and distributing these funding programs include the WSDOT, Washington Traffic Safety Commission, Washington Transportation Improvement Board, and Washington State Recreation and Conservation Office. The Department of Ecology has programs that can contribute to aspects of projects that also help control storm water, such as permeable sidewalks and rain-gardens.

Local jurisdictions have many tools available to assist in finding and leveraging local dollars. Cities, counties, ports, transit agencies and other entities have primary responsibility for selecting projects to receive each agency's local funds. Examples of different types of funds jurisdictions can use to support active transportation include:

- **General Funds:** Jurisdictions can use these funds to emphasize multimodal transportation when prioritizing transportation projects as part of the local Capital Improvement Program (CIP) process
- **Targeted Funds:** These are funds that have been collected for specific purposes and must be allocated by law toward those purposes.
- Levies: Local communities in the central Puget Sound region have a strong history of supporting packages that benefit increased infrastructure for bicycling and walking. Some regional examples include:
 - o King County Parks Trails, and Open Space Replacement Levy (2013)
 - The City of Kirkland City Street Maintenance and Pedestrian Safety and City Parks Maintenance, Restoration, and Enhancement Levy (2012)
 - Mukilteo City Park Purchase Levy Proposition (2012)
 - Seattle Parks and Green Spaces Levy (2008) and "Bridging the Gap" Levy (2006)

- Transportation Benefit Districts: Councils can pass vehicle license fees up to a set amount without a vote of the public, or a higher amount with a vote of the public. Other types of taxes can also support these benefit districts if approved by voters, such as sales and use taxes. Local examples include:
 - Mountlake Terrace passed a Transportation Benefit District to help fund their Main
 Street project, which includes substantial sidewalk improvements
 - In 2014, the City of Tacoma approved Transportation Benefit District Proposition A, which uses sales and use taxes to fund street improvements.
- Local Improvement Districts: Property owners affected by a project vote on whether or not to help pay for an improvement. The City of Kent is a local example of a jurisdiction using these funds to improve their active transportation network.
- Excise taxes: These are taxes paid when purchases are made on a specific good. The Regional Transit Authority (RTA) tax is an excise tax that funds Sound Transit.

State and Federal Active Transportation Funding Sources Available

Table 6: An overview of major state and federal funding sources available to jurisdictions in the Puget Sound Region.

Funding	Type of Funds	Funding Agency in PSRC	Description	Eligible Non-Motorized	Eligible Project
Program Transportation Investment Generating Economic Recovery (TIGER) Federal Lands Access Program (FLAP)	Federal (US DOT) Federal (US DOT FHWA)	Region U.S. Department of Transportation US DOT Federal Highway Administration	Supports capital projects which repair bridges or improve infrastructure to a state of good repair; projects that implement safety improvements to reduce fatalities and serious injuries; projects that connect communities and people to jobs, services, and education; and, projects that anchor economic revitalization and job growth in communities Provides funds to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands	Access enhancements to public transportation; on-road and separated bike facilities, bike parking and storage, bike racks on transit, bike share, Bridges/ overcrossings for pedestrians and bicyclists, engineering improvements for non-motorized transportation, sidewalks, trail improvements Bicycle and pedestrian accommodations that provide access to or within federal or tribal lands	State, local, and tribal governments, including U.S. territories, transit agencies, port authorities, metropolitan planning organizations, other political subdivisions of State or local governments, and multi-State or multi-jurisdictional groups State, local agencies, and tribal governments
Rivers, Trails, and Conservation Assistance Program	Federal (US NPS)	U.S. National Parks Service	Supports community-led natural resource conservation and outdoor recreation projects	Regional trails, parks	State or local agencies, Native American Tribes, nonprofit organizations, citizen groups, federal agencies if in partnership with local organizations

Funding	Type of	Funding Agency in PSRC	Description	Eligible Non-Motorized	Eligible Project
Program	Funds	Region		Projects	Sponsors
Safe Routes to School (SRTS)	State/Federal (US DOT FHWA)	Washington State Department of Transportation	Aids public agencies in funding projects within two-miles of primary and middle schools (K-12) that provide children an alternative to riding the bus or being driven to school	Operational and physical non- motorized infrastructure improvements, educational and promotional activities, law and community enforcement, outcomes evaluation	All public agencies in Washington (including tribal governments), and nonprofit entities responsible for the administration of local transportation safety programs.
National Highway Performance Program (NHPP)	Federal (US DOT FHWA)	Washington State Department of Transportation	Provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan	Construction, reconstruction, resurfacing, restoration, rehabilitation, and preservation of bicycle and pedestrian infrastructure associated with an NHS facility.	State and local agencies
Highway Safety Improvement Program (HSIP)	Federal (US DOT FHWA)	Washington State Department of Transportation	Funds projects for reducing fatal and serious injury collisions and follow <i>Target Zero</i> , WSDOT's Strategic Highway Safety Plan. WSDOT administers the funds under its City Safety Program and County Safety Program	On-road facilities, pedestrian walkways, bicycle facilities	State and local agencies

Funding	Type of	Funding Agency in PSRC	Description	Eligible Non-Motorized	Eligible Project
Program	Funds	Region		Projects	Sponsors
FTA 5311 Formula Grants for Rural Areas	Federal (US DOT FTA)	Washington State Department of Transportation	Provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000, where many residents often rely on public transit to reach their destinations	Bicycle and pedestrian routes to transit, bike racks, shelters and equipment for public transportation vehicles	States, Native American Tribes. Subrecipients may include state or local government authorities, nonprofit organizations, and operators of public transportation or intercity bus service.
Land and Water Conservation Fund (LWCF)	Federal (US DOI)	Washington State Recreation and Conservation Office	Provides funding to preserve and develop outdoor recreation resources, including parks, trails, and wildlife lands	Community parks, recreational facilities, trails	State agencies, local agencies, special purpose districts, Native American Tribes
National Recreational Trails Program	Federal (US DOT FHWA)	Washington State Recreation and Conservation Office	Funds rehabilitation and maintenance of recreational trails and facilities that provide a backcountry experience	Rehabilitation and maintenance of existing unpaved trails, off-road facilities, and pedestrian walkways (non-urban), recreational and trail-related educational programs	Native American Tribes, state agencies, federal agencies, trail-related, non-profit organizations, local agencies, some special purpose districts
Community Development Block Grants (CDBG)	Federal (USHUD)	Washington State Department of Commerce/ Local municipalities	Provides grants for community planning initiatives that benefit low- and moderate-income persons, prevent or eliminate slums or blight, and address urgent community development needs	Trail construction; commercial district streetscape improvements; sidewalk improvements; safe routes to school; neighborhood-based bicycling and walking facilities	Local governments (cities under 50k and counties under 200k); WA State
Surface Transportation Program (STP) [AKA Surface Transportation Block Grant]	Federal (US DOT FHWA)	Puget Sound Regional Council	Funding for highway and bridge construction and repair; transit capital projects; bicycle, pedestrian and recreational trails; and construction of ferry boats and terminals.	Bicycle and pedestrian improvements on local roads and federally classified facilities, bicycle and pedestrian related nonconstruction projects (coordinator positions, encouragement programs, maps, data gathering)	State, local agencies, transit agencies, and Native American Tribes

Funding	Type of	Funding Agency in PSRC	Description	Eligible Non-Motorized	Eligible Project
Program	Funds	Region		Projects	Sponsors
Congestion Mitigation and Air Quality (CMAQ)	Federal (US DOT FHWA)	Puget Sound Regional Council	Funds specific categories of transportation projects and programs that provide air quality benefits by reducing emissions and congestion. General purpose roadway projects are not eligible.	Off-road (not exclusively recreational) and on-road facilities, pedestrian walkways, bicycle facilities	State, local agencies, transit agencies, and Native American Tribes
Transportation Alternatives Program (TAP)	Federal (US DOT FHWA)	Puget Sound Regional Council	Funds projects defined as transportation alternatives, including pedestrian and bicycle facilities, community improvement activities, environmental mitigation, and other similar types of projects.	Off-road and on-road facilities, pedestrian walkways, bicycle facilities, safe routes to school, safety education (K-8 only)	Local governments; Regional transportation authorities; Transit agencies; Natural resource or public land agencies; School districts, local education agencies, or schools; Tribal governments; Other local or regional governmental entities
FTA 5307 Urbanized Area Formula Program	Federal (US DOT FTA)	Puget Sound Regional Council	Provides grants to Urbanized Areas (UZA) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances.	Bicycle and pedestrian access and walkways; bicycle storage facilities and installing equipment for transporting bicycles on public transportation vehicles	Funding is made available to designated recipients, which must be public bodies with the legal authority to receive and dispense Federal funds.
Enhanced Mobility of Seniors and Individuals with Disabilities	Federal (US DOT FTA)	Washington State Department of Transportation/Puget Sound Regional Council	Improve mobility for seniors and individuals with disabilities by removing barriers to transportation services and expanding transportation mobility options available. Must be part of the region's Coordinated Plan.	Pedestrian improvements that provide access to public transportation facilities	Private nonprofit organizations, area agency on aging, state or local governmental authority, or an operator of public transportation

Funding Program	Type of Funds	Funding Agency in PSRC Region	Description	Eligible Non-Motorized Projects	Eligible Project Sponsors
Pedestrian and Bicycle Safety Program	State	Washington State Department of Transportation	Supports public agencies in funding cost-effective projects that reduce bicycle and pedestrian related collisions, and work to increase walking and biking. T	Off-road and on-road facilities, pedestrian walkways and bicycle facilities	Public agencies, including tribal governments
Washington Wildlife and Recreation Program	State	Washington State Recreation and Conservation Office	Supports a range of land protection and outdoor recreation, including park acquisition and development, habitat conservation, farmland preservation, and construction of outdoor recreation facilities.	Regional trails, recreational facilities (benches, paths, shelters, restrooms)	State agencies, local agencies, special purpose districts, Native American Tribes, salmon recovery lead entities
Mini Grants (Up To \$300)	State	Washington Traffic Safety Commission	Helps children walk and bike to school safely through grants of up to \$300 per school to assist with crossing guard equipment.	Training materials, equipment, and supplies for school zone crossing guards	Public, private, and tribal elementary and middle schools
TIB Funding Programs for Small City Customers	State	Washington Transportation Improvement Board	Funds projects for reconstructing or maintaining transportation infrastructure for small cities and towns through five grant programs: Small City Arterial Program, Small City Sidewalk Program, Small City Preservation Program, Relight Washington Program and the Complete Streets Program.	Pavement and sidewalk maintenance, non-recreational pedestrian projects, street lighting, arterial extensions	Cities and towns with a population of less than 5,000
Non-Highway and Off-Road Vehicle Program	State	Washington State Recreation and Conservation Office	Provides funding to develop and manage recreation opportunities, as well as education and enforcement programs.	Building, renovating, maintaining and rerouting trails, educating trail users	Local agencies special purpose districts, Native American Tribes, state agencies, federal agencies

Funding	Type of	Funding Agency in PSRC	Description	Eligible Non-Motorized	Eligible Project
Program	Funds	Region		Projects	Sponsors
Rural Arterial	State	County Road	Funds rural arterial road and	Improving rural roads which	WA state counties
<u>Program</u>		Administration Board	bridge reconstruction.	are primarily local use or	
				recreational to be multi-	
				modal	