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15 **DRAFT** Cycle Highways Proviso
16 **Report**

17 2025-2027 Legislative Report

18

19 WSDOT Active Transportation Division

20 February 12, 2025

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EXECUTIVE SUMMARY

The cycle highways proviso was funded by the legislature in the 2023-2025 biennium to conduct “the preliminary phase of an action plan for the establishment of cycle highways in locations that connect population centers and support mode shift,” (HB 1125, Sec. 224(5); full text in Appendix A). The Washington Department of Transportation’s (WSDOT) Active Transportation Division (ATD) has prepared this draft report ahead of the June 1, 2025 deadline to facilitate continued engagement around the concept.

Cycle highways are a multi-jurisdictional network of facilities on state and local rights of way (ROWS) that optimize bicycle, micromobility,¹ and other forms of active travel through and between population centers. They support existing active travel demand and encourage mode shift from personal motor vehicles to active transportation.

The state’s Active Transportation Plan (ATP) provides a map for supporting active transportation in Washington and identifies a conceptual, statewide network of bikeways and trails. A cycle highways network in Washington state will build on those efforts. The idea won enthusiastic support from stakeholders in early engagement efforts, and partner agencies and organizations provided feedback and recommendations for the development of this first phase of an Action Plan.

Cycle highways facilitate movement for bicyclists the same way highways do for drivers. As a core principle, facilities should always be of consistent quality and improve connectivity regardless of trip length or purpose. Bicycle facilities serve people with different needs and destinations, just as state highways may carry traffic from one end of a town to the next exit, to the next town over, or across the state. People may use a cycle highway on a daily basis or for occasional trips, similar to a state highway for drivers. Importantly, the network considers equity, environmental justice, and the needs of nondrivers, including access to the system.

A review of national and international case studies provided an overview of best practices. Local bikeway networks in Washington started in the 1890s with the Good Roads movement. The Side Path Movement and European highway engineers created the original cycle highways as early as the 1930s as local roads became regional highways. Several states, such as Utah, Minnesota, and California, have already made significant progress towards funding and building statewide and regional networks for active modes to encourage longer distance travel. Implementing, operating, and maintaining these networks requires a unified vision and coordinated action across a broad base of partner agencies, tribal governments, and organizations.

¹ The Federal Highway Administration (FHWA) defines micromobility as: “Any small, low-speed, human or electric-powered transportation device, including bicycles, scooters, electric-assist bicycles (e-bikes), electric scooters (e-scooters), and other small, lightweight, wheeled conveyances.” More information can be found in this FHWA resource: https://www.fhwa.dot.gov/livability/fact_sheets/mm_fact_sheet.cfm. Under Washington state law e-bikes are classified as bicycles (RCW 46.04.071); WSDOT uses the term “micromobility” to refer to the devices that aren’t bikes.

1 This report summarizes initial findings and the steps needed for the next phase of program
2 development, including estimates of schedule and costs. The primary actions to build on this
3 first phase of the Cycle Highways Action Plan are to:

- 4 • **Establish a Cycle Highways Program:** Create a staffed program within WSDOT’s Active
5 Transportation Division focused on the implementation of cycle highways across the
6 state. This program’s recommended staff are in addition to, and depend on, existing
7 staffing levels and core competencies in the division.
- 8 • **Complete Development of a Cycle Highways Action Plan:** Finalize an Action Plan that
9 identifies a preliminary statewide network (route details to be confirmed with partners
10 over time); develops guidelines and standards for design, maintenance, and
11 implementation; includes robust engagement with partner agencies and community
12 members; describes data and methods necessary to assess needs, prioritize routes, and
13 track progress; and estimates costs of implementation from planning, design and
14 construction through maintenance and operations for an enduring program.
- 15 • **Implement Pilot Projects of the Cycle Highways Program:** Deliver pilot projects aimed
16 at quick wins and proof of concept that may include quick-build or demonstration
17 projects, shovel-ready projects, and projects to close system gaps.
- 18 • **Establish Ongoing Cycle Highway Program Systems:** Facilitate an enduring program by
19 prioritizing actions and projects from the Cycle Highway Action Plan and revising
20 program strategies based on lessons learned from the pilot projects.

21
22 To be truly effective, a Cycle Highways Program will need to be a comprehensive, permanent,
23 and statewide effort. To achieve this, we recommend the next steps in this effort be broken into
24 two phases. The time to complete each phase will depend on funding made available for the
25 effort. The first phase involves completing the full Action Plan with a preliminary analysis of the
26 complete network, establishing the program with support for staffing and engagement, and
27 developing initial technical guidance, as well as completing pilot projects. The next phase builds
28 on this with continued partner engagement to identify and prioritize routes that will form a
29 complete network. This phase will also establish Memorandums of Understanding (MOUs) and
30 other mechanisms to build the Cycle Highways Action Plan into all relevant local, regional, and
31 state plans for implementation. Capital project planning, construction, and maintenance will
32 continue over time.

33
34 WSDOT recognizes that this report is being prepared during a budget cycle with significant
35 challenges both for the transportation budget and for other state agencies. This report provides
36 details on how to establish a statewide Cycle Highways Program in Washington with the
37 breadth needed to be optimally effective, recognizing that funding and implementation will be
38 decided by the Legislature and Governor. The pace and level of funding will affect how long it
39 takes to work through each phase of implementation.

1 DEVELOPING A CYCLE HIGHWAYS SYSTEM IN WASHINGTON STATE

3 Intent of the Cycle Highways Proviso

4 During the 2023 legislative session, members included a proviso within ESHB 1125 that
5 directed WSDOT to develop the initial phase of a Cycle Highways Action Plan (proviso language
6 provided in Appendix A). Per the proviso, the goals of the Action Plan are to improve active
7 transportation² connections between population centers and support mode shift to active
8 travel. Consistent with WSDOT's Active Transportation Plan 2020 and Beyond³ and Vulnerable
9 Road User Safety Assessment (2023)⁴, the cycle highways framework is founded on a Safe
10 System Approach. Routes, facilities, and crossings will be designed for low levels of traffic stress
11 and improve safety for people walking, biking, and rolling, which also improves safety for people
12 driving and taking transit.

13
14 The proviso language included a number of topics to be addressed in a complete Action Plan,
15 which goes beyond the scope of this Phase 1 document. The goal of the initial phase was to
16 establish a framework and recommendations for next steps. The recommendations include
17 strategies for facility design, investment prioritization, network planning, facilities development
18 and maintenance, as well as future engagement with project partners. WSDOT developed these
19 recommendations through preliminary discussions with state partners, review of existing related
20 policies and resources, and research of similar efforts in other states, as well as national and
21 international best practices.

22
23 Each action includes an expected timeline and cost estimate, broken out into phases with
24 deliverables that will depend on staffing levels. For purposes of this report, these are labeled in
25 terms of the next few biennia and ongoing investments.

² The WA State Active Transportation Plan – 2020 and Beyond (refer to Footnote 3 for reference) defines active transportation as using a human-scale and often human-powered means of travel to get from one place to another; includes walking, bicycling, using a mobility assistive or adaptive device such as a wheelchair or walker, using micromobility devices, and using electric-assist devices, such as e-bikes and e-foot scooters. State law now includes a definition of active transportation (RCW 36.70A.030) as “forms of pedestrian mobility including walking or running, the use of a mobility assistive device such as a wheelchair, bicycling and cycling irrespective of the number of wheels, and the use of small personal devices such as foot scooters or skateboards. Active transportation includes both traditional and electric assist bicycles and other devices. Planning for active transportation must consider and address accommodation pursuant to the Americans with disabilities act and the distinct needs of each form of active transportation.”

³ Washington State Department of Transportation (2021, December 20). *Washington State Active Transportation Plan - 2020 And Beyond*. <https://wsdot.wa.gov/sites/default/files/2021-12/ATP-2020-and-Beyond.pdf>

⁴ Washington State Department of Transportation. (2023, November 20). *WSDOT Vulnerable Road User Safety Assessment 2023*. <https://targetzero.com/wp-content/uploads/2023/11/VRU-Safety-Assessment-2023.pdf>

1 What Is a Cycle Highway?

2 The ATP set the stage for a cycle highways concept, with its emphasis on developing low-stress
3 networks, filling in gaps between existing trail systems and population centers, and building on
4 initiatives like the United States Bicycle Route System (USBRS) to support longer distance
5 bicycle travel. During early engagement with partner agencies for this report, participants
6 expressed the importance of having facilities that allow for safe, comfortable, predictable,
7 direct, efficient, and well-connected routes for bicycle travel. Cycle highways facilities should be
8 suitable for people of all ages and abilities and be primarily designed to support bicycle and
9 micromobility travel, but should also accommodate pedestrian travel as appropriate as part of
10 the overall multimodal network.⁵

11
12 Regarding the name “cycle highways,” while some engagement participants were in favor of it,
13 others were interested in further discussion and outreach to develop a label that fully and
14 accurately captures the long-term vision for such a network in Washington State. The concept
15 itself is analogous to the highway system; cycle highways would function for bicyclists much as
16 the highway system functions for drivers.

17
18 Through preliminary engagement, as well as insights gleaned from case studies, WSDOT
19 developed a working definition for cycle highways in Washington State:

20 *Washington cycle highways are a multi-jurisdictional network of facilities on state and local*
21 *rights of way that optimize bicycle, micromobility, and other forms of active travel through*
22 *and between population centers to support existing active travel demand and encourage*
23 *mode shift from personal motor vehicles to active transportation. Cycle highways are well-*
24 *maintained facilities that include shared-use paths⁶, paved trails (for trails meeting shared-*
25 *use path design criteria), bike lanes, and bicycle boulevards that emphasize safety, reduce*
26 *modal conflicts, and prioritize efficient active transportation travel. Cycle highways are well-*
27 *marked and provide essential wayfinding and other user information.*

28 Most engagement participants agreed that facilities should accommodate multimodal use where
29 that is expected, such as on shared-use paths. Shared-use facilities within the network should
30 be designed to allow all active transportation users to operate comfortably, safely, and
31 efficiently. This means designing facilities with appropriate widths and providing adequate
32 separation between active transportation modes where needed. Importantly, cycle highways

⁵ Many parts of Washington lack infrastructure that provides a low level of traffic stress for all types of active transportation users. While the emphasis on cycle highways is to facilitate longer connections that are most likely to be taken using a bicycle or other micromobility device, pedestrians and slower speed active transportation users need to be considered. If there is no dedicated pedestrian facility, pedestrians will use the cycle highway facility, particularly within population centers. Proactively planning for this dual use will improve functionality, safety, and community support.

⁶ [RCW 47.04.010](#) defines a “shared-use path,” also known as a “multiuse path,” as “a facility designed for active transportation use and physically separated from motorized vehicular traffic within the highway right-of-way or on an exclusive right-of-way with minimal crossflow by motor vehicles. Shared-use paths are primarily used by pedestrians and people using bicycles or micromobility devices, including those who use nonmotorized or motorized wheeled mobility or assistive devices. With appropriate design considerations, equestrians may also be accommodated by a shared-use path facility.”



Figure 1: Burke-Gilman Trail in Seattle, WA

Source: Toole Design Group

Description: The 20-mile Burke-Gilman Trail is a multi-use trail in Seattle, WA that provides direct, active transportation connections between job centers like the University of Washington, as well as a link to transit and recreational amenities.

- 1 should incorporate highly legible wayfinding signage, lighting, and network design to allow for
- 2 easy navigation and a reliably comfortable user experience. The facility shown in Figure 1
- 3 provides an example of the working definition of a cycle highway.
- 4

1 **Establishing a Cycle Highways Program**

2 The primary recommendation to emerge from the initial phase of work is that Washington
3 should establish a statewide Cycle Highways Program within the Active Transportation
4 Division.⁷

5
6 A statewide program for cycle highways would help users of all ages and abilities to access both
7 nearby and longer-distance population centers safely and comfortably through active travel.
8 Such a program would add significant value to local efforts to improve bicycle and pedestrian
9 networks within communities and across regions. The process would also provide an
10 opportunity to focus on repairing transportation inequities by prioritizing early investments in
11 environmentally overburdened, vulnerable, and underserved communities and in locations that
12 connect those communities to sources of goods, services, and opportunities for employment,
13 education, and participation in civic life. A primary benefit of a Cycle Highways Program would
14 be providing infrastructure to disadvantaged communities that allows for the use of viable, low-
15 cost transportation options and reduces emissions associated with vehicle use in those
16 neighborhoods served by the network. A Washington Cycle Highways Program should be an
17 enduring effort to improve active transportation connections between population centers
18 throughout the state.

19
20 The development of this program is consistent with Revised Code of Washington (RCW)
21 47.06.100, which concerns the statewide bicycle transportation and pedestrian walkways plan.
22 That statute directs WSDOT to “propose a statewide strategy for addressing bicycle and
23 pedestrian transportation, including the integration of bicycle and pedestrian pathways with
24 other transportation modes; the coordination between local governments, regional agencies,
25 and the state in the provision of such facilities; the role of such facilities in reducing traffic
26 congestion; and an assessment of statewide bicycle and pedestrian transportation needs.”

27
28 WSDOT is the logical convenor and coordinator for an effort that must connect across
29 boundaries; establishing this as a WSDOT program within the Active Transportation Division
30 will allow one entity to oversee development of the full cycle highways network while working
31 closely with partners for implementation. This model is consistent with how other state-interest
32 elements of the transportation system are managed, such as aviation and public transportation.

33
⁷ The term “program” in state government use may refer to a budget program or a facilitating process that serves the public interest. This report does not propose establishing a budget program. Cycle Highways Program is meant to refer to a focused effort led by the WSDOT Active Transportation Division that would play an active role in developing a network and facilitating its stewardship, and also serve a project evaluation role similar to the Safe Routes to School Program (SRTS) or Pedestrian and Bicyclist Program (PBP). Funding for capital projects to implement the cycle highways plan could be provided within the existing Pedestrian and Bicyclist Program as a single programmatic line. This would enable WSDOT to direct funds to projects as they prioritize rather than requiring local agencies and tribes to submit applications in a competitive process over a two-year cycle. This programmatic line-item approach would operate similarly to the Active Transportation Assistance Program, which appears as a line item in the SRTS and PBP project lists, and names projects in annual reports to the Legislature after they are invited to participate. Projects could also be funded by other sources, including as part of larger capital projects, through federal grants, private philanthropy, local trail group efforts, and in some locations through the Recreation and Conservation Office’s grants or the Federal Lands Access Program.

1 The Cycle Highways Program will function as a “backbone” organization that supports and
 2 amplifies local network development efforts and catalyzes them where they don’t exist. Under
 3 this unified approach, WSDOT program staff would steward a statewide plan and lead
 4 coordination for the full network. A key part of this work will be development of technical
 5 assistance resources, such as design guidance and other project decision-making and
 6 management tools. This stewardship role will also include evaluation of project development to
 7 enable future analysis of mode shift, total connected mileage, and other performance metrics.

8
 9 WSDOT’s level of direct involvement would vary by location while maintaining the overall
 10 vision and direction and be tailored based on local and regional capacity and plans. This model
 11 will allow the program to have a collective impact on networks throughout Washington State.
 12 The agency would defer to local partner agencies on facilities in their jurisdictions within the
 13 context of established standards for cycle highways. This is similar to how standards are set for
 14 state highways under the Manual on Uniform Traffic Control Devices (MUTCD).

15
 16 **Table 1: Cycle Highways Program Actions and Estimated Costs for Phase 2**

Actions	Logistical Details	Estimated Costs
Establish Cycle Highways Program	Staff and provide resources to launch the Cycle Highways Program with six (6) full-time employees (FTEs) (beyond existing WSDOT staff) to initiate and lead the program.	\$1.92 million for six (6) FTEs (expanding as needed in future years as the program matures). An additional \$500,000 per year to support research, development of technical guidance, engagement, advisory council(s), communications, and other initiatives.
Complete Development of the Cycle Highways Action Plan	Finish development of the Cycle Highways Action Plan, including state system network analysis, network definition and approaches for implementation, funding, and operations / maintenance. Support program start-up with consultant capacity while new staff are being hired to develop and run the program.	\$850,000 initially, with funding in future years to support regular updates and special projects beyond staff capacity.
Implement Pilot Projects of Cycle Highways Program	Utilize both capital and operating funding as appropriate for selected projects to enable implementation of pilot projects in parallel to the Cycle Highways Action Plan.	\$20 million capital in this phase (estimated 5-10 projects). Additional funding needs will be established through future phases of the Cycle Highways Action Plan.

1 Table 2 provides an overview of the three actions needed to continue to advance the
2 development of cycle highways in Washington, and the logistical details and estimated total
3 costs for each action.

4
5 In addition to connectivity and mobility improvements, developing the cycle highways network
6 will have a multitude of health, environmental, economic development, and equity benefits.
7 Many people in the state do not or cannot drive for transportation or cannot afford a reliable
8 working vehicle. As of 2020, approximately 24.6 percent of Washington’s residents did not hold
9 a driver’s license, including both people not yet old enough to obtain a license and people over
10 16 who do not have a license.⁸ This makes access to active and public transportation essential
11 for a large number of residents to get to work, education, services, and community life
12 destinations.

13
14 Bicycling networks and active transportation facilities generally deliver economic benefits,
15 including increased retail sales and property values, which boost tax revenues collected by local
16 and state governments. Bikeable and walkable places support tourism and workforce
17 recruitment and retention in population centers both small and large.⁹ In recent years states like
18 Utah, Minnesota, and California have recorded such benefits resulting from their efforts to
19 create statewide networks of safe, low-stress bicycle and shared-use facilities.

20
21 The increased opportunity to use low-cost transportation options and other economic benefits
22 of a Cycle Highways Program provide a direct benefit to lower-income households. However,
23 some of the economic benefits may contribute to gentrification pressures, and thus require an
24 emphasis on engagement and planning to mitigate the potential negative impacts of community
25 improvements. To ensure everyone can share in positive outcomes, the Cycle Highways Action
26 Plan will be developed through intentional and collaborative planning that seeks to avoid
27 displacement and support the protection of low-income and affordable housing for current
28 residents. This will require connecting this program’s development with efforts in housing
29 policy. WSDOT staff in the program will coordinate with staff in other state agencies and
30 beyond for this element. This represents a new type of work for the agency and an opportunity
31 to improve efficiency and effectiveness of investments from multiple state agencies.

32
33 The first essential step for beginning this effort is to staff a state Cycle Highways Program and
34 set aside funding to lead the development and implementation of a statewide Cycle Highways
35 Action Plan, with selected pilot projects to build momentum. The following sections include
36 detailed information on each action, as well as the key findings from the initial phase that
37 informed those implementation steps.

⁸ Washington State Legislature, Joint Transportation Committee. [Nondrivers: Population, Demographics & Analysis](#). 2023. People not yet old enough to hold a license includes school-age children who would benefit from a separated facility like this to get to school, where the cycle highway location can serve that purpose.

⁹ Kennan, Hallie, and Chris Busch. 2016. [How sustainable cities can drive business growth](#). GreenBiz. EPA. 2015. [How Small Towns and Cities Can Use Local Assets to Rebuild their Economies: Lessons from Successful Places](#). Center for Rural Policy and Development. 2015.

1 STATE OF THE PRACTICE REVIEW

2 This section reviews key findings from the initial phase of the Cycle Highways Action Plan,
3 including a summary of current state level active transportation efforts, existing conditions for
4 active transportation in Washington, and synopses of the early engagement and best practices
5 research conducted for this phase.
6

7 Active Transportation Network - General Roles and Responsibilities

8 In Washington State, no single entity oversees or manages the state's entire active
9 transportation network. Instead, numerous organizations are involved in active transportation
10 facility planning, development, funding, and maintenance. These include public agencies, tribes,
11 and private entities, each of which play different roles in the process.
12

13 In this initial phase, only state agency roles and responsibilities were reviewed in detail.
14 Exploration of contributions by other entities would be undertaken in a future phase, if funded.
15

16 *WSDOT's Roles in the Active Transportation Network*

17 WSDOT's current role in active transportation involves a broad range of activities, including
18 planning, developing, preserving, and maintaining active transportation facilities in the state
19 right of way (ROW). WSDOT has the statutory responsibility for a statewide plan under RCW
20 47.06.100, including a requirement to coordinate with local governments. Many miles of
21 shared-use paths have been constructed in WSDOT ROW, some of which are maintained and
22 operated by partner agencies under agreements with WSDOT. WSDOT is also responsible for
23 developing trail signage standards (RCW 47.30.060).
24

25 WSDOT focuses on provision of active transportation facilities to advance transportation goals
26 and monitors performance to see if those goals are met over time. Under the Revised Code of
27 Washington, the department of transportation is authorized to expend funds for the planning,
28 construction, and maintenance of active transportation facilities. This includes developing and
29 sharing design standards and best practices, advancing safety of all road users, improving
30 predictable mobility for people and goods, enhancing healthy communities, promoting commute
31 trip reduction and demand management, and reducing energy use, greenhouse gas emissions,
32 and vehicle miles traveled.
33

34 WSDOT is also responsible for implementing the state's Complete Streets requirement (RCW
35 47.04.035) for state transportation projects, adopted in 2022. The implementation of this
36 requirement established a Level of Traffic Stress (LTS) threshold of two or better for active
37 transportation facilities on state roadways within population centers, as well as a requirement to
38 integrate with the local network on state transportation projects that cost \$500,000 or more.¹⁰
39

40 WSDOT administers grant program funding for local agencies, tribal nations, and others to
41 develop and construct active transportation facilities on local and state ROW, providing
42 technical assistance as needed to facilitate those efforts. WSDOT focuses on provision of active
43 transportation facilities to advance transportation goals and monitors performance to see if

¹⁰ Level of Traffic Stress provides an evaluation of active transportation facilities and their suitability for all ages and abilities. A separated trail or shared-use path is rated LTS1.

1 those goals are met over time.
2 Funding programs include the Safe
3 Routes to School, Pedestrian and
4 Bicyclist, and Sandy Williams
5 Connecting Communities
6 programs, as detailed in Appendix
7 E. Other WSDOT funding programs
8 may also play a role in advancing
9 active transportation goals, such as
10 the City Safety Program, County
11 Safety Program, Regional Mobility
12 Grants, and the First Mile/Last Mile
13 Connections Grant, among others.

14 **Other State Agencies**

15 Washington State Parks, the
16 Department of Natural Resources
17 (DNR), and the Washington
18 Recreation and Conservation
19 Office (RCO) also have roles in
20 advancing active transportation
21 infrastructure, primarily in the form
22 of trails. Washington State Parks
23 manages trails within state parks,
24 as well as a number of long-
25 distance trails throughout the state
26 (linear parks). Washington State
27 Parks owns and operates some of
28 the most significant trails that
29 support transportation usage,
30 including the Palouse to Cascades
31 Trail, Spokane River Centennial
32 Trail, Klickitat Trail, Columbia
33 Plateau Trail, and Willapa Hills
34 Trail. DNR manages some accessible trails that may include facilities used for active
35 transportation. RCO is a key source of funding for trails in the state and is tasked with
36 maintaining the statewide trails database and developing a statewide trails plan (RCW
37 79A.35.040).

38
39 Washington State Parks is in the process of developing a statewide Scenic Bikeways program,
40 established in 2020 (RCW 79A.05.800). Scenic Bikeways are defined as bike routes made up of
41 trails, shared-use paths, bike lanes, and roadways which have “exceptional scenic, cultural,
42 historic and/or recreational value.” The Washington State Parks and Recreation Commission is
43 responsible for officially designating proposed routes as Scenic Bikeways, in coordination with
44 WSDOT staff. This program uses signage to identify designated routes but does not fund or
45 construct new bike paths or trails.

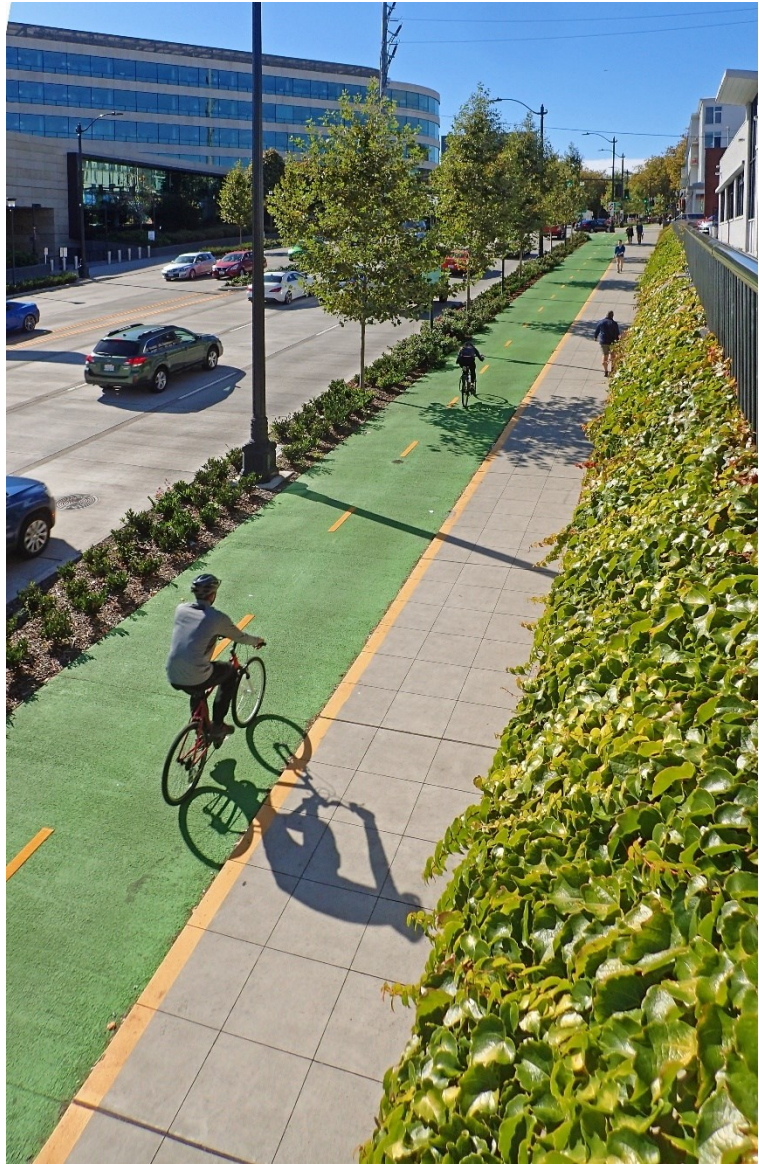


Figure 2: Bike Lane and Sidewalk in Seattle, WA
Source: Toole Design Group



Figure 3: Neighborhood Greenway in Kirkland, WA
Source: Toole Design Group

2 The Washington State Transportation Improvement Board (TIB) administers several competitive
 3 funding programs which can be used for bicycle and pedestrian infrastructure projects (listed in
 4 Appendix E). The Urban and Small City Active Transportation Programs provide funding for
 5 pedestrian and bicyclist projects to improve safety, mobility, and connectivity. Under the TIB's
 6 Complete Streets Program, cities and counties that have an adopted Complete Streets
 7 ordinance are eligible to apply for funding to support building streets that accommodate all
 8 users. These programs provide critical funding to help jurisdictions complete their active
 9 transportation networks, particularly for small towns and rural communities that have limited
 10 access to grant opportunities. As a funding agency, the TIB funds planning and construction of
 11 individual infrastructure projects but not broad-scale planning efforts like the cycle highways
 12 network.

13

14 **Relationship to Complete Streets**

15 Cycle highways route development is expected to be consistent with and to advance
 16 implementation of the State's Complete Streets requirement. As established, the Complete
 17 Streets statute authorizes WSDOT to use existing funds to comply with the requirement, but
 18 additional funds were not provided specifically to support the development of compliant
 19 facilities. Depending on the approved funding mechanisms for cycle highways, coordination
 20 with Complete Streets projects may provide an opportunity to expand funding access,

1 consolidate planning and design, and advance the development of high-quality facilities that
2 help shift mode choice to active modes and improve safety for people using all modes.

3 4 **State Code and Policy Review**

5 A preliminary review of existing state codes, including the RCW and Washington Administrative
6 Code (WAC), identified opportunities and limitations for a potential Cycle Highways Program.
7 The scope of this report did not include an exhaustive review but identified potential limitations
8 and opportunities for further analysis in Phase 2. Examples include explicitly integrating cycle
9 highways into existing provisions and facilitating greater collaboration between WSDOT and
10 local agencies. In some cases, state code revisions may be needed to appropriately reflect the
11 role of cycle highways in the state transportation system. In other cases, the identified code
12 may not require revision but the explicit responsibility for cycle highways would require updates
13 to WSDOT policy and procedures. These findings are summarized in Appendix F.

14 15 **State of the System**

16 This section provides a general overview of existing active transportation facilities in the state,
17 which includes shared-use paths¹¹, on-street bicycle facilities (bike lanes), and crossing and
18 intersection infrastructure. Historically, active transportation facilities data has not been
19 collected systematically and the associated data describing the extent of the statewide active
20 transportation network is not comprehensive or complete. In 2024, the Active Transportation
21 Division hired a GIS and data specialist, who is leading a new effort to collect statewide bicycle
22 facility data. This data will complement the data needs of the Cycle Highways Program.

23
24 While sidewalks and other exclusive pedestrian facilities are important active transportation
25 facilities, they are not included in the cycle highways working definition and not discussed in
26 this review. Cycle highway routes should have parallel pedestrian facilities, particularly within or
27 leading to population centers.

28 29 **Shared-Use Paths**

30 Washington has more than 1,600 miles of existing facilities that are generally considered to be
31 shared-use paths. However, many of the existing facilities do not meet ADA requirements or
32 align with current guidance for shared-use path design. In general, shared-use paths

¹¹ A shared-use path is a facility specifically designed for the exclusive use of pedestrians, bicyclists and other active transportation users of all ages and abilities. Shared-use paths must meet ADA accessibility requirements for pedestrian access route, surface type, cross-slope, and running slope. Shared-use paths may sometimes include the word “trail” in their names, and state statute includes shared-use paths within the legal definition of trail (RCW [47.30.005](#)). However, trails as defined in statute also include other types of public ways and may even include widened road shoulders in certain gap locations. WSDOT maintains specific design guidance for shared-use paths (see [Chapter 1515 of the WSDOT Design Manual](#)) that details, among other things, separation from motor vehicle traffic, path width, and path shoulder width.

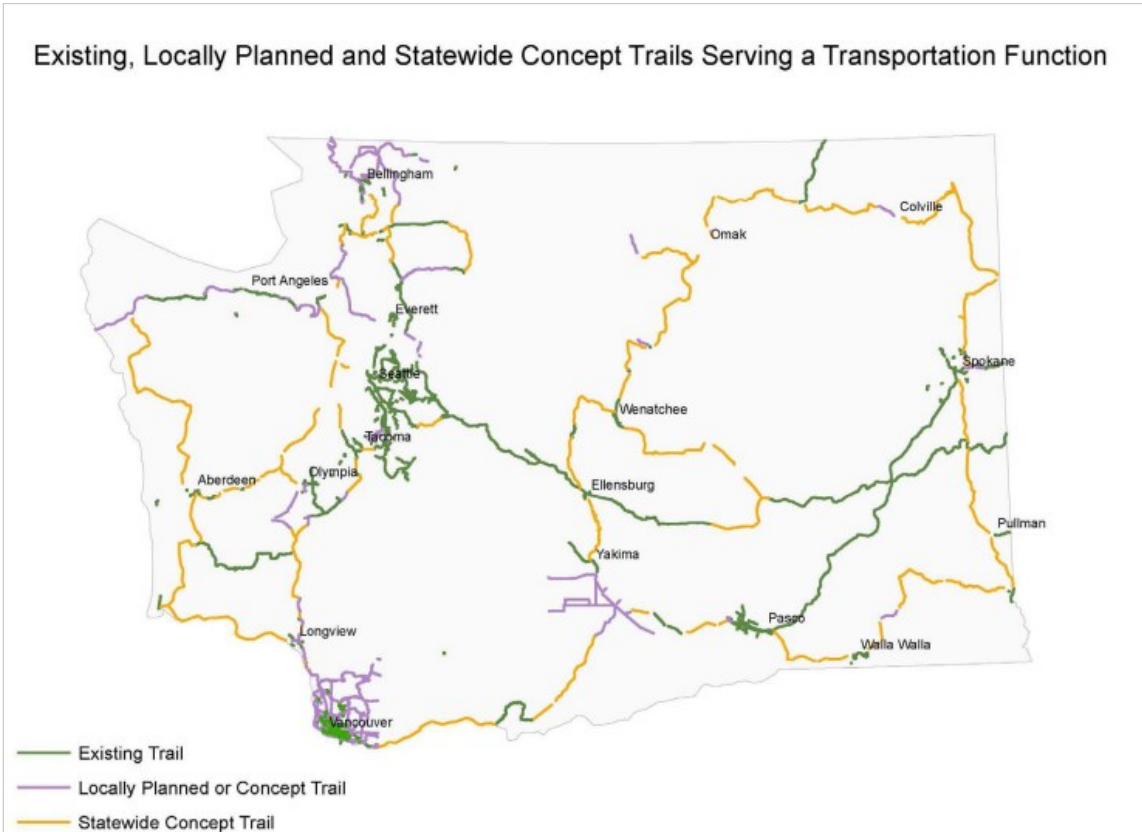


Figure 4: Map of Trails Serving a Transportation Function (2020)
 Source: WA State Active Transportation Plan - 2020 And Beyond

1 constructed after 2012¹² are more likely to meet a cycle highways facility definition for all ages
 2 and abilities criteria. Shared-use paths serve local functions, such as commuter use during peak
 3 periods and trips to local destinations, and long-distance functions like bike tourism. The
 4 Recreation and Conservation Office maintains a statewide trails database which has information
 5 on nearly 12,000 miles of local, state, and federal trails. The WSDOT dataset described here
 6 contains data for the shared-use paths along state-owned rights-of-way, which is included in
 7 the statewide trails database.

8
 9 Though the statewide trails database serves as the most comprehensive dataset for shared-use
 10 facilities, many facilities currently lack the information necessary to assess suitability for serving
 11 all ages and abilities as part of a cycle highways network.¹³ Further, RCO's trails database is an
 12 incomplete source of planned or aspirational future segments. As of early 2025, WSDOT and
 13 RCO are partnering to provide ongoing technical support to improve the quality of shared-use

¹² The American Association of State Highway and Transportation Officials (AASHTO) published its *Guide for the Development of Bicycle Facilities, 4th Edition* in 2012, providing updated guidance for shared-use path design. A more recent edition has since been published: American Association of State Highway and Transportation Officials, (2024). *Guide for the Development of Bicycle Facilities, 5th Edition*.

¹³National Association of City Transportation Officials. (2017, December). *Designing for All Ages & Abilities: Contextual Guidance for High-Comfort Bicycle Facilities*. https://nacto.org/wp-content/uploads/2017/12/NACTO_Designing-for-All-Ages-Abilities.pdf

1 path data available in the existing trails database. A statewide program aimed at supporting
2 collaborative development of complete, connected networks has the potential to fill a number
3 of gaps in current plans of various agencies and jurisdictions.

4
5 Figure 4 shows a map from the state ATP of the existing, locally planned, and statewide concept
6 trails that serve a transportation function, as of 2020. The Statewide Concept Trail network
7 (shown as gold lines in the figure) was informed by several inputs: population centers, existing
8 and planned trail data from state, regional, and local sources, and existing and conceptual U.S.
9 Bicycle Route System corridors¹⁴. Conceptual statewide connector trails were identified as links
10 to connect population centers between existing and proposed trails from other agencies.

12 **On-Street Bicycle Facilities**

13 The completed cycle highways network may also include on-street bicycle facilities designed for
14 all ages and abilities, such as protected bicycle lanes. WSDOT keeps an inventory of bike lanes
15 on state routes and is in the process of collecting the additional attributes required to assess
16 these facilities for allowing bike travel by users of all ages and abilities. Many cities maintain
17 their own data on bicycle infrastructure within their jurisdiction. The partnership between RCO

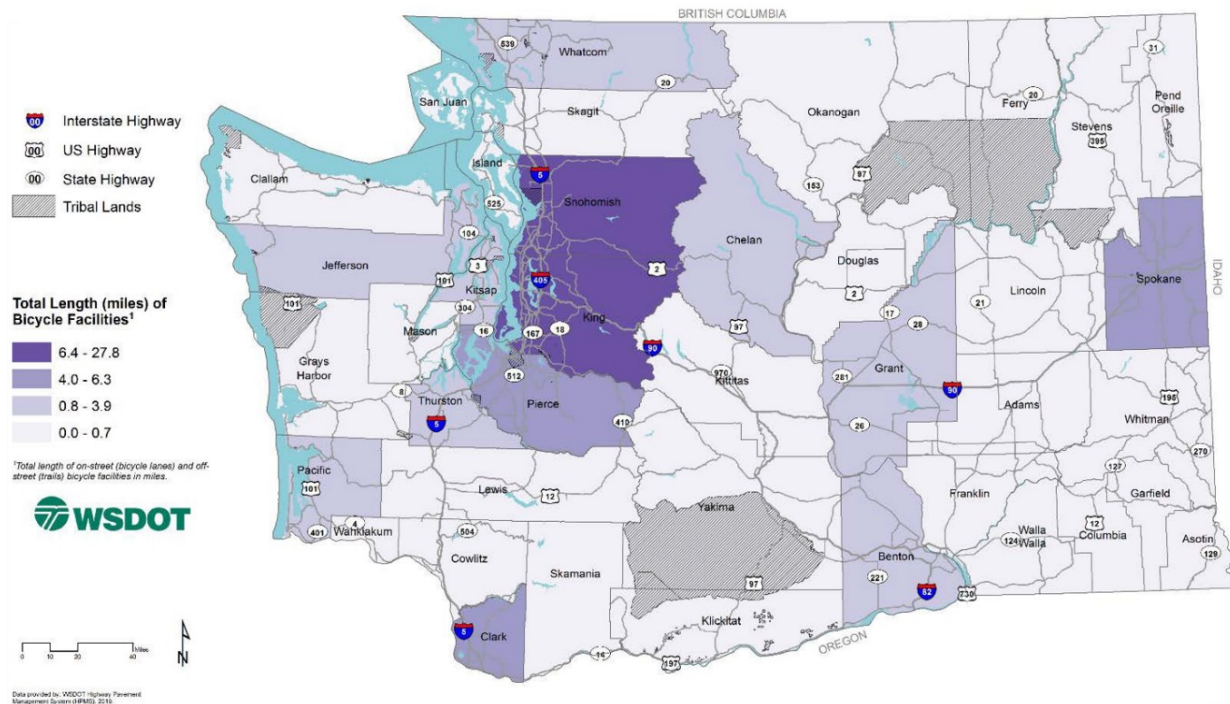


Figure 5: WSDOT-managed On-street Bicycle Lanes and Shared-use Paths (2020)

Source: WA State Active Transportation Plan - 2020 And Beyond

Note: This graphic does not include additional miles of facilities on state right of way managed by local jurisdictions.

¹⁴ Note that Washington’s US Bicycle Route System (USBRS) information helped suggest Statewide Concept Trail routing, but not all of the US Bicycle Routes offered feasible shared-use path options (for WA USBR maps refer to <https://wsdot.wa.gov/travel/bicycling-walking/bicycling-washington/us-bike-routes>). For example, USBR 10 follows State Route 20 where it crosses Washington Pass and passes through two narrow tunnels. Although it is a preferred on-road bicycle route, the constrained highway corridor would require significant investments to develop a shared-use path that follows the USBR routing.



Figure 6: Protected Intersection in Seattle, WA

Source: WSDOT

Description: Protected Intersection in Seattle, WA to facilitate bicyclist turning movements at an intersection.

1 and WSDOT will expand the data collection effort of the statewide trails database to also
2 include on-street bike facility data from local jurisdictions.

3
4 The map in Figure 5 shows existing miles of on-street bicycle facilities on state highways and
5 shared-use paths within WSDOT management. Bike lanes, when present, are generally found
6 on roads inside population centers and not on limited-access highways. In total, there are
7 approximately 1,200 miles of non-limited access state highways in population centers, but only
8 about 60 of those miles include marked bike lanes that meet the WSDOT minimum standard of
9 a five-foot width.¹⁵ This map also shows existing shared-use facilities that are within WSDOT
10 management. Although bicycling is permitted on roadway shoulders everywhere on the state
11 system (unless explicitly prohibited), shoulders are not considered dedicated bicycle facilities
12 and are therefore excluded from the overall mileage.

13
14 Per the state ATP and Complete Streets requirement, WSDOT has a goal that all state highways
15 in population centers should have appropriate bicycle facilities, with the design of each facility
16 determined by context and conditions. This would include both appropriately designed bicycle
17 facilities on state highways and parallel local system facilities that provide equivalent access to
18 area destinations.

19

¹⁵ Five feet is the minimum width for standard bike lanes, as described in the WSDOT Design Manual. However, the Design Manual may recommend wider bicycle lanes or additional protection elements for bicycle facilities depending on road characteristics like traffic speed and volume. Chapter 9 of the [AASHTO Guide for the Development of Bicycle Facilities \(2024\)](#) provides further information on the ranges of recommended bike lane widths for a variety of common contexts, including the practical minimums and maximums vs. recommended lower and upper limits.

1 **Crossing Infrastructure**

2 Infrastructure and operational improvements at road crossings are critical for cycle highways to
3 function efficiently and comfortably, as illustrated in Figure 6. Technology like bike detectors,
4 bike signals, and leading bicycle intervals (and in some cases leading pedestrian intervals)
5 prioritize bicycle travel through the intersection. Bike boxes and bicycle crossing markings
6 increase driver awareness of crossing bicyclists. Raised crossings help manage driver speed.
7 Providing the optimal bike lane interface at intersections reduces bicyclist exposure to turning
8 traffic. Protected intersections and appropriately designed roundabouts provide a number of
9 features that maximize crossing safety for bicyclists and all intersection users. Where
10 appropriate, dedicated bridges and tunnels may be the right solution for accommodating
11 bicyclists of all ages and abilities at crossings.

12
13 As of early 2025, WSDOT does not have a dedicated statewide dataset on the location of these
14 intersection features, though some local jurisdictions maintain their own data. This data may be
15 collected from local partners through the RCO and WSDOT partnership in a future data
16 collection effort.

17
18 **Signage and Wayfinding**

19 Signage and pavement markings serve several important functions for bicyclists and other
20 active transportation users. Regulatory, warning, and guidance signage, and wayfinding signs
21 and pavement markings help users navigate the transportation system safely and help them to
22 access key destinations. These tools guide users to major geographic destinations and nearby
23 attractions; help them make connections to adjoining pathways, transit, and other multimodal
24 facilities; help them plan trips; and allow them to gauge their physical ability to reach resources
25 and services.

26
27 There is no current, comprehensive dataset that captures general active transportation signage
28 and wayfinding tools around the state. In accordance with RCW 47.30.060, which states
29 “[WSDOT] shall provide a uniform system of signing paths and trails which shall apply to paths
30 and trails under the jurisdiction of the department and of cities, towns, and counties,” WSDOT
31 has developed some initial guidance to facilitate implementation of on-road signage, but there is
32 still work to do with our partners to develop complete guidance that addresses the diverse
33 signage and wayfinding needs of WSDOT, local agencies, and tribes across the state.

34
35 **Partner Perspectives**

36 For this initial phase, WSDOT held ten listening sessions from July to September 2024, as
37 detailed in Appendix G. This included staff from other state offices, bicycle advocacy
38 organizations, city and county governments, a tribal nation, Regional Transportation Planning
39 Organizations, and leaders of regional trail coalitions. The key objectives of the preliminary
40 listening sessions were to inform partners about the project and gain preliminary feedback to
41 inform the development of this report. WSDOT also asked participants to recommend
42 strategies for more comprehensive engagement in the next phase of Action Plan development.

1 The following points were consistently heard across the interviews:
2

- 3 • **Messaging:** There was interest in thinking through the name cycle highways, particularly
4 the word “highways,” and how to ensure it conveys a vision that is relevant to
5 Washington and does not discourage use of the facility.
6
- 7 • **Facility Type:** There were different ideas about the type of facilities that would be built,
8 as well as sentiment that different facility types would be appropriate in different
9 contexts. Some participants pictured a network of separated facilities for people on
10 bicycles, with pedestrian accommodations on separate paths, while some envisioned
11 only shared-use paths. Participants recognized that there would be demand for facilities
12 accessible for all ages and abilities from a variety of users traveling at different speeds,
13 and that managing potential conflicts between users would be important.
14
- 15 • **Facility Design:** Participants consistently stated that cycle highways should be designed
16 with full separation from vehicles, low traffic stress, safe crossings, and easy navigation
17 and wayfinding. This would also align with the requirements of WSDOT’s Complete
18 Streets policies for state routes, and with a statute that describes the state’s interest in
19 bicycle routes that support mobility, safety, and environmental benefits.¹⁶
20
- 21 • **Routing:** Participants generally agreed that facilities should be fully separated from
22 vehicular traffic but had different views on whether cycle highway routes should run
23 parallel to state routes or in different ROWs, such as shared-use paths through state
24 parks. Having cycle highways along state highways would make it easier for WSDOT to
25 use state-owned ROW and would also help create directly connected bicycle routes
26 between population centers. However, the bicycle user experience on routes close to
27 busier state highways would need to be evaluated based on local context and potential
28 availability of a quieter yet direct connection on other ROWs.
29
- 30 • **Signage/Wayfinding:** Consistent branding and wayfinding were identified as important
31 elements, so that different facilities are tied together as a connected, reliable, and easy
32 to navigate network.
33
- 34 • **Maintenance:** Maintenance to keep facilities operational, comfortable, and safe was also
35 a common theme. Participants discussed the importance of having a clear, well-thought-
36 out plan for maintaining current facilities, with some noting there could be competing
37 priorities between expanding the network and maintaining existing facilities.
38
- 39 • **Connectivity and Access:** Participants had differing views on whether cycle highways
40 should only provide connections between adjacent communities versus also providing
41 connections within communities, e.g., protected bike lanes connecting urban
42 destinations (the way state highways do). Some noted that many existing shared-use

¹⁶ From RCW 47.26.300: “The legislature therefore finds that the establishment, improvement, and upgrading of bicycle routes is necessary to promote public mobility, conserve energy, and provide for the safety of the bicycling and motoring public.”

1 path facilities are difficult to get to because people have to travel long distances to
2 trailheads, so having cycle highways run through communities would both increase
3 access and also help better incorporate these facilities into everyday travel.
4

- 5 • **Equity:** There was general agreement that network planning and facility design must
6 incorporate equity and the environmental justice requirements of the Healthy
7 Environment for All (HEAL) Act to ensure bikeways support historically underserved
8 populations and users of all ages and abilities. Relatedly, cycle highways would improve
9 rural equity by building or improving facilities that connect communities in areas where
10 the state highway is the only route that currently exists. More rural areas of the state
11 often have high levels of poverty, resulting in people walking or bicycling on highway
12 shoulders next to high-speed vehicular traffic out of necessity. Also, it is important to
13 consider ways to address the potential for gentrification and displacement associated
14 with certain kinds of infrastructure investments.
15
- 16 • **Underserved Populations:** There are general challenges for engaging with
17 representatives of underserved populations, as they have high demands for their time
18 and limited capacity.
19
- 20 • **Partnership Opportunities:** Other groups within the state have done related work on
21 building active transportation networks in their regions. Participants were eager to see
22 this statewide effort help to complete and/or complement current regional and local
23 efforts.
24
- 25 • **Engagement:** For the next phase, participants suggested ways that regional and local
26 agencies and advocacy groups could help with outreach, particularly related to design
27 guidance and standards, prioritizing routes, piloting projects, and providing ongoing
28 technical guidance. Participants also emphasized the value of frequent engagement and
29 transparency in decision-making.
30

31 **Model Examples from Other States and Provinces**

32 For the preliminary phase, WSDOT reviewed several examples of efforts to build active
33 transportation systems similar to cycle highways in other states and provinces. WSDOT found
34 five statewide and regional examples to be the most relevant to the proviso to develop a
35 preliminary phase of an Action Plan for Washington State, and these were reviewed in greater
36 depth (detailed in Appendix H). The five studies included:

- 37 • Circuit Trails Network (Greater Philadelphia)
- 38 • La Route verte (Greater Québec)
- 39 • Minnesota State Bikeway Network
- 40 • San Francisco Bay Trails
- 41 • Utah Trail Network
42

43 WSDOT looked to both more mature networks, like La Route verte and the San Francisco Bay
44 Trails, as well as newer statewide planning efforts, such as the Utah Trail Network (illustrated in
45 Figure 7), for lessons learned that could be applied to developing the cycle highways network in



Figure 7: Utah Trail Network example
Source: Utah Trail Network

1 Washington. Staff from the appropriate lead agencies were provided the opportunity to review
2 and give feedback on each of the in-depth case studies to ensure their accuracy and
3 completeness. In addition, WSDOT reviewed several other state and regional networks that had
4 specific elements which were applicable to this effort but did not rise to the same level of
5 relevance as the in-depth case studies.

6

7 To supplement the case studies, WSDOT also examined best practices guidance resources on
8 the topics of design, network development, demand analysis, and project prioritization, as
9 described in Appendix I. Findings were drawn from national and international guidelines, as well
10 as various planning documents by public agencies, such as design guidance and prioritization
11 methods produced for county and municipal bicycle plans.

12

13 **Summary of State of Practice and Future Opportunities**

14 Table 2 summarizes the major potential network development, legal, and funding challenges
15 that were identified in this initial phase. The table then provides responsive steps to each item.
16 These responsive steps and opportunities are incorporated into the actions for developing the
17 Cycle Highways Program and Action Plan.

1 Table 2: Summary of State of Practice and Future Opportunities

State of Practice Review	Responsive Steps and Opportunities
Potential Development Challenges	
<p>For messaging, there were varying responses to the concept and name “cycle highways.”</p>	<ul style="list-style-type: none"> • Select a name for the concept that is appropriate to Washington and that conveys the larger network and connectivity concept when coupled with well-established trail names around the state. • Leverage partner engagement in the next phase to hone messaging for promoting and developing the cycle highways network with different groups and in different parts of the state, particularly areas outside population centers and in historically underserved communities.
<p>Having a primary focus on bicycle travel may be a barrier to forming partnerships with some jurisdictions and advocacy groups. In other places this will be viewed as a benefit.</p>	<ul style="list-style-type: none"> • Identify partners and jurisdictions interested in being early adopters and build successes to demonstrate value to other locations. • Build on analysis prepared for the Recreation and Conservation Office demonstrating the value of bike tourism to local economies and the state¹⁷ and examples such as the <u>Bike-Friendly Business program</u> managed by Travel Oregon. • Emphasize the benefits of providing facilities for bicycling in support of transportation equity.
<p>Incorporating existing shared-use paths into the cycle highways network may confuse current multimodal users.</p>	<ul style="list-style-type: none"> • Develop facility design criteria and wayfinding/signage to directly address multimodal use where that is expected, such as shared-use paths. For shared-use facilities, they should be designed to comfortably, safely, and efficiently accommodate all active transportation users.
<p>Local jurisdictions may not be invested in helping advance the cycle highways vision, particularly if they lack staff capacity and expertise, funding resources, or local political support.</p>	<ul style="list-style-type: none"> • Provide technical support and, potentially, funding for local jurisdictions and tribal governments building cycle highways segments outside of state ROW. • Many communities are eager for these improvements; work with the willing first. • Provide messaging to elected officials and staff on the benefits of and support for cycle highways. • Engage and coordinate with regional advocacy groups, tribal governments, Metropolitan Planning Organizations (MPOs), and Regional Transportation Planning Organization (RTPOs) to help develop local partnerships.

¹⁷ Recreation and Conservation Office reports: “Economic, Environmental, & Social Benefits of Recreational Trails in Washington State.” 2019; “Economic Analysis of Outdoor Recreation in Washington State, 2020 Update.”

State of Practice Review	Responsive Steps and Opportunities
<p>If different parts of the network are built and maintained by different jurisdictions, variation among their design and maintenance standards could lead to irregular and unpredictable routes.</p>	<ul style="list-style-type: none"> • Set clear design criteria and standards for cycle highways facilities, adapted for different contexts. • Provide technical guidance and other assistance for achieving those standards. • Set standards for maintenance of WSDOT-owned facilities and develop a standard approach to maintenance agreements across jurisdictions. • Establish system-wide wayfinding and branding standards to maintain a high level of consistency and legibility of the system.
<p>The longer the distance between destinations, the fewer people are likely to use the route for daily transportation trips.</p>	<ul style="list-style-type: none"> • Establish consistent communications to build understanding that quality and connectedness of facilities is the core principle regardless of trip length or purpose, and that bike facilities serve people with different needs and destinations, just as state highways may carry traffic from one end of a town to the next exit, to the next town over, or across the state. • Prioritize network investment in routes that have the highest potential demand for active travel. • Prioritize connections to multimodal transportation hubs to facilitate long-distance travel.
<p>It may be difficult to plan cycle highway routes in some areas of the state, such as more rural or suburban areas where destinations are far apart. However, smaller cities and rural areas still need active transportation investments, particularly to address safety and mobility concerns.</p>	<ul style="list-style-type: none"> • Build understanding of active transportation needs in all areas of the state by collecting comprehensive facility data and gathering information on local planning efforts. • Establish rural equity criteria to help prioritize lower density locations that have a high need for active transportation facilities. • Work with WSDOT Region Office staff and MPOs/RTPOs to build potential project lists and strive for broad investment in all regions. • Provide technical assistance and other support for project implementation and maintenance by smaller jurisdictions with fewer resources. • Identify potential strategies to align priorities of different funding programs administered by WSDOT to maximize benefit to local jurisdictions where a cycle highways project aligns with other program purposes.

State of Practice Review	Responsive Steps and Opportunities
Potential Legal and Funding Challenges	
<p>There are differences in funding source eligibility for transportation versus recreational facilities.</p>	<ul style="list-style-type: none"> • Develop funding resource guidance for local and regional agencies to support identification of relevant grants that can fund cycle highway implementation.
<p>Local jurisdictions have few local funding resources for developing bicycle and shared-use facilities outside of population centers.</p>	<ul style="list-style-type: none"> • Provide technical assistance to prepare state and federal grant applications to develop network segments outside of population centers. • Potentially give state program funding priority, or develop a dedicated state funding approach to develop cycle highways network segments. This could be structured as a dedicated line item in the existing Pedestrian and Bicyclist Program, similar to the Active Transportation Assistance Program overseen by ATD. • This single program line approach allows jurisdictions to advance projects throughout the biennium, rather than relying on a fixed application period. This helps mitigate rising construction costs. It also enables prioritization of projects based on the overall cycle highways plan and doesn't require agencies to invest time in a competitive application process.

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CYCLE HIGHWAY PROGRAM RECOMMENDATIONS

Phase 2: Establish Program and Kick-off Plan Development

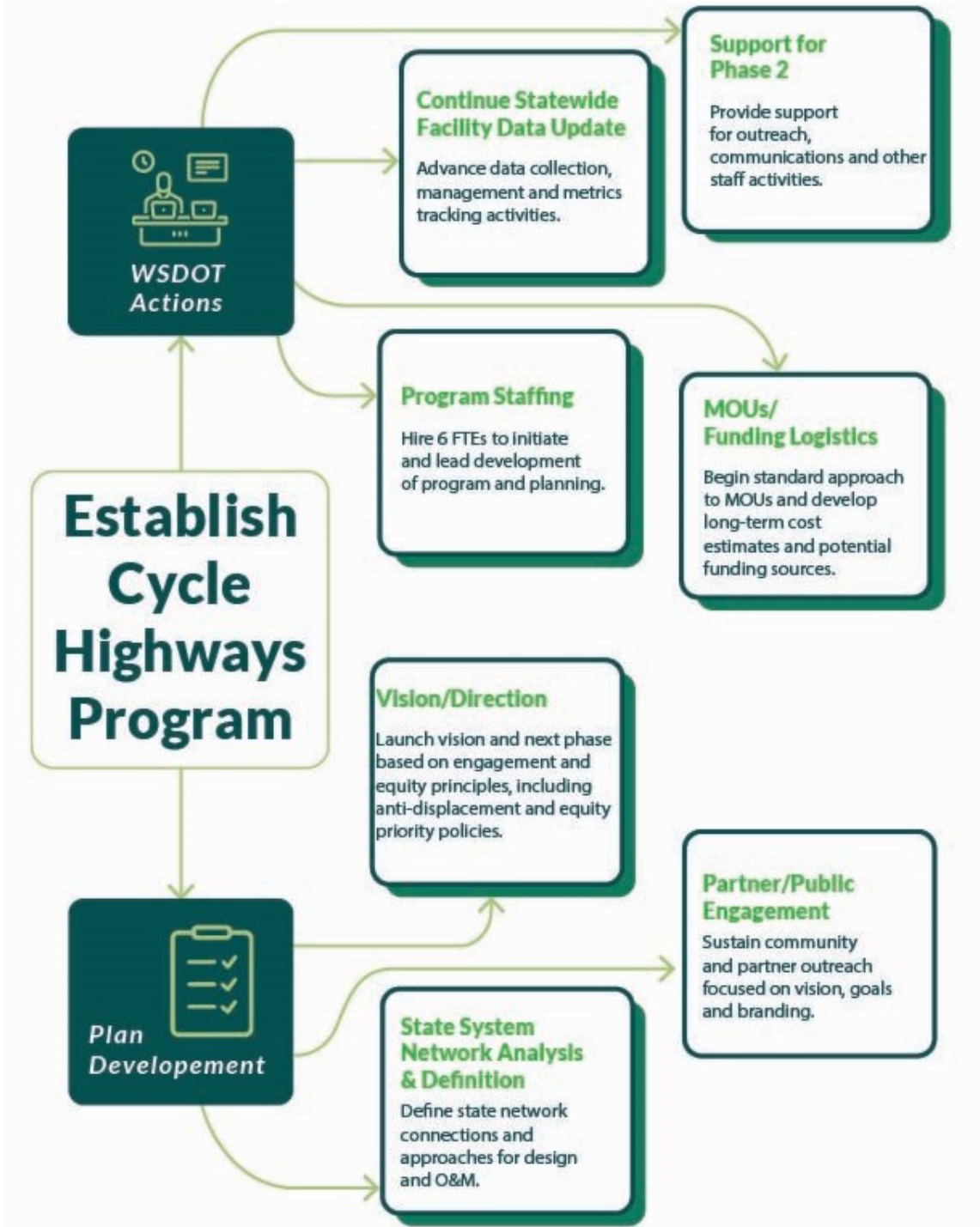


Figure 8: Cycle Highways, Phase 2 Action Steps
Created by: Toole Design Group

5

1 Figure 8 and Table 3 below detail the tasks that could be accomplished in Phase 2 of the Cycle
 2 Highways Program project, if funded. Actions include establishing and staffing a program,
 3 engaging partners and the public on vision and goals, advancing initial pilot projects, and
 4 beginning to develop technical guidance resources for network implementation and
 5 maintenance.¹⁸ Table 3 also includes the highest priority outcomes and work products to be
 6 completed by the end of Phase 2 of the Cycle Highways Program.

7
 8 The body of work in each phase relies on total capacity funded, including consultant support to
 9 maintain momentum while WSDOT recruits staff who will take on specific activities. This
 10 outline describes a ramp-up across two phases. Providing capacity below what’s described here
 11 would enable the program to get under way, but slow the trajectory and change the tasks and
 12 deliverables in each phase.

13
 14 As part of Action Plan development, WSDOT will also begin establishing performance measures
 15 and metrics that will be used to regularly monitor and report on progress towards the goals of
 16 the plan. Appendix C provides further information about estimated costs for each phase,
 17 assuming each phase is funded in a biennium.

18
 19 *Table 3: Cycle Highway Phase 2: Establish Cycle Highways Program and Complete Action Plan*

Actions	Details	Priority Outcomes
WSDOT Actions:		
Program Staffing (6 FTEs)	<ul style="list-style-type: none"> Hire 6 FTEs to initiate and lead development of a Cycle Highways Program and planning efforts. 	<ul style="list-style-type: none"> Program is operational and developing to produce outcomes below
Support for Phase 2	<ul style="list-style-type: none"> Support activities include: develop and initiate an organizational plan in consultation with partners; establish community advisory council(s); implement the framework for the program; lead pilot projects; initiate technical assistance; establish core policies, such as those associated with anti-displacement and housing; and manage the program long-term. 	<ul style="list-style-type: none"> Vision, core policies, and principles Program organizational plan Program framework Formation of community advisory council(s)
Continue Statewide Facility Data Update	<ul style="list-style-type: none"> Assemble statewide bicycle and shared-use infrastructure data for use in network gap identification and evaluation.¹⁹ 	<ul style="list-style-type: none"> Statewide bicycle and shared-use path infrastructure data

¹⁸ The graphic in Figure 8 does not show the pilot projects task, as that work would be funded and implemented outside of the Cycle Highways Program Phase 2 budget.

¹⁹ This effort is ongoing and within existing staff capacity.

Actions	Details	Priority Outcomes
MOUs / Funding Logistics	<ul style="list-style-type: none"> • Develop long-term cost estimates for administering, planning, and implementing the Cycle Highways Program, including operations and maintenance (O&M) of network facilities. • Identify potential funding sources and support needed for elements such as obtaining and managing federal grants. • Begin establishing a standard approach to developing MOUs between local jurisdictions on O&M, including identifying budget implications. 	<ul style="list-style-type: none"> • Long-term cost estimates • Identification of potential funding sources for projects • Establish basis for MOU approach
Pilot Projects / Technical Assistance	<ul style="list-style-type: none"> • Identify and develop pilot projects that can be completed in Phase 2, based on available data and planning opportunities. • Begin development of local technical guidance resources, such as design guidance, feasibility criteria, and data management standards. 	<ul style="list-style-type: none"> • Completion of initial pilot projects, within available funding
Outside Consultants:		
State Network Analysis and Definition, including Design and O&M	<ul style="list-style-type: none"> • Finalize vision, goals, and guiding principles for the Cycle Highways Program in coordination with project partners. • Building off of existing plans and approaches, operationalize assessment methodologies for network route identification and prioritization, including demand modelling, gap analysis, feasibility analysis methods, and prioritization criteria. • Define preliminary cycle highways network map to show priority connections, but not yet the exact route alignments. • Shape standard approaches for design and O&M of cycle highways network. 	<ul style="list-style-type: none"> • Program vision, goals, and guiding principles • Needs assessment • Preliminary cycle highways network map • Standard approaches for design and O&M

Actions	Details	Priority Outcomes
Partner / Public Engagement - Vision, Goals, Branding	<ul style="list-style-type: none"> • Conduct review of existing state, county, and local plans to identify existing planning and project implementation efforts that can be built upon for defining the cycle highways network. • Coordinate with WSDOT regions to identify Complete Streets and trail projects already planned or underway that can be incorporated into the cycle highways network, and/or that would benefit from program assistance with partner coordination. • Further develop and implement a community and partner engagement plan. • Continue outreach with public partners and advocacy groups, with a focus on honing messaging for the Cycle Highways Program to ensure buy-in and support for name and brand to be developed in this phase. • Create a branding and marketing strategy for promoting the program across the state, based on partner feedback. The branding and marketing strategy will inform wayfinding design and priorities in future stages. • Engage standing community advisory council to guide Action Plan development and initial project implementation. 	<ul style="list-style-type: none"> • Review and compilation of existing plans • Community and partner engagement plan and engagement plan implementation • Partner feedback on potential projects, data practices, and related ongoing efforts • Partner feedback on program vision, goals, and branding • Branding and marketing plan for cycle highways • Community advisory council(s) support

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Recommended Approach by Focus Area

This section provides a summary of the general components of planning, developing, and operating a statewide or regional active transportation network, based on the early engagement conversations, case studies, and best practices research. For each component, specific recommendations are provided for how these best practices should be applied to Washington’s Cycle Highways Program, if funded.



Figure 9: MN State Bikeway Network (2016)

Source: Minnesota Department of Transportation

Description: This map provides an example of how the MnDOT used the Bottom-Up Approach to plan their state bikeway network.

- 1 Two programmatic approaches for network development and management emerged from this
- 2 research:
- 3 • In the **Bottom-Up Approach**, the primary agency first identifies priorities for filling
- 4 critical gaps in a network, and then works collaboratively with member jurisdictions to
- 5 address the identified gaps. Using this approach for the Minnesota State Bikeway
- 6 Network, the Minnesota Department of Transportation (MnDOT) first identified routes
- 7 to connect priority destinations along the state highway system based on public
- 8 engagement and statewide analyses, then MnDOT district office engineers were
- 9 responsible for choosing the appropriate design for bicycle facilities. The Bottom-Up
- 10 Approach helps ensure that routes and facilities more closely meet the needs of the
- 11 communities they serve.
- 12 • In the **Top-Down Approach**, connections to key destinations are identified first and then
- 13 the primary agency takes the lead in planning and implementing new and upgraded
- 14 routes to connect those destinations. As an example, the Utah Trail Network (UTN) is
- 15 led by the state’s new Trails Division, which is guiding development of the UTN and
- 16 forthcoming strategic plan. This approach has also included significant engagement
- 17 across the state. The Top-Down Approach can allow development of a more cohesive
- 18 and consistent network, particularly across jurisdictional boundaries.

1 The key elements in network development include partner and public engagement, data
2 collection on existing conditions and existing local and regional plans, needs assessment and gap
3 analyses, route prioritization, project development, operations plan development, and operation
4 and maintenance of completed segments. Two key goals that emerge consistently for network
5 development are prioritizing closing critical gaps and completing the larger network.
6 Oftentimes, prioritizing closing critical gaps tends to be complicated and expensive compared to
7 prioritizing increasing the length of the network. Much of the “easy” trail mileage may already
8 be planned, constructed, or under way.

9
10 The evaluation of existing plans can be used to find projects that can be incorporated into the
11 cycle highways network because they meet (or could be adapted to meet) the established
12 facility standards. The review could also use the broader statewide perspective to help identify
13 individual projects that could be stitched into longer spinal corridors, similar to WSDOT’s recent
14 work on the spuyaləpabš Trail.

15
16 Equity should be emphasized throughout planning, implementing, and operating the Cycle
17 Highways Program. Equity and environmental justice needs, including accessibility and language
18 access, should be built into the process of conducting public and partner engagement; selecting
19 project prioritization criteria; planning network connections; designing facilities and signage;
20 ensuring adequate maintenance of facilities; mitigating potential concerns stemming from the



*Figure 10: Shared-Use Path in Elk Grove, CA
Source: Toole Design Group
Description: Shared-use facilities designed for all ages and abilities, such as the path shown here, help to ensure equitable access.*

1 program (i.e., gentrification and displacement concerns); and conducting outreach to potential
2 users.

3

4 **Developing a Cycle Highways Program**

5 *Recommendation*

6 If Phase 2 is funded, WSDOT will be best positioned to establish a Cycle Highways Program
7 with six new full-time employees, representing a range of program specific skills, such as
8 engineering, planning, contracting, and developing core policies, as detailed in Table 4 below.

9 This staffing level relies on ongoing capacity already provided by the Active Transportation
10 Division. This assessment is based on WSDOT’s recent experiences standing up new active
11 transportation programs that require extensive statewide coordination with local jurisdictions,
12 tribes, and other partners. Such programs sometimes involve establishing new practices and
13 new types of deliverables, which may require complex contracting and/or MOU development.

14

15 The proposed new WSDOT staff would initiate the program, develop an organizational plan,
16 construct the program framework, and lead engagement, research, and promotion efforts. The

17

18 *Table 4: Cycle Highways Program Staffing Recommendations*

19 Note: Table from “Appendix B: Program Staffing Recommendations”

Cycle Highways Statewide Leadership: Create a staffed program (6 FTEs) within WSDOT Active Transportation Division focused on the implementation of cycle highways across the state.

- **Statewide Direction and Implementation Leader** to lead program development and administration.
- **Design and Construction Expert** to provide technical expertise to aid partners and develop standards and guidance resources to support consistent and high-quality facility planning, design, and construction by all cycle highways partners.
- **Maintenance Expert** to provide technical expertise and develop standards and guidance resources for maintenance and operations, including maintenance agreements, equipment, and levels of service to support consistent and effective maintenance by all cycle highways partners.
- **Branding, Wayfinding, and Marketing Expert** to provide technical expertise and develop standards and guidance resources for signage and wayfinding, branding, and marketing to enable clear and consistent navigation and communication.
- **Funding Expert** to develop funding resource guidance and technical assistance for grant applications to help projects secure funding.
- **Equity and Collaboration Expert** to support partner convening and provide technical expertise and develop standards and guidance resources for effective and inclusive public engagement.

20

1 organizational plan will outline the structure, staffing roles, and goals for the new program, as
2 well as the path for how to achieve identified goals. As the team develops new guidance they
3 will serve as expert resources for partners.
4

5 Program staff will initiate and lead coordination with partners, manage data collection, oversee
6 consultants in the development of the Cycle Highways Action Plan Phase 2, initiate a technical
7 assistance program and community advisory council(s), and work with WSDOT Region staff to
8 embed cycle highways into long-range corridor plans where that meets the intent of the cycle
9 highways system plan. As the program grows, additional staffing may be required, especially at
10 the WSDOT Region Office level, to provide adequate support for ongoing program activities
11 and projects and to maintain continuity of the long-term plan across jurisdictional boundaries
12 and varied local and regional planning cycles. Staff will ultimately serve as regional cycle
13 network coordinators using a collective impact model, offering convening support, technical
14 assistance, and project prioritization specific to cycle highways.
15

16 Public and partner engagement will be vital throughout the process of developing and
17 implementing the Cycle Highways Action Plan. Dedicated program staff are needed to develop
18 and maintain constructive, trust-based relationships with local agencies, tribes, trail groups, and
19 other organizations throughout the state. Staff will also need to frequently coordinate with the
20 other state agencies that have a role in trail and bicycle and pedestrian facility development and
21 data collection.
22

23 *Identified Practices*

24 The Cycle Highways Program will enable partner groups to work together to reach active
25 transportation goals and strategically support the development of a cycle highways network
26 that will deliver the greatest benefit to all Washington residents. Establishing and operating an
27 effective program will require continuing support in the form of staff time and administration.
28 The body of work involved extends well beyond existing capacity within WSDOT and would
29 represent additional work for other partners, who will need centralized, expert assistance to
30 make their participation possible. Project case studies emphasized the importance of ongoing
31 funding and staffing to operate a successful program and facilitate a cohesive network that
32 achieves the stated vision.
33

34 *Engagement*

35 *Recommendation*

36 In Phase 2, WSDOT should engage early with regional and local partners to facilitate program
37 buy-in, improve understanding of local needs and practices, review existing plans, and identify
38 potential projects. Engagement and coordination with MPOs/RTPOs, tribal governments, and
39 regional advocacy groups will be essential to better understand local needs and demands,
40 develop relationships with jurisdictional partners, and build from local efforts to establish active
41 transportation networks, such as the Leafline Trails Coalition in the Puget Sound region. These
42 groups can provide vital assistance with local outreach efforts and promote the Cycle Highway
43 Program to local partners. Regional agencies could also help procure and steward local facility
44 and travel data that will be needed for planning, implementing, and maintaining the cycle
45 highway network.
46

- 1 Goals for engagement at this stage include:
- 2 • Informing agencies, tribal governments, and organizations of the Cycle Highways
 - 3 program.
 - 4 • Gathering feedback on program vision, goals, and objectives, which will provide the
 - 5 foundation for all subsequent tasks.
 - 6 • Gathering feedback on program branding.
 - 7 • Identifying opportunities for coordination and collaboration among MPOs/RTPOs,
 - 8 WSDOT Region Offices, and other partners.
 - 9 • Initiating conversations regarding local data, plans, and potential projects that will inform
 - 10 future phases.

11

12 Phase 2 will also establish a community advisory council to provide guidance and accountability.

13 This group will meet on a regular basis and will represent Washington residents with various

14 backgrounds. In developing the organizational plan, staff may determine that regional councils

15 may be helpful to tailor the system plan to local needs and opportunities.

16

17 *Identified Practices*

18 The review of case studies emphasized the importance of engaging with a broad range of

19 interested parties early and often. Engagement with advocacy organizations and other

20 organizations advancing active transportation networks should be far-reaching to leverage

21 understanding of priorities and past planning efforts, while also building buy-in across the state.

22 Engagement should also seek potential partners beyond those with self-defined interests in

23 active transportation, such as partners from tourism, public health, emergency response,

24 community-based organizations, transit agencies, other multimodal entities, and others that will

25 be identified during Phase 2. The Utah Trail Network has conducted workshops across the state

26 with agency partners, advocacy organizations, and others to help shape the program and build

27 early buy-in for the next stages. Similarly, the Minnesota State Bikeway Network incorporated

28 extensive public engagement with input from a broad range of voices to refine the selected

29 state network.

30

31 Developing the Cycle Highways Program will be a phased and long-term process; engagement

32 should similarly be an ongoing effort that builds on previous phases and stewards relationships.

33 For example, while early engagement efforts may focus on refining the definition for cycle

34 highways, later stages of engagement may address topics of facility design, promotion and

35 marketing, and network identification.

36

37 *Data Collection and Management*

38 *Recommendation*

39 In Phase 2, WSDOT will continue its existing partnership with RCO to contribute technical

40 support in maintaining data on shared-use paths, while also expanding the data collection effort

41 to include on-street bicycle facilities in local jurisdictions. Additionally, WSDOT will collect

42 state and local jurisdiction data on crossing infrastructure like bike signals, bike detection,

43 leading pedestrian/bicyclist intervals, rectangular rapid flashing beacons, and pedestrian hybrid

44 beacons. The facility database, combined with an ongoing stewardship plan, are necessary tools

45 for evaluating cycle highway consistency.

1
2 Additional coordination with efforts such as University of Washington’s Open Sidewalk project,
3 WSDOT’s internal mobile LIDAR project, and potentially with private data providers may also
4 support this task. It will be important for WSDOT to have oversight of data used to identify and
5 evaluate needs and projects and to work closely with regional and local partners on questions of
6 quality control and data stewardship. WSDOT recognizes that the capacity of different
7 jurisdictions to collect data varies, and direct support may be required in some cases in order to
8 effectively manage data for a cycle highways system.

9
10 This effort will align closely with engagement efforts, both relying on information about vision
11 and goals as well as initiating understanding of local data practices that can inform future
12 phases of the Cycle Highways Program.

13
14 *Identified Practices*

15 Available state active transportation facility data is neither comprehensive nor complete, though
16 existing staff efforts in the Active Transportation Division are improving data collection for both
17 state and local facilities. WSDOT has only partial information on the active transportation
18 facilities they own and manage, and far less information on facilities owned and managed by
19 partners. RCO and WSDOT have initiated plans to bring on- and off-street bicycle data together
20 from all jurisdictions to fully describe the statewide bicycle transportation network.

21
22 This information is critical for identifying gaps, opportunities, and network priorities in the next
23 stages of developing the cycle highways network. Additionally, a comprehensive data program
24 can facilitate performance tracking over time. Creating publicly available mapping resources can
25 also help increase awareness of the network and facilitate route planning and partner agency
26 coordination.

27
28 Examples from both Utah and Oregon rely on a centralized data collection effort led by the
29 state. The Utah Geospatial Resource Center hosts and maintains statewide data, including
30 bicycle and pedestrian infrastructure. They have made efforts to integrate locally or regionally
31 planned trail alignments in advance of the UTN Action Plan. The Oregon Department of
32 Transportation (ODOT) is currently compiling a comprehensive database of active
33 transportation infrastructure as part of the recent Climate Friendly and Equitable Communities
34 (CFEC) rulemaking to support performance tracking. This data will be made available to local
35 jurisdictions.

36
37 Phase 2 of the Washington Cycle Highways Program should integrate bicycle crossing
38 infrastructure to inform ongoing network planning opportunities. Data collection completed
39 throughout both Phase 2 and subsequent phases should also be made available to local
40 jurisdictions to support planning and implementation activities. Finally, program staff should
41 coordinate with partners to identify opportunities to collect and steward active transportation
42 user data and monitor performance over time.

1 Table 5: Network Planning Recommendations

Network Planning Stage	Identified Practices	Recommendation
<i>Needs Analysis</i>		
Demand Evaluation	<p>Conducting a demand analysis involves using data on existing infrastructure, land use and demographics to determine potential demand for active travel and help identify areas that should be connected.</p> <p>The focus is on locations or characteristics that either generate or attract active trips and can be adjusted based on context. Common factors include:</p> <ul style="list-style-type: none"> • Population density • Employment density • Retail and commercial density • Transit stops and intermodal connection proximity • Proximity to schools, parks, and other recreation • Convenient access to destinations or bike facilities • Percentage of nondrivers and households without access to a motor vehicle, particularly when associated with lack of access to frequent transit service. • Percentage of low-income households; if they own a vehicle, costs of ownership constitute a high proportion of household income and the opportunity to bike can help reduce that cost burden. <p>Conducting a demand analysis is a valuable way to increase the utility of the network by identifying links that have the highest potential to attract new users and support mode shift to active modes.</p>	<p>Build on the work completed as part of the state ATP and Active Transportation Decision Making Tools project²⁰, to inform initial demand assessment (refer to Figure 11).</p> <p>Modify inputs as needed based on information gathered during engagement and the program vision and goals.</p>

²⁰ The Active Transportation Decision Making Tools Project was an implementation step stemming from the state Active Transportation Plan work on level of traffic stress, and other metrics used to evaluate the transportation system from the perspective of people who walk and bike. The report was not published to the WSDOT website, but the work guided development of public datasets for level of traffic stress, route directness, and population centers. The report has additional recommendations for prioritization that are likely to inform future work efforts.

Network Planning Stage	Identified Practices	Recommendation
	<p>Consideration of rural context and transit access is important for identifying locations where nondrivers may be more reliant on active transportation. Pedestrian and bicycle count data can then be used to help monitor performance of the completed facilities over time.</p>	
<p>Level of Traffic Stress, Crossing Functional Characteristics, and Route Directness</p>	<p>These analyses provide an assessment of network quality, including information about traveling both along and across a roadway.</p> <ul style="list-style-type: none"> • Level of Traffic Stress is an assessment of safety factors and comfort along a roadway and guides Complete Streets project development. • Crossing functional characteristics are a set of factors to be optimized at intersections and other crossings to achieve Complete Streets objectives. • Route directness evaluation can help identify where crossing improvements could increase direct travel to destinations or across major barriers—essentially identifying and then eliminating out-of-direction detours imposed by lack of appropriate facilities and crossing opportunities. 	<p>Build on the work completed as part of the state ATP to understand current opportunities to leverage existing low-stress routes and identify potential pilot projects to reduce LTS in key connection gaps and to improve route directness. This data should be used in conjunction with the database developed through Phase 2 to better understand potential for cycle highway implementation.</p>
<p>Gap Analysis</p>	<p>A gap analysis is a method for identifying and displaying existing network gaps. These locations directly inform project opportunities and can help focus further assessment and planning. A gap analysis should be informed by information about existing and planned facilities, as well as the results of the demand, LTS, and route directness evaluations.</p>	<p>Build on the work completed as part of the state ATP and modifications completed in demand, LTS, and route directness analyses to identify focus areas or locations for further assessment and review. This will inform route identification.</p>
<p><i>Network Definition</i></p>		
<p>Preliminary Route Planning</p>	<p>Preliminary route planning refines route options and alternatives to establish a core</p>	<p>Building off multi-use routes already identified in</p>

Network Planning Stage	Identified Practices	Recommendation
	<p>network. The resulting network should aim to connect destinations, including activity centers, educational institutions, business districts and more. Connections to transit systems, such as buses, Amtrak, light rail, ferries, and even aviation are critical trip generators and attractors; these modes may also help address critical barriers, such as water crossings.</p> <p>Existing and planned routes at the local, county, and regional level should be the foundation of this work. Preliminary routes may also be informed by previous grant applications submitted to the Sandy Williams Connecting Communities, Safe Routes to School, and Pedestrian and Bicycle Program, and by WSDOT project locations where Complete Streets needs have been deferred.</p>	<p>the state ATP and local planning processes, the Cycle Highways Action Plan should involve a defined process for identifying routes between nearby population centers that offer the best opportunities for cycle highway development. Priority should also be given to routes that foster economic vitality and segments that serve other functions, such as emergency evacuation routes and other system resiliency/redundancy functions.</p> <p>Feedback from partner and public outreach can then help determine and refine the highest priority connections. Coordination with WSDOT Region Offices will further inform preliminary route planning.</p>

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Network Implementation

Recommendation

Phase 2 will identify cost estimates and potential funding and implementation mechanisms for advancing the cycle highways network. Through development of model MOUs and identification of funding strategies, this phase will establish the foundation for an ongoing, permanent Cycle Highways Program. Additionally, the Cycle Highways Action Plan will be a comprehensive strategic plan to identify and refine routes, establish contextual guidance, and prioritize projects for each geographic area of the state.

Project prioritization will identify phasing to guide funding and implementation decisions. The prioritization process will build on the methodology used for the ATP’s gap analysis assessment, which included analyses of safety, equity, and demand. Additional factors identified by WSDOT’s Active Transportation Decision Making Tools Project may be added to align with the Cycle Highways Program vision and goals. This strategic and comprehensive approach will also support the development of highly competitive applications for federal funds as part of the funding strategy; success in landing such grants will leverage state investments.

1
2 WSDOT should have the primary responsibility for developing projects within state ROW.
3 Program staff will work with WSDOT Region Offices to advance project development and
4 implementation, pending legislative approval of funding for design, construction, and
5 maintenance. Additionally, coordination with Region Offices will help align identified projects
6 with Complete Streets project needs.
7

8 Project Funding

9 For funding Cycle Highways Program projects, those within the state ROW may be funded
10 through a combination of dedicated state funding per biennium and grants from various federal
11 and state programs (if awarded), as well as inclusion of trail projects in some locations as the
12 best way to deliver a Complete Streets project, if funded.
13

14 It is important to note that delivery of trail segments as Complete Streets will be helpful to long-
15 term completion of the network. However, WSDOT preservation projects are grounded in an
16 assessment of the condition of existing assets; they do not begin by prioritizing the need to
17 complete and connect active transportation facilities. The Cycle Highways Program approach
18 will provide a plan that can be overlaid with preservation and safety priority lists to leverage
19 existing funding and project opportunities where possible. Having such an approach may also
20 increase the competitiveness of state and federal grant applications that support needed
21 preservation activities along with cycle highways implementation.
22

23 The legislature could choose to establish dedicated funding for cycle highways projects. This
24 can be accomplished by providing a line item under the Pedestrian and Bicyclist Program (PBP),
25 similar to the approach already in place for the Active Transportation Assistance Program
26 under the PBP and the Safe Routes to School program. This approach enables program staff to
27 identify and prioritize projects and advance them throughout the biennium, which will maintain
28 momentum and enable strategic use of state funds to leverage other funding sources and
29 projects. These projects and others constructed as part of delivering Complete Streets would
30 be reported annually, parallel with other grant programs.
31

32 When the initial conceptual plan has been established and local and regional plans are being
33 updated to include projects that contribute to the statewide vision, projects being proposed for
34 any competitive program managed by WSDOT or another state or federal agency can be
35 identified as contributing to the network. This should increase their competitiveness for such
36 funds.
37

38 WSDOT does not currently have maintenance and operations funding dedicated to trails and
39 other active transportation facilities. For the full network to function as it should, maintenance
40 of both state and local segments will need to be considered and addressed. WSDOT is
41 currently conducting research on active transportation facilities maintenance needs as an
42 element of its Complete Streets work. The state ATP included an estimate of maintenance
43 costs for closing gaps on the state system; that number is not transferable to the cycle
44 highways concept and more research will be needed to develop estimates.
45

1 The question of maintenance lies beyond the scope of this first report. Maintenance costs will
2 be identified and included in future program operational plans for legislative consideration to
3 ensure stewardship of new facilities added to the system. In order for a Cycle Highways
4 Program to be successful, users should experience the same level of maintenance across the
5 system. In some cases, this will mean direct support will be needed for agencies that lack the
6 capacity to provide those services, as further detailed in the following section.
7

8 Pilot Projects

9 Prior to full plan development, with legislative approval and funding, WSDOT should develop
10 initial pilot projects identified with currently available data and adopted active transportation
11 plans. Priority should be given to shovel-ready projects that fit the cycle highways working
12 definition and that could be advanced in the near term, respond to immediate transportation
13 needs, and realize quick wins. The focus will be on projects that fill critical gaps, resulting in as
14 much total connected mileage as possible. Pilot projects will help encourage further network
15 development by demonstrating the benefits of cycle highways and engaging local communities
16 in the planning process.
17

18 Pilot projects could include:

- 19 • New bicycle facilities meeting cycle highways criteria.
- 20 • Incremental improvements to existing facilities, such as paving, pavement markings,
21 and/or amenities.
- 22 • Adding or improving crossings that enable or improve access from local networks to
23 cycle highways or future cycle highways.
24

25 Identified Practices

26 Other states have implemented their statewide and regional bicycle and shared-use networks in
27 a variety of ways. In addition to establishing priority networks and funding strategies, technical
28 guidance in the form of design guidelines and design toolkits helps advance a cohesive vision.
29 Examples include the [MnDOT Bicycle Facility Design Manual \(2020\)](#) for district engineers
30 implementing the Minnesota State Bikeway Network, as well as the [San Francisco Bay Trail](#)
31 [Design Guidelines and Toolkit \(2016\)](#), which guides the San Francisco Bay Trail network.
32



Figure 12: Shared-Use Path in Minneapolis, MN
Source: Toole Design Group

- 1 The case studies showed that agencies use a variety of public and private funding sources for
2 developing their state and regional networks. State agencies like UDOT and MnDOT can use
3 dedicated state funding streams to make investments, as well as federal funding sources:
4
- 5 • MnDOT has general guidance to allocate about 30 percent of funding to projects within
6 the State Bicycle Network corridors and 70 percent of funding to local bicycle routes
7 that connect to state routes. The Minnesota State Highway Investment Plan: 2023-2042
8 identifies \$316 million for maintenance and expansion of the state network.
9
 - 10 • The Utah Legislature allocated \$45 million in annual, ongoing funding from the
11 Transportation Investment Fund (TIF) for planning, design, construction, maintenance,
12 reconstruction, or renovation of paved trail projects. An additional \$45 million one-time
13 investment was made to catalyze the Utah Trail Network process. UDOT worked with
14 local agencies to identify an initial list of projects that met the program’s guiding
15 principles. UDOT plans to construct and operate all trails on the Utah Trail Network.
16
- 17 Regional networks are implemented using a combination of state, federal, local, and private
18 grants. As a regional example, Circuit Trails projects in Pennsylvania have been built with federal
19 formula funds and the Delaware Valley Regional Planning Commission’s Regional Trail Program,
20 among other local and state sources. In 2024, several large, county-led Circuit Trail projects



Figure 13: Vancouver Bicycle Club Clean-up

Source: WSDOT

Description: This image depicts the Vancouver Bicycle Club's clean-up of the I-205 Path in Vancouver, WA in 2020. Though WSDOT leads planning and construction of many trails, maintenance may be directed by other entities, such as volunteer groups.

1 received more than \$50 million in funds from the Carbon Reduction Program (CRP), a new
2 federal formula program.

3

4 **Operations and Maintenance**

5 *Recommendation*

6 In Phase 2, WSDOT should review existing operations and maintenance processes and revise
7 approaches to provide a consistent approach for cycle highways routes. Development of design
8 standards will need to occur in tandem with development of operations and maintenance
9 procedures, given that material selection, facility dimensions, and other design-related factors
10 influence overall maintenance costs and strategies (and vice versa). Comprehensive standards
11 for a state of good repair for paths, and an operations strategy for auditing facility conditions
12 and tracking maintenance needs across the cycle highways network should be developed.

13

14 WSDOT should also work with local partners to develop MOUs for partnerships between local
15 jurisdictions and the state for O&M, including identifying budget implications. Brokering
16 agreements across jurisdictional boundaries would help ensure coordinated maintenance so that
17 cycle highways can meet consistent quality standards for users as they travel across regions.

1 The City Streets as State Highways agreement defines local agency and WSDOT operations and
2 maintenance responsibilities within jurisdictions.²¹ However, this 2013 agreement focused on
3 municipalities and does not refer to county population centers. Also, the current agreement
4 does not always provide the necessary clarity, and both WSDOT and local agencies are
5 challenged to fulfill their responsibilities due to lack of capacity and resources. The creation of a
6 Cycle Highways Program would highlight the need for updates to the agreement to address
7 active transportation. Proactive planning for operations and maintenance responsibilities is an
8 important component of a successful Cycle Highways Program, including the provision of
9 adequate funding for maintenance needs and establishment of consistent maintenance
10 schedules.

11

12 *Identified Practices*

13 WSDOT currently owns and performs operations and maintenance for approximately 38 miles
14 of shared-use paths that connect to regional systems. Many additional trails that exist in
15 WSDOT ROW are managed by other jurisdictions under a variety of agreement types. WSDOT
16 performs maintenance on state-owned shared-use paths in response to constituent requests;
17 this does not provide a systematic process, such as pavement management systems often
18 provide for roadway networks.

19

20 The Utah Trail Network Strategic Plan is expected to include information on maintenance
21 practices and schedules, as well as to incorporate maintenance considerations in the
22 development of design standards and materials selection. This was identified as a key focus area
23 to make sure that the developed network remains usable, while also better understanding long-
24 term program needs and how ongoing funding should be allocated over time.

25

26 **Future Cycle Highways Phases and Ongoing Program Actions**

27 Phase 2 would include establishment of a Cycle Highway Program, completion of the Cycle
28 Highway Action Plan, and identification of planning and operations tasks that will form the
29 foundation of a permanent program. A subsequent Phase 3 will prioritize the Cycle Highway
30 Action Plan and revise program strategies based on lessons learned from the pilot projects. This
31 phase will also set up the Cycle Highway Program to move into ongoing program
32 administration. More detail about the actions associated with each of these phases is
33 summarized in Appendices B and C.

34

35

36

²¹ From the City Streets as Part of State Highways Agreement Reached by the Washington State Department of Transportation and the Association of Washington Cities, "City streets as part of state highways guidelines are primarily intended for city streets designated as state highways . . . The jurisdiction, control, and duty of the state and city or town for city streets that are a part of state highways is specified in RCW 47.24.020." (Washington State, April 2, 2013). <https://wsdot.wa.gov/publications/fulltext/design/DevelopmentServices/DevelopmentServices-StateHighwaysasCityStreetsGuidelines.pdf>



Figure 14: Existing and Concept U.S. Bicycle Routes in WA
 Source: WSDOT Active Transportation Division

Emerging Opportunities

There are multiple opportunities to increase or leverage the pool of existing state and local resources for planning and implementing the cycle highways network. As previously discussed, existing resources include the WA State Trails Database (stewarded by the RCO), state Active Transportation Plan, Active Transportation Programs Design Guide, WSDOT Design Manual, and AASHTO Guide for the Development of Bicycle Facilities. For funding, there are several state and federal funding opportunities for planning and constructing active transportation facilities, as detailed in Appendix E.

At the regional level, the state’s MPOS and RTPOs can be particularly useful as resources for collecting and organizing transportation, demographic, and land use data. Regional organizations can also help convene local agencies to develop the shared cycle highways network plan. As one example, the Walla Walla Valley MPO brought more than 30 local, regional, state and federal entities together to develop the Blue Mountain Region Trails Plan, a regionwide trail and transportation network.²² For an example of data collection at the regional level, in 2020 the Puget Sound Regional Council (PSRC) worked with its jurisdictional partners to gather local

²² Walla Walla Valley Metropolitan Planning Organization. (2018, January). [Blue Mountain Regional Trails Plan](#).

1 datasets and create its first comprehensive inventory of regional shared-use paths and bicycle
2 and sidewalk facilities on arterial roads in the region.

3

4 For efforts at the national level, the United States Bicycle Route System is a national network of
5 numbered and signed bicycle routes.²³ It was developed in consultation with regional partners
6 and approved by states and AASHTO. Figure 14 shows a map of existing Washington USBRS
7 routes and conceptual corridors. For the state ATP, WSDOT used proposed USBRS alignments
8 to help identify trail routes that could provide links between population centers. That data was
9 used in conjunction with existing and conceptual statewide trails data to develop an early
10 concept of a connected statewide trail network.

11

12 The "Great American Rail-Trail", a project of the Rails-to-Trails Conservancy, represents another
13 current national initiative to link the country for bicycle travel.²⁴ The Rails-to-Trails Conservancy
14 is promoting a cross-country rail-trail of over 3,700 miles from Washington, D.C., to
15 Washington state's western shoreline. In Washington, it would include the Palouse to Cascades
16 Trail, Mountains to Sound Greenway, Olympic Discovery Trail, the planned Sound to Olympics
17 Trail in Kitsap County, and other connections needed to reach to the Pacific Ocean. Portions of
18 the conceptual statewide connector trails routes are aligned with the western segment and
19 terminus of the "Great American Rail-Trail."

20

²³Adventure Cycling Association. [U.S. Bicycle Route System webpage](#).

²⁴ Rails-to-Trails Conservancy. [Great American Rail-Trail webpage](#).

1 NEXT STEPS

2
3 The most immediate next step for developing the Cycle Highways Program is to provide the
4 staffing and other resources needed to establish the program, complete the Action Plan, and
5 develop the pilot projects that will showcase what an ongoing program will deliver for
6 Washington State. Program initiation activities would include continued engagement, finalizing
7 the program goals and vision, and collecting and updating data that will be used to complete the
8 larger Action Plan. Staff would concurrently work to identify and implement pilot projects that
9 fit the cycle highways working definition and that could be advanced in the near term when
10 funding is available.

11
12 An additional important step will be to examine existing RCWs, WACs, and funding program
13 criteria to see if there are any legal and administrative barriers to building and maintaining the
14 cycle highways network. Some of these efforts are already under way; WSDOT Active
15 Transportation Division staff, in consultation with the Washington Attorney General's Office,
16 have provided information to the legislature on technical fixes to several sections of RCW 47.04
17 that would address likely unintended barriers to trail construction and align the trail statutes
18 with the Complete Streets requirement. More information about review and revisions is
19 included in Appendix F.

20
21 The cycle highways network has the potential to be a robust transportation asset that advances
22 broader state goals for sustainable development, greenhouse gas reduction, economic
23 development, health, equity, and access to opportunity for the residents of our state. This work
24 will help optimize scarce resources, engage and involve partners and members of the public, and
25 establish consistent technical standards, legal and funding requirements, and expectations for
26 active travel between population centers.
27

APPENDIX A: Legislative Proviso for Preliminary Phase

(5)(a) \$200,000 of the multimodal transportation account—state appropriation is provided solely for the department to develop the preliminary phase of an action plan for the establishment of cycle highways in locations that connect population centers and support mode shift.

(b) The action plan may complement and incorporate existing resources, including the state trails database maintained by the Recreation and Conservation Office, local and regional plans, and the state active transportation plan.

(c) The action plan may also include, but is not limited to:

(i) Recommended design; geometric and operational criteria and typologies appropriate to urban, suburban, and rural settings; settings that include shared use; and incremental approaches to achieve desired facility types;

(ii) A model or methodology to project potential demand and carrying capacity based on facility quality, level of traffic stress, location, directness, land use, and other key attributes;

(iii) Examination of the feasibility of developing high-capacity infrastructure for bicycle and micromobility device use within a variety of contexts and recommendations for pilot projects;

(iv) Identification of key gaps in regional networks, including planned and aspirational routes and locations within three miles of high-capacity transit or existing shared-use paths and trails suitable for transportation;

(v) Identification of legal, regulatory, financial, collaboration, and practical barriers to development and community acceptance and support of such facilities; and

(vi) Recommended strategies to consider and address issues to avoid unintended consequences such as displacement, and to ensure equity in long-term development of such facilities.

(d) The department must provide a report with its initial findings, and recommendations for next steps, to the transportation committees of the legislature by June 30, 2025.

APPENDIX B: Program Staffing Recommendations

Table 6 shows information on program staffing and organizational recommendations. The recommendation for six (6) FTEs is based on the need to have dedicated, long-term staff who both lead day-to-day program operations as well as develop broad technical expertise on network planning and implementation.

This program will function as a “backbone” organization that supports and amplifies local network development efforts and catalyzes them where they don’t exist. This model will allow the program to have a collective impact on networks throughout Washington State, similar to planning assistance provided by the National Park Service and current regional trail network groups, such as the Leafline Trails Coalition and Blue Mountain Trails Plan. Program staff would be able to develop close relationships with local partners through frequent collaboration, allowing for creative problem solving on projects and the ability to leverage a wider range of partnership and funding opportunities.

Specific roles and responsibilities will be further identified in the planning phase and through engagement.

Table 6: Cycle Highways Program Staffing Recommendations

Cycle Highways Statewide Leadership: Create a staffed program (6 FTEs) within WSDOT Active Transportation Division focused on the implementation of cycle highways across the state.

- **Statewide Direction and Implementation Leader** to lead program development and administration.
- **Design and Construction Expert** to provide technical expertise and develop standards and guidance resources for facility planning, design, and construction.
- **Maintenance Expert** to provide technical expertise and develop standards and guidance resources for maintenance and operations, including maintenance agreements, equipment, and levels of service.
- **Branding, Wayfinding, and Marketing Expert** to provide technical expertise and develop standards and guidance resources for signage and wayfinding, branding, and marketing.
- **Funding Expert** to develop funding resource guidance and technical assistance for grant applications to help projects secure funding.
- **Equity and Collaboration Expert** to support partner convening and provide technical expertise and develop standards and guidance resources for public engagement.

APPENDIX C: Action Program - Scope, Timeline, and Associated Budget

Table 7 summarizes cost estimates for the action steps identified in this report. Estimates are based on a set of assumptions and information from past and current WSDOT programs and similar programs in peer states. These assumptions helped identify the amounts required to initiate and sustain the program. Refer to “Phase 2: Establish Program and Kick-off Plan Development” on P. 29 for more detailed information on the intended tasks and expected outcomes of Phase 2.

This program would be established within WSDOT’s Active Transportation Division, rather than as a separate division. The program would run in parallel with the established grant and technical assistance programs (Pedestrian and Bicyclist Program, Safe Routes to School, Active Transportation Assistance Program, Sandy Williams Connecting Communities) and Complete Streets programs. The Cycle Highways Program would build from and complement these programs by providing a full network vision and criteria, identifying priority routes that meet those criteria, and helping both WSDOT and local jurisdictions develop projects to fill identified network needs and gaps based on the highest needs for active transportation.

Phase 2 of the Cycle Highways Action Plan would initially need the resources of transportation consulting firms with experience in multimodal planning, engineering, and community engagement to continue progress while the ATD defines position descriptions, recruits, hires, and onboards program staff. Funding for pilot projects can be set at any level. The figure of \$20 million used here represents approximately 5-10 projects, depending on the complexity of the projects.

Table 7: Phases 2 and 3 Actions and Estimated Costs (calculated per biennium)

ACTIONS	ESTIMATED COSTS
PHASE 2: Establish Cycle Highways Program & Kick-off Plan Dev.	
WSDOT Staff:	
Program Staffing (6 FTEs)	\$1,920,000
Action Plan Support for Phase 2 staff activities, e.g. outreach, communications	\$500,000
MOUs / Funding Logistics	N/A
Statewide Data Facility Data Update - Bike/Shared-Use ²⁵	N/A
Outside Consultants (Complete Action Plan Development):	
State Network Analysis and Definition (including Design and O&M)	\$500,000
Partner and Public Engagement - Vision, Goals, Branding	\$350,000
PHASE 2 TOTAL COSTS—STAFFING AND SUPPORT	\$2,770,000
Project Development	
Pilot Projects / Technical Assistance (<i>costs not included in total</i>)	\$20,000,000

²⁵ Statewide data collection and network analysis are already under way. Ongoing work to complete and steward the dataset relies on existing staffing in the Active Transportation Division.

PHASE 3: Develop and Implement Prioritized Work Plan	
WSDOT Staff:	
Program Administration—initial staffing level	\$1,920,000
Program Administration—additional staffing need	TBD
Support for Phase 3 staff activities	\$1,000,000
Data Collection and Management	TBD
Outside Consultants (Prioritized Work Plan Development):	
Partner / Public Engagement on Prioritization	TBD
Network Prioritization	TBD
PHASE 3 TOTAL COSTS—STAFFING AND SUPPORT	
Project Development, Delivery, and Operations	
Capital Projects	TBD
Facility O&M	TBD

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APPENDIX D: Future Program Phases

Table 8 details the tasks that will be accomplished in Phase 3 of the Cycle Highways Program. These tasks will build on and continue the efforts from Phase 2 of the program, including continued engagement, ongoing refinement of the Action Plan as a living and evolving plan, continued development of technical guidance resources, data collection and stewardship, and completion of additional projects.

Phase 3 adds the ongoing tasks of a fully implemented Cycle Highways Program, including implementation and coordination for projects within and outside of state ROWs, collecting and managing data, maintaining state assets, and establishing systems to support coordinated approaches to maintenance and operations of all cycle highways assets, with evaluation and updates to all processes as needed. This strategic and comprehensive planning approach will also support the development of highly competitive applications for federal funds as part of the funding strategy; success in landing such grants will leverage state and local investments.

Table 8: Cycle Highway Program - Phase 3 Action Steps

ACTIONS	DETAILS
Program Administration	<ul style="list-style-type: none"> Continued staffing to administer Cycle Highways Program and lead development of Action Plan.
Data Collection and Management	<ul style="list-style-type: none"> Continue stewarding and coordinating active transportation database, including statewide inventories of on-street bicycle and shared-use facilities.
Projects / Technical Assistance	<ul style="list-style-type: none"> Identify and develop projects based on available data and planning opportunities. Complete development of local technical guidance resources, such as design guidance, feasibility criteria and data collection standards.
Facility O&M	<ul style="list-style-type: none"> Continue to operate and maintain WSDOT-owned cycle highways facilities.
Partner / Public Engagement on Prioritization	<ul style="list-style-type: none"> Collaborate with state and regional partners and member jurisdictions for feedback on alignment within their jurisdictions, and to ensure buy-in and support for priorities and route destinations and connections.

ACTIONS	DETAILS
Network Prioritization, Project Identification and Initial Scope	<ul style="list-style-type: none"> • Refine comprehensive state network plan with conceptual routes, contextual guidance, and prioritized projects for each geographic area of the state. • Further Cycle Highways Action Plan based on program vision and goals, including the above elements, branding and marketing strategies, and long-term planning for network implementation and O&M.
State ROW	<ul style="list-style-type: none"> • <i>Work with WSDOT Region Offices to prioritize and begin implementation of projects within the state ROW within available funding.</i>
Non-State ROW	<ul style="list-style-type: none"> • <i>Coordinate and convene local partners and agencies as they work to build out the cycle highway network within their jurisdictions.</i> • <i>Provide state funding if appropriated and/or other forms of technical assistance and project implementation support.</i>

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Priority outcomes

The following are the most highly prioritized outcomes and work products to be completed by the end of the first phases of the Cycle Highways Program:

- Communicate the cycle highways vision to partners statewide and engage them in long-range planning
- Complete additional pilot projects and evaluate initial pilot projects
- Complete technical guidance resources
- Prioritize routes in Cycle Highways Action Plan, including identification of prioritized projects for each region of the state
- Complete cost estimates for identified projects and a preliminary estimate for the network
- Develop estimates for maintenance and operations
- Begin implementation and coordination for state ROW and non-state ROW projects

Ongoing Program Actions

Table 9 details the tasks that will be accomplished on an ongoing basis. The development of a shared vision and planning, ROW acquisition, and project funding all have long time horizons. It is therefore essential for the cycle highways program to have sufficient dedicated funding and staff tasked with working towards this long-term vision for the network, rather than the funding being tied to individual projects.

1 *Table 9: Cycle Highway Program - Ongoing Program Action Steps*

ACTIONS	DETAILS
Program Administration	Continued staffing and funding.
Plan Updates	Periodic minor and major updates to planning resources.
Data Stewardship and Coordination	Continued stewardship of available infrastructure data; coordination for ongoing collection of statewide data relevant to the program.
Technical Assistance	Technical assistance and other support for regional and local implementation of cycle highways network.
Network Maintenance and Operations	Continuous maintenance and operation of state-owned cycle highways facilities; coordination with other facilities owners for consistent maintenance and operations.
Partner Coordination	Continued outreach and coordination with public partners, tribes, and advocacy groups, including standing advisory group(s).
Plan Updates	Periodic minor and major updates to planning resources.
Project Development	
<i>State ROW (Project Implementation)</i>	Ongoing planning and implementation of priority cycle highways projects within state-owned ROWs.
<i>Non-state ROW (Partner Coordination)</i>	Ongoing convening and coordination for local implementation of bicycle, shared-use, and pedestrian projects along or connecting to the cycle highways network.
Technical Guidance Resource Development	Updates and development of additional technical guidance resources for guiding state and local network planning implementation and maintenance, such as design guidance, feasibility criteria and data collection standards.

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APPENDIX E: Funding Sources Review

The following table provides information on key federal and state funding sources which may be used for planning, designing and constructing cycle highways facilities. The federal funding sources are distributed by state agencies, MPOs/RTPOs, or federal agencies, while state funding sources are distributed through state agencies. For each grant program, funding levels, grant sizes, and match requirements are subject to change in each funding cycle; applicants should consult the program pages for current information.

In addition to those listed here, there are multiple other federal, tribal, local, and private funding sources which could potentially be used to implement cycle highways facilities, as further detailed in Appendix J of the state Active Transportation Plan.

This table includes federal and state funding sources. A variety of local tax and fee sources are available to local governments. The Transportation Efficient Communities website maintained by WSDOT, Department of Commerce, and Department of Health includes [a list](#).

Table 10: Potential Funding Sources

NAME	DESCRIPTION	CYCLE HIGHWAY ELIGIBILITY
FEDERAL FUNDING		
<u>Community Development Block Grant (CDBG) – General Purpose Program</u>	The CDBG program provides grant funds that foster a more livable urban environment, particularly for low- and moderate-income residents. Administered by the U.S. Department of Housing and Urban Development, the funds are flexible in order to allow communities tools to respond to their unique needs. Eligible projects include infrastructure improvements and economic development initiatives.	CDBG may be a source of funding for cycle highways if used to build bike lanes as part of larger street projects.

NAME	DESCRIPTION	CYCLE HIGHWAY ELIGIBILITY
<p><u>Congestion Mitigation and Air Quality Improvement Program (CMAQ)</u></p>	<p>CMAQ provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act in specific locations.</p>	<p>CMAQ funds must be invested in areas that do not meet the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, and particulate matter. Trails and on-road bicycle and pedestrian facilities are eligible for CMAQ funding if they are principally for transportation rather than recreational use and can be shown to reduce vehicle trips. Projects to maintain or replace current facilities are therefore ineligible as they would not further reduce vehicle trips.</p>
<p><u>FHWA Pedestrian and Bicycle Funding Opportunities</u></p>	<p>FHWA provides numerous opportunities to fund bicycle-related improvements under surface transportation funding programs.</p>	<p>Eligible funding opportunities include bicycle lanes on roads, emergency and evacuation routes for cyclists, paved shoulders, recreational trails, and shared-use path / transportation trails. Multiple safety programs and initiatives are also funded. Cycle highways have a nexus with FHWA funding when constructing transportation trails for cyclists. FHWA also supports programs that fund bicycle facilities as part of a larger project. Safety, accessibility, and equity are also noted as important for FHWA.</p>
<p><u>Federal Lands Access Program (FLAP)</u></p>	<p>This program helps improve access to federal lands. The program focuses on public highways, roads, bridges, trails, and transit systems.</p>	<p>Program permits construction of provisions for cyclists. Improvements must be located on, adjacent to, or provide access to federal lands. Improving safety and providing access to federal high-use recreation sites or economic generators are two project selection criteria. Cycle highways that connect to federal lands will align with program framework.</p>

NAME	DESCRIPTION	CYCLE HIGHWAY ELIGIBILITY
<p><u>Highway Safety Improvement Program (HSIP)</u></p>	<p>The Highway Safety Improvement Program goal is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. WSDOT’s programs for local governments include the City Safety program, the County Safety program, and the Railway- Highway Crossing program. Combined, these programs include a percentage for high-risk rural roadways and a portion of funding for the Safe Routes to School program. In addition to the funds for local agencies, a percentage of HSIP funds are allocated to WSDOT for spending on state highway improvements. Under the Infrastructure Investment and Jobs Act Washington is currently required to spend 15% of HSIP funds on bicyclist and pedestrian improvements because more than 15% of traffic fatalities in the state are pedestrians and bicyclists.</p>	<p>Cycle highways may align with HSIP's goal of significantly reducing fatalities and serious injuries if cycle highway facilities increase safety, reduce identified safety problems, and receive recurring evaluation to ensure strategy effectiveness. Both programs also utilize the Safe System approach. Cycle highways projects would need to be identified in local safety plans to be eligible for HSIP funding directed to local agencies.</p>
<p><u>Land and Water Conservation Fund (LWCF)</u></p>	<p>The Land and Water Conservation Fund provides grants to buy property for trails and/or develop public recreation trails. Trails funded in LWCF should provide adequate separation from roadways. In Washington state, the program funds are administered by RCO.</p>	<p>Some grants within LWCF, such as the National Park Service State and Local Assistance Programs, fund recreational facilities such as trails. Cycle highways might align if the trail projects are submitted through the lens of recreation.</p>

NAME	DESCRIPTION	CYCLE HIGHWAY ELIGIBILITY
<u>Recreational Trails Program</u>	The fund is designed to rehabilitate and maintain trails that provide a backcountry experience, including trails for bicycling. Eligible projects include development of trailside facilities, trailheads, and trail links for recreational trails; maintenance and restoration of trails, trailside facilities, and trailheads; and programs to directly convey a safety or environmental protection message for recreational trails. In Washington state, the recreational trails funds are administered by RCO.	Cycle highways may have nexus with this funding source if applying through a recreational lens. One of the few programs that can fund trail maintenance projects.
<u>Surface Transportation Block Grant (STBG)</u>	The federal Surface Transportation Block Grant program is the most flexible of all the federal transportation programs and provides the most financial support to local agencies. Types of eligible projects include highway and bridge construction and repair; transit capital projects; and bicycle and pedestrian projects.	Bicycle projects under 23 USC 217 which are for transportation use are eligible under STBG. STBG also uses the Safe System approach. Cycle highways' focus on bicycle transportation projects and the Safe System approach aligns the program with STBG funding.
<u>Transportation Alternatives (TA)</u>	The Federal Transportation Alternatives Set-Aside provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and improved mobility, community improvement activities and environmental remediation; recreational trail program projects; and safe routes to school projects.	The TA set-aside provides funding for bicycle and pedestrian facilities, including on-road and off-road trail facilities, sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure. TA funds can also be used for conversion of abandoned railroad corridors into trails, as well as any projects eligible under the SRTS or RTP. TA funds cannot be used for routine maintenance and operations, except trail maintenance and restoration as permitted under the RTP.

NAME	DESCRIPTION	CYCLE HIGHWAY ELIGIBILITY
STATE FUNDING		
<u>Pedestrian and Bicycle Program</u>	The purpose of the Pedestrian and Bicycle Program administered by WSDOT ATD is to improve the transportation system to enhance safety, mobility, and comfort for people who choose to walk or bike.	The Program uses LTS to evaluate the performance of bicycle facilities as well as equity and safety criteria. Cycle Highways will use LTS in its methodology for potential demand. Cycle highways will improve safety, mobility, and comfort for people riding bicycles.
<u>Public Works Board Traditional Financing</u>	This program provides low-interest loans for public infrastructure construction and rehabilitation. Eligible projects must improve public health and safety, respond to environmental issues, promote economic development, upgrade system performance, or other evaluation criteria. Eligible projects include repairing, replacing, or creating roads, streets, and bridges.	This program may be a source of funding for cycle highways if used to build active transportation facilities as part of larger road or bridge projects. Eligible applicant agencies include cities, counties, special purpose districts, and quasi-municipal organizations.
<u>RCO Grant - Outdoor Recreation Legacy Partnership</u>	This grant fund is designed to help urban communities with 30,000 or more people to create or reinvigorate public parks and other outdoor recreation spaces. Typical projects include building skate parks, swimming pools, and trails.	Cycle highways may have nexus with this funding source if applying through a recreational lens.
<u>RCO Grant - Recreation Projects - Washington Wildlife and Recreation Program</u>	The program provides funding for a broad range of land protection and outdoor recreation, including local and state parks, trails, water access, and the conservation and restoration of state land. The development of trails on state lands is eligible.	Grant opportunities must be recreation based. Transportation based uses are not specifically mentioned as eligible. A funding nexus may exist with cycle highways if accompanied by a recreational lens.

NAME	DESCRIPTION	CYCLE HIGHWAY ELIGIBILITY
<u>Safe Routes to School</u>	The purpose of the Safe Routes to School Program administered by WSDOT ATD is to improve safety and mobility for children by enabling and encouraging them to walk and bicycle to school. Funding from this program is for projects within two miles of primary, middle and high schools (K-12). Funded by both federal and state funds.	Cycle highways projects will be eligible for SRTS funding if located within the required school proximity. SRTS incorporates LTS and equity in its review criteria, which align with the Cycle Highways Action Plan.
<u>TIB Complete Streets Program</u>	The Complete Streets Program Award is a funding opportunity for local governments that have an adopted complete streets ordinance. Projects must design and develop streets to accommodate all users, including pedestrians, cyclists, transit riders, and motorists.	Program aligns with cycle highways due to its focus on building streets that accommodate all users, including cyclists.
<u>TIB Small City Active Transportation Program (ATP)</u>	This program provides funding to projects in cities and towns with a population less than 5,000. Eligible projects include improvements to pedestrian and cyclist safety, pedestrian and cyclist mobility and connectivity, or improvements to the condition of existing facilities.	Cycle highways align with program's rating guidelines in areas of improving access for all users and improving sustainability.
<u>TIB Small City Arterial Program (SCAP)</u>	The Small City Arterial Program establishes the integrity of small city street system while minimizing costs. The program rehabilitates TIB classified arterial streets, enhances street physical condition, corrects geometric deficiencies and improves safety. The program also supports the construction of multimodal features consistent with local needs.	Cycle highways align with program's rating guidelines in areas of improving access for all users and improving sustainability. A project could be eligible if the cycle highway connection is an element of an arterial project.

NAME	DESCRIPTION	CYCLE HIGHWAY ELIGIBILITY
<u>TIB Urban Active Transportation Program (ATP)</u>	The Urban Active Transportation Program establishes highly connected pedestrian networks in downtowns and activity centers. The program constructs and replaces sidewalks to improve pedestrian safety, create system continuity, link pedestrian generators, extend the system and complete gaps. The intent of each project must be transportation-related, not recreational, and the project must be on a federally classified route.	Eligible projects align with the goal of Cycle Highways to improve cyclist safety and enhance cyclist mobility on transportation-related projects. A project could be eligible if the cycle highway connection is an element of a project on an eligible roadway.
<u>TIB Urban Arterial Program (UAP)</u>	The Urban Arterial Program funds projects that enhance arterial safety, support growth and development, improve mobility and physical condition. TIB also rates projects on sustainability and constructability. The program requires sidewalk on both sides of the streets and funds bike lanes when consistent with a local transportation plan.	Program does include bicycle facilities as part of its sustainability criteria in evaluating potential projects. A project could be eligible if the cycle highway connection is an element of an arterial project.
<u>Washington Wildlife and Recreation Program (WWRP)</u>	The WWRP Trails category provides grants to acquire, develop, or renovate non-motorized public recreation pedestrian or bicycle trails that provide connections to neighborhoods, communities, or regional trails. Note: trails funded in this category cannot be part of a street or roadway such as a sidewalk, bike lane, or unprotected road shoulder. Trails adjacent to roadways must be separated by space and/or physical barriers. This program is administered by RCO.	WWRP supports 12 different categories of projects, including trails. Grants associated with trails in part intend to create regional trails systems. Cycle highways may align with this program if emphasizing the regional nature of a connected trail system.

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1 **APPENDIX F: State Code Review Findings**

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This table does not represent a comprehensive review of statutes that may affect or constrain planning and development of a statewide cycle highways network. Such a review needs to be undertaken in Phase 2, continuing into Phase 3. Some necessary changes may involve amendments to statute; others are noted for WSDOT to take action on WACs or internal guidance or standards.²⁶

Table 11: Summary of State Code Review

CODE	POTENTIAL UPDATE NEEDS
RCW 47.04.035 - Directs WSDOT to apply Complete Streets principles in its projects.	Revise to enable WSDOT to partner with local jurisdictions to achieve network connectivity in most appropriate location for purposes of active transportation directness and access to destinations. ²⁶
RCW 47.24 - Defines jurisdiction control and duties for city streets that function as state highways.	Review for alignment with needs and purposes of a cycle highways system that may involve both local and state ROW.
RCW 47.26.300 Bicycle routes— Legislative declaration.	Amend to delete this declaration about state bicycle route planning from the statutes governing the Transportation Improvement Board. WSDOT’s role in statewide planning for bicycle and pedestrian transportation is covered in RCW 47.06.100
RCW 47.30.005 - Defines “trail” or “path” to also include wide shoulder of highways.	A wide shoulder is not expected to meet the specifications of a cycle highway. Definitions of a cycle highway and criteria for evaluation should be clear in what types of trails or facilities will meet the cycle highway specifications.
RCW 47.30.010 - Provides for repair or construction of equivalent recreational trails when highway construction severs a trail.	Update language to incorporate references to shared-use paths and review for other updates to align with cycle highways purposes. ²⁶
RCW 47.30.020 - Directs WSDOT to provide for trail construction in state ROW where trails do not duplicate existing or proposed routes.	Update to provide for trail construction that provides needed connections without reference to possible duplicate routes, which are not defined. ²⁶
RCW 47.30.030 - Provides for construction of trails to improve motor vehicle safety.	Update to consider safety of travelers using all modes, not only the driving public. ²⁶

²⁶ WSDOT ATD staff, in consultation with the Washington Attorney General’s Office, have provided information to the legislature on technical fixes to several sections of RCW 47.04 that would address likely unintended barriers to trail construction, and align the trail statutes with the Complete Streets requirement. In the 2025 session this has been introduced as [SB 5581](#).

CODE	POTENTIAL UPDATE NEEDS
<p>RCW 47.30.040 - Lists factors to consider before permitting trail construction, including cost relative to expected use.</p>	<p>Expected use of a single segment of trail may not be high until the network is complete in a given region; remove short-term expected use as a required factor to enable long-term cycle highways planning that will lead to increased use as network is extended.²⁶</p>
<p>RCW 47.30.060 - Requires the department to specify construction standards for paths and trails, as well as a uniform system of signing paths and trails.</p>	<p>Cycle highways are expected to have unique branding and associated signage. WSDOT branding and signage standards should specify the application of appropriate standards to qualifying facilities.</p>
<p>RCW 47.50.090 - Establishes access management standards for the state highway system, including requirement for the department to establish a classification system to guide access management provision.</p>	<p>Access management standards do not specifically include cycle highways or active transportation facilities. The classification system should be expanded to include opportunities to increase connections to and across state ROW for users of active modes.</p>

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1 **APPENDIX G: List of Partners Engaged**

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3 *Table 12: Early Engagement Partners*

ORGANIZATION / AGENCY	PARTICIPANTS
Cascade Bicycle Club	Vicky Clark, Rachel Schaeffer
WA State Recreation and Conservation Office	Ben Donatelle
Disability Rights Washington	Anna Zivarts
Leafline Trails Coalition, Leadership Group	Davíd Urbina, Emily Griffith, Max Hepp-Buchanan, Dianne Iverson, April Delchamps (WSDOT staff; member of Leafline Leadership Group)
Outdoor Recreation and Economic Development, Office of Governor Inslee	Jon Snyder
Friends of the Centennial Trail	Loreen McFaul
WA State Parks and Recreation Commission	Bryanna Osmonson
Benton Franklin Council of Governments	Erin Braich, Daisy Schonder
City of Vancouver	Kate Drennan
Yakama Nation	Brent Demko, Kaylee Jim

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APPENDIX H: Case Studies Summary

The below table provides brief descriptions of each case study and relevant findings and lessons learned for developing a Cycle Highways Program in Washington. Further detailed information on each case study is available in the accompanying reports.

As a note, facility design standards vary across the different case studies; some only include shared-use paths that would meet WSDOT Design Manual standards, while others also include facilities like bicycle lanes and trails that would not meet those criteria. The in-depth case study reports feature further information on the types of facilities included in each network.

Table 13: Summary of Case Studies

NAME (LOCATION)	GEOGRAPHIC SCOPE	RELEVANT FINDINGS FOR WASHINGTON
CASE STUDIES		
Circuit Trails Network (Greater Philadelphia)	Regional	<ul style="list-style-type: none"> The Circuit Trails network is a subset of shared-use paths in the region that meet specific design and connectivity criteria. The Circuit Trails Coalition provides strong governance for monitoring and advocating for network development. Using a coalition also promotes ongoing collaboration between public agencies and non-profit and private organizations. The Coalition carefully tracks data on segment completion in relation to network goals, which is helpful for both encouraging partner engagement and marketing the system to users. The Pennsylvania Environmental Council has been working to analyze network gaps from an equity lens and created a dedicated funding source aimed at increasing trail access and usage for marginalized groups.
La Route verte (Québec)	Regional	<ul style="list-style-type: none"> The initiative is spearheaded by a non-profit organization that oversees the regional development, technical support, and communications, while the Province’s Ministry of Transportation oversees the planning and development of network segments on roads under its jurisdiction. As the network traverses diverse regions its bikeway designs take a variety of different forms, including abandoned rail corridors, old towpaths, hydroelectric corridors, existing

NAME (LOCATION)	GEOGRAPHIC SCOPE	RELEVANT FINDINGS FOR WASHINGTON
		<p>roads with a paved shoulder, and shared lanes.</p> <ul style="list-style-type: none"> • La Route verte is ingrained in Québécois culture as a provincial treasure and has maintained support and momentum since its inception. • Ongoing commitment to a feasible delivery timeframe from the outset allowed for the timely construction of the province-wide bicycle network. • La Route verte was developed and constructed primarily through the lens of recreation and bike tourism.
Minnesota State Bikeway Network	State	<ul style="list-style-type: none"> • Network uses bicycle routes to connect priority destinations along the state trunk highway system in rural, suburban and urban areas. • State district office engineers are responsible for choosing the appropriate design for bicycle facilities on the state bikeway network in their district, while local engineers design local facility connections to the state routes. • The design of facilities included on the network is based on land use context, traffic volumes, and posted speeds. • State routes were identified and refined based on extensive public engagement, with input from a broad range of voices.
San Francisco Bay Trail	Regional	<ul style="list-style-type: none"> • Network follows state trail design standards, but trail design needs to be adapted in some locations due to wide variation in topography and other environmental constraints. • Environmental sustainability and resilience are highly prioritized in planning and implementation of the Bay Trail network. • The Metropolitan Transportation Commission is producing a Bay Trail Equity Strategy that will look at how to develop a network that is accessible and welcoming to all people.

NAME (LOCATION)	GEOGRAPHIC SCOPE	RELEVANT FINDINGS FOR WASHINGTON
Utah Trail Network	State	<ul style="list-style-type: none"> • Early engagement with project partners and advocacy partners has established broad buy-in and advanced understanding of opportunities. • The legislature allocated \$45 million in annual, ongoing funding to support Trail Division Staff and funds implementation and maintenance of the UTN. An additional \$45 million in initial funding is advancing early pilot projects. • The forthcoming Action Plan will expand on the state’s long-term vision and includes trail maintenance, signage, and amenities. • Leverages existing community trail plans that already reflect local planning processes and community priorities; alignments have been compiled by state GIS center into a comprehensive database.

ADDITIONAL EXAMPLES

Breezeway Network (Montgomery County, MD)	County	<ul style="list-style-type: none"> • Reviewed as an example of design criteria and network development.
Capital Trails Network (Greater Washington, DC)	Regional	<ul style="list-style-type: none"> • Reviewed as a model for design criteria, network development, project prioritization, equity considerations, collaboration and funding strategies.
<u>Denmark Cycle Superhighways</u>	Country	<ul style="list-style-type: none"> • Reviewed as a model for design criteria, planning and network development, and progress tracking.
Germany Cycle Superhighways	Country	<ul style="list-style-type: none"> • Reviewed as a model for design criteria, network development, project prioritization, and funding strategies.
Pima County Loop Trail (Greater Tucson, AZ)	County	<ul style="list-style-type: none"> • Reviewed as an example for demand modelling, design criteria, network development, and project prioritization.
Razorback Greenway (Northwest Arkansas)	Regional	<ul style="list-style-type: none"> • Reviewed as an example of network development model.

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1 **APPENDIX I: Best Practices Guidance Matrix**

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3 *Table 14: Summary of Best Practices Guidance Review*

NAME	AUTHOR	TYPE OF GUIDANCE
GUIDANCE RESOURCES		
<u>AASHTO Guide for the Development of Bicycle Facilities (2024)</u>	American Association of State Highway and Transportation Officials	Comprehensive bicycle facility design guide.
<u>CROW Design Manual for Bicycle Traffic (2016)</u>	CROW-Fietsberaad	Guide for bicycle transportation planning and engineering in the Netherlands. Reviewed because international guidance has been used in communities in the United States.
<u>Bicycle and Pedestrian Connections to Transit</u>	Federal Highway Administration	Reviewed for guidance on demand modelling and developing network connections to transit.
<u>Bikeway Selection Guide</u>	Federal Highway Administration	Reviewed for guidance on network planning.
<u>Small Town and Rural Design Guide</u>	Federal Highway Administration	Reviewed for guidance on demand modelling in areas outside population centers.
<u>Cycle Highway Manual</u>	Interreg North-West Europe	Guidance on cycle highway planning, design, construction, selling, maintenance, monitoring or evaluation in a European context. Reviewed because international guidance has been used in communities in the United States.
<u>Creating Walkable and Bikeable Communities (2012)</u>	Initiative for Bicycle and Pedestrian Innovation	Reviewed for guidance on demand modelling and prioritization criteria.
<u>Complete Connections: Building Equitable Bike Networks (2023)</u>	National Association of City Transportation Officials	Reviewed for guidance on demand modelling and prioritization criteria.
<u>Urban Bikeway Design Guide, Third Edition (2025)</u>	National Association of City Transportation Officials	Comprehensive bicycle facility design guide focused on urban contexts.
<u>Pedestrian and Bicycle Transportation Along Existing Roads –ActiveTrans Priority Tool Guidebook (2015)</u>	National Cooperative Highway Research Program	Reviewed for guidance on prioritization criteria.

NAME	AUTHOR	TYPE OF GUIDANCE
PLANNING DOCUMENTS		
<u>Caltrans District 4 Bike Plan</u>	CalTrans District 4 (Bay Area)	Reviewed for guidance on needs assessment, prioritization criteria, and network development.
<u>Bike & Pedestrian Master Plan</u>	City of Bentonville, AR	Reviewed for guidance on gap identification, prioritization criteria, engagement and funding strategies.
<u>Pedestrian and Bicycle Prioritization Criteria</u>	City of Lawrence, KS	Reviewed for guidance on prioritization criteria,
<u>Trail, Pedestrian, and Bicycle Master Plan</u>	City of Milpitas, CA	Reviewed for guidance on demand modelling and prioritization criteria.
<u>Move Tucson</u>	City of Tucson, AZ	Reviewed for guidance on design criteria, demand modelling, prioritization criteria, and network development.
<u>Bicycle Master Plan</u>	Los Angeles County, CA	Reviewed for guidance on design criteria, prioritization criteria, network development, and collaboration and relationship-building strategies.
<u>New Mexico Prioritized Statewide Bicycle Network Plan</u>	New Mexico Department of Transportation	Reviewed for guidance on design criteria, demand modelling, gap analysis, prioritization criteria, and network development.
<u>Active Transportation Plan Development Guide</u>	Ohio Department of Transportation	Reviewed for guidance on network development.
<u>Statewide Active Transportation Needs Inventory</u>	Oregon Department of Transportation	Reviewed for guidance on prioritization criteria.
<u>Bicyclists Bring Business</u>	Parks & Trails New York, New York State Canal Corp. and Erie Canalway National Heritage Corridor	Reviewed for guidance on demand modelling and economic development benefits of bicycle routes.
<u>Texas Bicycle Tourism Trails Study</u>	Texas Department of Transportation	Reviewed for guidance on pilot projects, demand modelling, prioritization criteria, and network development.