



GREATER WENATCHEE BICYCLE MASTER PLAN



The Greater Wenatchee Bicycle Master Plan is a blueprint for incorporating bicycle transportation as a viable and attractive option for the communities of Wenatchee, East Wenatchee, Rock Island and the adjacent unincorporated areas of Chelan and Douglas Counties.

WENATCHEE VALLEY
TRANSPORTATION COUNCIL

Final

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WENATCHEE VALLEY TRANSPORTATION COUNCIL

This plan is a Wenatchee Valley Transportation Council Document. It has been prepared by the staff in coordination with the Technical Advisory Committee and the Regional Bicycle Advisory Board (see members listed below).

The WVTC would like to thank the citizen volunteers who serve on the Regional Bicycle Advisory Board for their participation in development of this plan.

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ABBREVIATIONS

<u>AASHTO:</u>	American Association of State Highway and Transportation Officials
<u>ADT:</u>	Average Daily Trips
<u>FHWA:</u>	Federal Highway Administration
<u>MPO:</u>	Metropolitan Planning Organization
<u>MUTCD:</u>	Manual of Uniform Traffic Control Devices
<u>NACTO:</u>	National Association of City Transportation Officials
<u>NCRTPO:</u>	North Central Regional Transportation Planning Organization
<u>RBAB:</u>	Regional Bicycle Advisory Board
<u>RCW:</u>	Revised Code of Washington
<u>STIP:</u>	State Transportation Improvement Program (regional projects submitted to state)
<u>TAC:</u>	Technical Advisory Committee
<u>TIP:</u>	Transportation Improvement Program (Local projects)
<u>WSDOT:</u>	Washington State Department Of Transportation
<u>WVTC:</u>	Wenatchee Valley Transportation Council



CHAPTER 1

INTRODUCTION

The Greater Wenatchee Bicycle Master Plan is a visionary document that projects a future for the urban areas inclusive of bicycle transportation. This plan encourages all communities within the metropolitan boundaries to acknowledge and embrace the benefits achieved by making their roadways safer and more attractive to bicycle use in order to achieve this dynamic future vision.

This plan has been developed as a result of two years of work with the Regional Bicycle Advisory Board, the jurisdiction members of the Wenatchee Valley Transportation Council and the public. Plan recommendations include policy statements, street projects and program recommendations all geared towards improving the ability for residents of, and visitors to, our community to ride their bicycle for commute, transport or pleasure.

During the last two years this community has seen a visible growth in the number of cyclists using the roadways. Awareness for bicycling as a transportation option has increased during this period through various events, local media and social media stories generated about the planning process. It is believed that through implementation of this plan the numbers of cyclists will increase, the roadways will become safer for all users and the awareness and acceptance of bicycles as a legitimate transportation option will be realized.

Data related to the number of bicycle crashes for the area, with the exception of a few very serious injury accidents is limited. Surveys conducted during development of the plan indicated that many riders in the community choose not to ride because of the close calls, or near misses that occur on a daily basis which are not recorded. The perception of safety concerns and lack of bikeways that offer an acceptable level of comfort for the average rider are two primary focus areas within this plan.

This plan offers a detailed guide for the leaders of the community to improve the roadway safety for bicyclists by creating bikeways that attract riders, policies that support development of a complete bikeway network and programs to educate riders, encourage ridership, and support enforcement of bicycle related infractions for riders and drivers alike.



PLAN PHILOSOPHY

Bicycle riders are on our roadways currently. Many of these riders are riders of necessity and their choices are limited to walking, public transportation, or riding a bicycle. This plan works to provide safe, convenient, connected access to bikeways for all riders whether it is by choice or necessity.

Whether a person is riding for commute, transport or pleasure by choice or necessity, they have the same mobility needs as any other user in the transportation system. In order for bicycling to become a viable transportation option for the community roadways need to include bicycle facilities which connect and provide access to the whole community.

A well connected, comfortable and convenient bicycle network should function in the same way as the local road system does for cars. Certain routes or bikeway types will serve certain users or trip types better than others. Many bikeways can serve more than one function and more than one rider type.

An effective bikeway network provides the opportunity for community members regardless of age, or ability to use a bicycle to access jobs, services, or recreational activities. Local roadway improvement projects can provide opportunities to enhance the safety and convenience of bicycle travel while also improving safety and mobility for motorists. Accommodations for bicycles at retail centers, employers and community destinations will encourage use and support growth of this mode of transportation.

PLANNING HISTORY

Through the efforts of local residents, and city staff, a series of bicycle routes were developed for Wenatchee in the early 1980's. A city map dated January 19, 1981 portrays the system. It consisted of bicycle routes which were signed and stenciled (lane markings). The system included one north-south route, and four routes starting near Memorial Park, radiating outwards towards the western foothills of Wenatchee. None of the routes at the time accessed the waterfront of Wenatchee as the Apple Capital Loop trail had not yet been created.

In 2005 the WVTC completed the "Confluence 2025 Plan" as a strategic transportation plan for the Wenatchee Valley. Under the goal "Ease of travel to, from and within the community" a number of objectives were laid out specific to bicycle planning

- "Maintain adopted performance standards for roadways, bicycle, pedestrian, and transit facilities"
- "Develop regional bicycle and pedestrian transportation plans"
- "Integrate bicycle, pedestrian and transit improvements with roadway improvements."

Additionally under the goal of "Make the best use of the existing transportation system" the specific objective of "promote public transportation, bicycling, walking, and carpooling in place of auto travel to reduce congestion" was included and adopted into the plan.

As a result of the goals set forth in the Confluence 2025 Plan the Wenatchee Valley Transportation Council (WVTC) put forward the effort to develop a more regional approach to bicycle planning. In 2009 the City of Wenatchee Bicycle Advisory Board was formally adopted by the WVTC and re-scoped as a regional advisory board serving the complete urban boundary of the MPO. This includes the cities of Wenatchee, East Wenatchee, Rock Island as well as Chelan and Douglas County roadways within the urban growth boundaries of the cities.

The RBAB was chartered under the Wenatchee Valley Transportation Council in February of 2009 and has met monthly in the development of this plan. There are 9 volunteer members.



The RBAB volunteers advise the WVTC Technical Advisory Committee (TAC) on bicycle related projects and planning. The RBAB provided much of the base feedback and direction for the development of this plan.

In 2010 the WVTC approved funding for a position to coordinate the bicycle and pedestrian planning within the MPO, and to develop a comprehensive Bicycle Network Master Plan.

RBAB Mission:

“To support bicycling by working with the community and its leaders to develop progressive multi-modal transportation planning, policy, and infrastructure which results in a world class place to live, work and ride!”

PUBLIC PROCESS

The public has provided much of the guidance for development of the Goals, Objectives and Bikeway Network Map through participation in surveys, open house events and through presentations made by WVTC specific to the development of the plan.

On line surveys were conducted with the local community and were advertised in a number of formats including; social media, direct email, press releases and poster distribution. The first survey done in April of 2011 had 142 respondents with questions focused on riding habits, demographic info, specific bicycle network questions, questions regarding encouragement for riding and general open ended questions.

Two open houses were held in February 2012, one in Wenatchee and one in East Wenatchee. More than 50 people participated in both of these open houses. Participants were able to review maps of proposed bikeways and answer questions specific to their ability, willingness and frequency of riding.

A second survey was conducted in February of 2012 which had 82 respondents. This was available both in English and Spanish and distributed in the same way the first survey was. This survey was designed to mirror the information and feedback direction of the two open houses also held in February. Information more specific to the rider’s comfort level, barriers to riding, and streets that need bicycle facilities was gathered. Through these two surveys and the open houses more than 50 local roadways were identified for improvement.

During this same period a focus group of downtown business owners met to discuss and develop a bicycle parking pilot for the Wenatchee Central Business district, resulting in the installation of the first bike coral downtown.

A final survey and online map were presented to the community in August of 2012. Information from this outreach sought feedback on the development of the bicycle network, specific bikeway treatment preferences and methods by which to achieve the development goals of the network. The online map received more than 500 views and 64 people responded with feedback via the survey.

This final survey was distributed in the same way as the previous with the addition of presentations made to more than 100 people via service club meetings. Radio interviews were also conducted with KPQ and KOHO Radio during this time encouraging participation in this public process.

Final adoption of this plan will follow a 45 day review period where the public will have the opportunity to provide additional input for review and inclusion in the plan.



CHAPTER 2

POLICY FRAMEWORK

The RBAB set a goal to develop a plan which encourages the community to take the steps needed to achieve a truly bicycle friendly community resulting in the following Vision, Goals and Objectives.

VISION

To transform the Wenatchee Valley into a bicycle friendly community where everyone can safely and confidently choose to ride for commuting, transport, or pleasure; and where the community supports bicycling through progressive multi-modal transportation planning, policy, and infrastructure development which results in a world class place to live, work, and ride!

GOALS

This plan has two very simple Goals

INCREASE BICYCLE USE

IMPROVE BICYCLING SAFETY

This plan lays the foundation for expanding the capacity of the regional transportation system and improving general mobility for citizens of the Wenatchee Valley by establishing a comprehensive, safe and well-connected bicycle transportation network.

The goals outlined by this plan support the Confluence 2025 Strategic Transportation Plan for the Wenatchee Valley, which identifies bicycling, bicyclists, and non-motorized infrastructure within its list of objectives for its goals of Transportation Safety, Ease of Travel, and Utilization of existing roadway systems, Balancing Travel options and Environmental Stewardship.

The bicycle master plan goals also align with the FHWA and Washington State goals which seek to double the number of people biking and walking while at the same time reducing fatal and serious injury crashes involving bicyclists and pedestrians.



OBJECTIVES & ACTION ITEMS

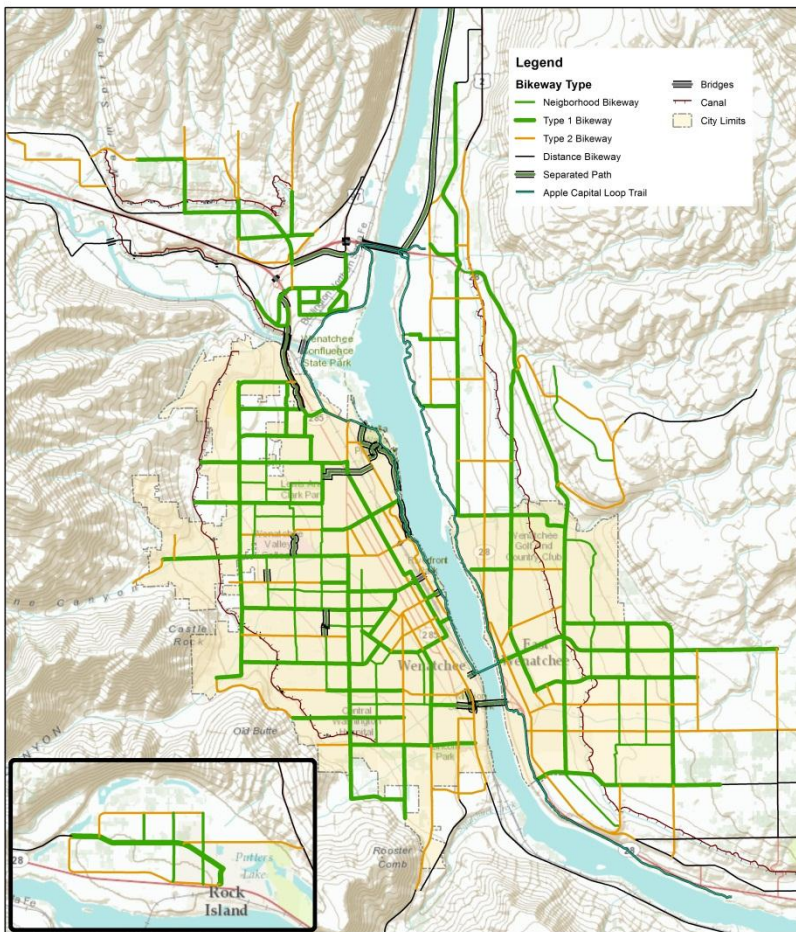
There are many ways to achieve the goals set for the plan, specific objectives outlined in this plan do not focus solely on a singular element of Engineering, Education, Enforcement, Encouragement or Evaluation (5 E's), but in fact take one or more of these elements into account within each objective. Each objective, taken alone, will offer a solution to address one or more of the 5 E's.

OBJECTIVE ONE—BUILD A COMPREHENSIVE BICYCLE NETWORK

The purpose of this objective is to build upon the existing bicycle network so bicycle transportation can become a comfortable, attractive, and effective transportation choice for a large percentage of the community.

Integration of this plan into the local planning efforts, documents, policies and the development activities is paramount to network development.

Action steps for this objective work towards making significant bikeway improvements within the community through plan adoption, policy development and implementation of priority projects resulting in increased mileage and improved connectivity of bikeways readily accessible to all parts of the community.



Bicycle Network: 20 Year Vision

This map represents a 20 year vision for development of a connected bicycle network serving all of the 2012 MPO area.

FIGURE 1--20 YEAR VISION

(See larger map on pg. 50)



OBJECTIVE 1. ACTION ITEMS**Action Item 1.1. IMPROVE EXISTING NETWORK**

Small steps taken to improve the existing bikeway functionality, safety and visibility will provide a significant improvement in the current network allowing many more people the opportunity to make the choice to ride their bicycle for short trips or to commute.

1.1-a. ADOPT STANDARD FOR BIKE LANE MARKINGS

This plan recommends the adoption of the WSDOT standard(see fig.2) for bike lane markings, in the plan area. Intersection crossings and intersection approaches should follow MUTCD or AASHTO guidelines if there is no WSDOT standard within the plan area.

Bicycle Lanes are considered “Preferential Lanes” in the MUTCD and ensuring the consistency of markings across jurisdictional boundaries will reinforce efforts to improve rider predictability, increase safety and potentially reduce enforcement needs. (see appendix for MUTCD Section 3D.01)

This plan recommends the use of the optional directional arrow to educate users, encourage proper use of the lanes and increase visibility of lane. Increasing lane markings will also allow a reduction of signage along routes further reducing the “sign clutter” along roadways.

“When a lane is assigned full or part time to a particular class or classes of vehicles, the preferential lane word and symbol markings described in this Section and the preferential lane longitudinal markings described in Section 3D.02 shall be used.”

MUTCD--Chapter 3D. Markings for Preferential Lanes



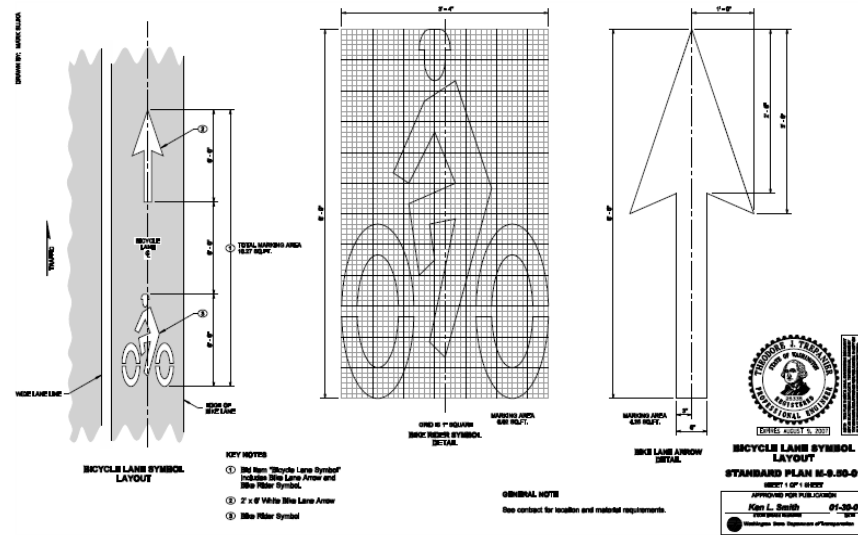


FIGURE 2-WSDOT BIKE LANE SYMBOLS

1.1-b. UPGRADE EXISTING LANE MARKINGS TO NEW STANDARD

This plan recommends removal and re-painting of all existing bike lane symbols to comply with the new adopted standard bike lane marking as budget and maintenance schedules allow.

The existing bike lanes within the plan area have a variety of different markings. Markings should be brought to the new standard to promote consistency in design throughout the planning area.

1.1-c. IMPROVE EXISTING BIKE LANES AT INTERSECTIONS

Figure 9C-7. Bicycle Detector Pavement Marking



FIGURE 3--SIGNAL LOOP MARKING

This plan recommends improvement of existing bike lane channelization at intersections; this is limited to intersections with sufficient existing right-of-way to allow for bike lanes to be painted up to the stop line in accordance to MUTCD and AASHTO Guidelines (see fig.4).

All intersections with existing bike lanes should be evaluated and, if need be, improved to protect bicyclists and improve predictability of movement for all users.

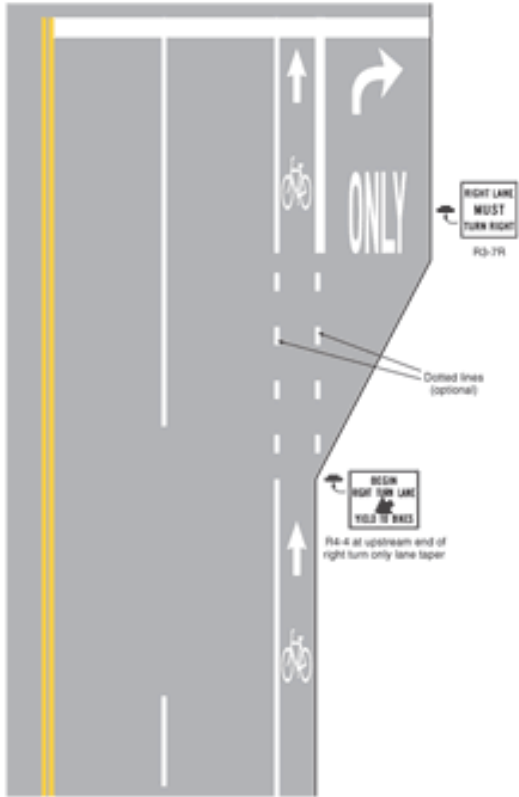
Where signal loop actuation is present evaluation of signal detection for these intersections should be done at the same time to ensure that the detection equipment is adjusted to the “extent that the existing equipment is capable” for detection of bicycles as outlined in RCW 47.36.025. The addition of pavement markings (see figure 3) may aid in signal activation and mobility for cyclists.

Some intersections may need or benefit from additional measures such as, bike boxes or bike signals in order to create a safer crossing for cyclists. These should be evaluated for future and current use of the bikeways, and installed according to MUTCD, NATCO or AASHTO Guidelines.



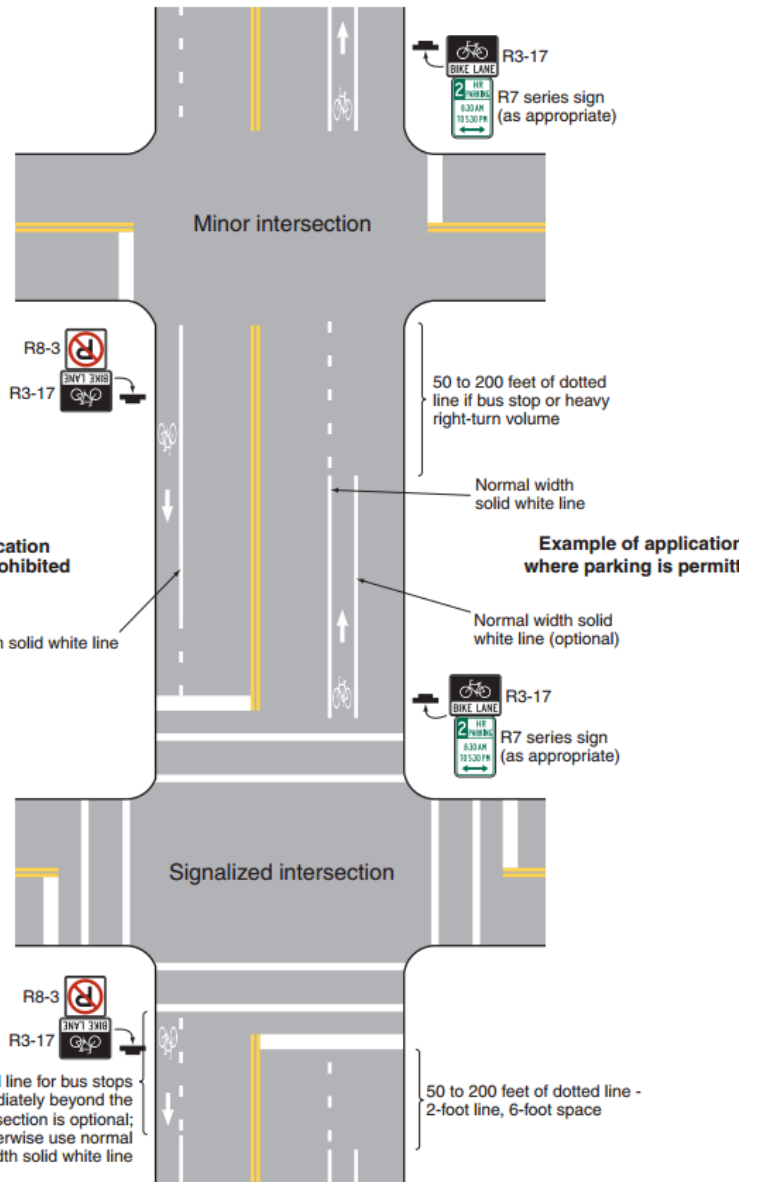
FIGURE 4-MUTCD LANE MARKING EXAMPLES

Figure 9C-4. Example of Bicycle Lane Treatment at a Right Turn Only Lane



Example of application where parking is prohibited

Normal width solid white line



1.1-d. IMPROVE CURRENT SHARED LANE BIKEWAYS

This plan recommends adding shared lane markings A.K.A. Sharrows (see fig. 5) to existing signed bike route

This recommendation is limited only to the existing signed bike routes *identified in the wayfinding plan (proposed in Action Item 3.2)*. These routes are identified on the Plan Network Map as “Shared Lane Bikeways” or “Neighborhood Bikeways”

Installation of the lane markings will improve visibility of the route and raise awareness and acceptance of all roadway users to the presence of bicycle traffic within the traffic lane.

Action Item 1.2. BUILD NEW BIKEWAYS

The addition of new bikeways will help to raise the acceptance and awareness of bicycling, within the community, and will set the tone for future expansion of the network.

1.2-a. BUILD SHORT TERM PRIORITY BIKEWAYS

This plan recommends incorporating bicycle facility upgrades to roads identified by the Priority Projects Map (see Map 1).

The short term priority projects (Table 1) have been identified through public feedback during plan development and refined through the RBAB and the TAC.

Projects identified will address the following short term needs:

- Improve connectivity of existing network
- Increase comfort level of existing network

These projects when completed will create an increased level of connectivity within the community which will allow more people the option to ride their bicycles.

1.2-b. PRIORITIZE STAND-ALONE PROJECTS

This plan recommends development of a priority list of “Stand-alone Projects” that are outside of the current Transportation Improvement Program (TIP) process completed annually.

These projects would remove significant barriers to riding, create new connections, or significantly improve safety. These projects are those that would require funding and implementation independent of planned roadway maintenance or construction.

Many projects can be completed within the current 6 year TIP program. However there are some that will require specific effort and funding to ensure they are completed. All applicable jurisdictions should work with the community, and the RBAB to develop this list and develop ways to move forward on implementation of these projects.

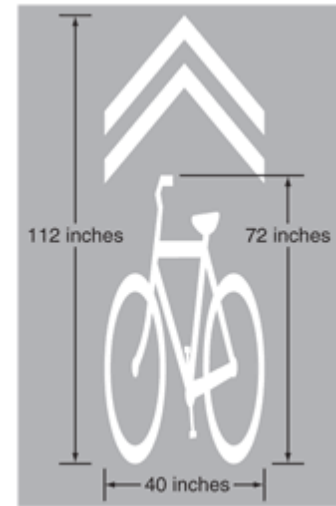
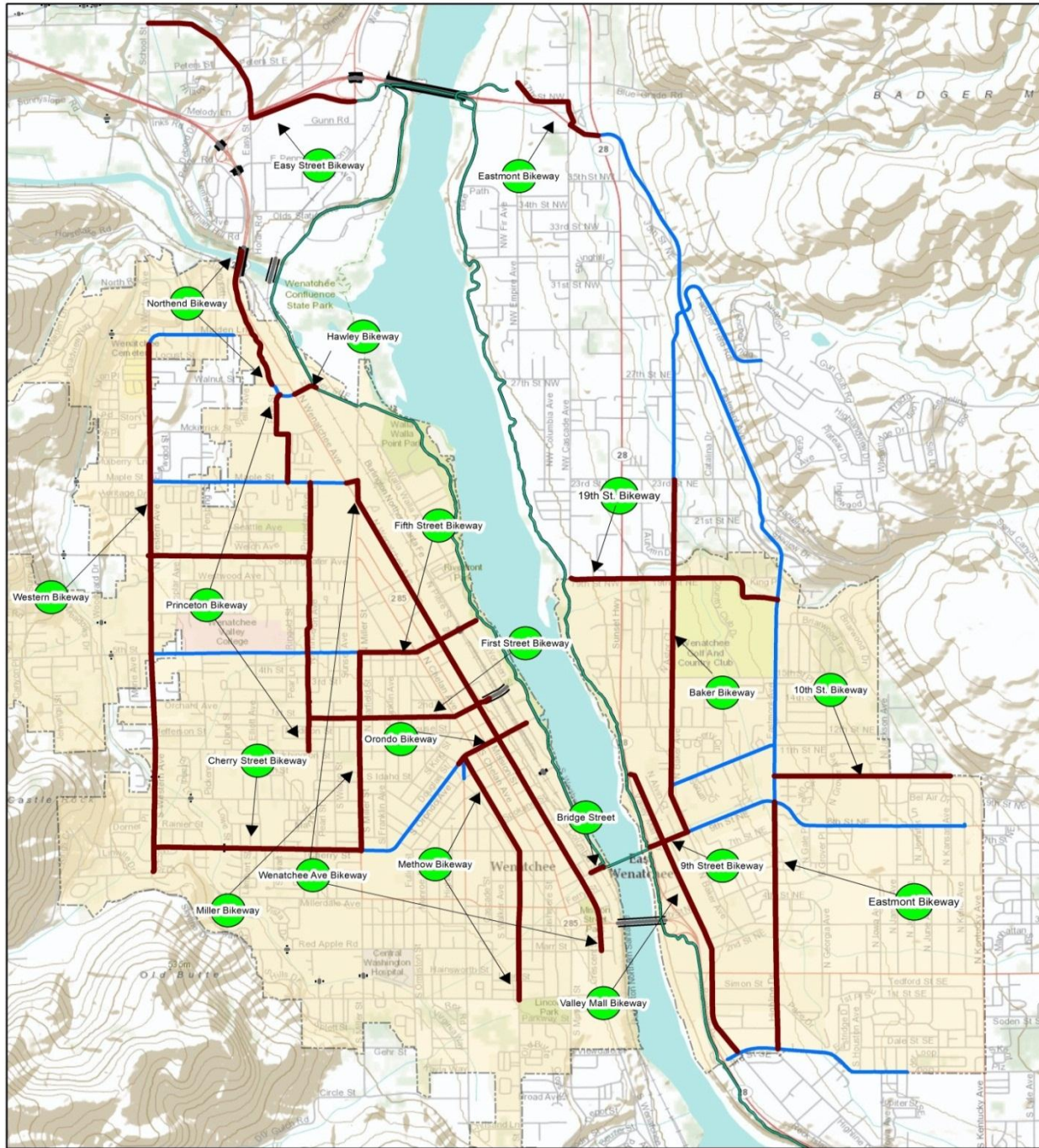


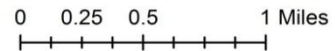
FIGURE 5-MUTCD "SHARROW"





Priority Projects

Bikeway names indicate location of projects areas, not individual projects. Bikeways may have one or more projects along it's length. Costs for projects will need to be verified prior to implementation.



Legend

- Priority Projects
- Existing Bike Lane
- Apple Capital Loop Trail
- Bridges
- City Limits

MAP 1-PRIORITY PROJECTS



TABLE 1-NEW BIKEWAY PRIORITY PROJECTS LIST

THE FOLLOWING TABLE WAS DEVELOPED AS A REFERENCE LIST FOR THE ASSOCIATED JURISDICTIONS TO USE TO FURTHER PRIORITIZE AND IMPLEMENT THESE PROJECTS.

EACH PROJECT WILL HAVE SPECIFIC CHALLENGES, LIMITATIONS, AND DESIGN NEEDS WHICH MAY OR MAY NOT BE IDENTIFIED IN THE LIST BELOW. PROJECTS INCLUDE A COST RANGE TO BE CONSIDERED WHEN REVIEWING.

PROJECT SPECIFIC DETAILS AND COSTS WILL NEED TO BE IDENTIFIED PRIOR TO CONSTRUCTION/IMPLEMENTATION BY THE JURISDICTION RESPONSIBLE FOR THE PROJECT.

WENATCHEE AVENUE BIKEWAY: Creates Connection to downtown, provides more direct N-S route, improves connectivity of existing bikeways

Price Range--\$90K-\$110K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
WA-1	Wenatchee Ave. Bikeway Miller/N. Wen. Ave Intersection	Intersection Improvements Two Way cycle track	Improve connection to Maple Street via Miller Ave. Create two-way Cycletrack on East side of Miller Ave (maple to Wen. Ave.) For connection to Wenatchee Ave bike lanes.	Primary challenge is lane configuration to create safe/comfortable crossing and efficient traffic movement. Costs are relatively low, primarily paint.
WA-2	Wenatchee Ave. Bikeway Miller to Marr St.	Buffered Bike Lanes Shared Lane Markings	Buffered Bike Lanes are recommended to create primary N-S connection to and through downtown, buffered lanes because of higher volume/speed traffic on either end of CBD. Shared Lane markings through CBD (2 nd ave to Kittitas)	Buffered Lanes will require lane reduction from Miller to 2 nd Ave and removal of on street parking From Kittitas to Marr on the South end. Costs are low when combined with preservation projects.



FIFTH STREET BIKEWAY: Improves current connection to Loop Trail and connection to Wenatchee Ave.

Price Range--\$9K-\$12K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
F-1	5th St. Bikeway Miller to Loop Trail	Intersection Improvements	Improve bike lane channelization at intersections, add crossing markings, and possibly include bike boxes.	Possible need to restrict turn movements in order to improve bicycle lane approaches. Costs are limited to paint and signage installation

WESTERN AVENUE BIKEWAY: Creates attractive N-S route for western side of Wenatchee. Improves connectivity of all bikeways from Western.

Price Range \$130K-\$160K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
WE-1	Western Ave Bikeway Maiden Ln. to Number Two Canyon.	Buffered Bike Lanes	Western has long been identified as a primary N-S corridor. Buffered bike lanes are recommended because of higher speeds, traffic volumes and access to residential areas. Retrofit of the existing bike lane from Maiden Lane to Maple as well as a reconfiguration of lanes to add buffered lane south to No. 2 Canyon.	On street parking will need to be removed to accommodate this change. Travel lanes may need to be narrowed as well. Costs will be limited to paint and signage installation.



PRINCETON BIKEWAY: Improves existing signed bikeway, making it more attractive and useful to interested but concerned riders, establishes roadway as shared space and creates mid Wenatchee N-S Corridor connecting multiple bikeways

Price Range \$35K-\$42K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
PB-1	<p>Princeton Bikeway</p> <p>Pine--Tacoma St—Princeton Ave.</p>	<p>Bike Lane</p> <p>Shared Lane Markings</p>	<p>Pine street offers connectivity from the loop trail at Walnut/Hawley. Bikes lanes added to commercial section with sharrows through residential section of Tacoma and a short section of McKittrick.</p> <p>Bike lanes added to Princeton from Maple to Springwater provide connectivity through a busy traffic area to Maple St. Bikeway and Lewis and Clark Elementary School</p>	<p>Pine is scheduled for re-construction so installation of bike lanes should only require incremental design changes and costs.</p> <p>Parking or lane configuration changes will need to be addressed on Princeton to accommodate bike lanes.</p> <p>Other costs will be limited to paint and signage installation</p>
PB-2	<p>Princeton Bikeway</p> <p>Springwater to Washington</p>	<p>Traffic Calming</p> <p>Intersection Treatments</p> <p>Shared Lane Markings</p>	<p>Already utilized as the most attractive N-S route by experienced riders the addition of the recommended improvements will create the first all-rider level bikeway.</p> <p>Connectivity to four other bikeways will provide access to many more riders.</p>	<p>Roadway constraints will be determined by the type, and frequency of traffic calming deemed appropriate to create bikeway.</p> <p>On street parking will not be affected.</p> <p>Costs associated with traffic calming will raise overall cost of project, however most improvements fall into paint and signage installation.</p>



LOOP TRAIL BIKEWAY ACCESS: Many of the existing bikeways do not have complete connections to the Apple Capital Loop Trail. Improving access and removing barriers will provide more opportunity for riders to access this key non-motorized route.

Price Range \$74K-\$89K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
LA-1	<p>Hawley Bikeway</p> <p>Hawley Street—N. Wen. Ave.to Loop Trail</p>	<p>Bike Lane</p> <p>Intersection improvements</p> <p>Shared Lane Markings</p>	<p>Connects with Walnut bike lanes and direct connection to Loop trail.</p> <p>Current bike lane ends at Wenatchee Ave with no guidance or accommodation connecting to Loop Trail east of the RR-Xing.</p>	<p>Lane striping and intersection configuration at Wenatchee Ave will need to be modified to create space for bicycles to safely cross.</p> <p>Crossing movements at RR –Xing needs to be carefully considered.</p> <p>Costs are limited to striping and sign installation.</p>
LA-2	<p>9th St. Bikeway</p> <p>9th St. (E. Wen)—Valley Mall to Loop Trail</p>	<p>Bike Lane</p> <p>Intersection improvements</p>	<p>Continue existing bike lanes to intersection of Sunset Hwy. and Loop Trail.</p> <p>Improve both intersections for bicycle use.</p>	<p>Evaluation of through and turning traffic volumes will dictate best option. Turn restrictions may be needed.</p> <p>Current configuration forces bikes into conflict scenarios.</p> <p>Costs are limited to striping and sign installation.</p>



LOOP TRAIL BIKEWAY ACCESS—continued

Price Range \$140K-\$170K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
LA-4	<p>Eastmont Bikeway</p> <p>Sunset Hwy to Cascade St. 37th St. NW—Hwy 2/97 to Loop Trailhead</p>	<p>Sharrows</p> <p>Separated Path</p>	<p>New BBL on the Eastmont Ave. extension will leave riders at intersection of Sunset Hwy-2/97. Crossing of intersection Eastbound to access BBL uphill needs attention.</p> <p>Improve existing side path with markings and signage. Provide for two way use and access to Cascade St. Possibly extend to 37th to reduce crossing conflicts.</p> <p>Shared lane markings to Cascade for connection to Loop Trail Access.</p>	<p>The current access to and from Cascade Ave will need to be evaluated from a non-motorized viewpoint. Shifting of lanes on the North leg of Cascade may allow for two way Cycletrack for short distance to connect 37th, allowing two way access to the existing separated path to intersection of Sunset Hwy.</p> <p>Access to Eastmont from the South leg of Cascade will require access along Hwy. 2.</p> <p>Costs limited to paint removal, new striping and signage installation.</p>



EAST WENATCHEE BIKEWAYS: Completing these projects will create a backbone network of connected routes for the City of East Wenatchee. Connecting and completing existing bikeways will provide more access and opportunity for riders.

Price Range \$60K-\$72K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
EW-1	Eastmont Bikeway 9 th to 3 rd	Bike Lane	Extend existing bike lanes to complete N-S route on Eastmont Ave. Current Lanes do not extend South of 9 th street, creating a barrier to riders using the existing lanes to the north. Connects to Existing Bikeways @ 9 th , 11 th , and 3 rd St.	Road width may require additional paving to be done when improved. Should be completed in conjunction with planned widening and improvements of this section. Costs can be minimized if included in plan from beginning.
EW-2	Baker Ave Bikeway 9 th St. to 23 rd St.	Bike Lane	Create connection between 9 th and 23 rd street. This will provide an alternative N-S route to the Loop Trail. Connects to existing bikeways @ 9 th , 11 th , and Eastmont Extention.	



EAST WENATCHEE BIKEWAYS—continued

Price Range \$79K-\$95K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
EW-3	10th St. Bikeway (E. Wen.)—Eastmont to Kentucky	Bike Lane	Creates E-W connection with bike lanes on Eastmont	Road width may require additional paving to be done when improved. Should be completed in conjunction with planned widening and improvements of this section.
EW-4	19th St Bikeway Eastmont to Loop Trail	Climbing Lane (Bike Lane/Sharrows)	Create key E-W connection from Eastmont to Loop trail. Climbing Lane treatment will allow for downhill riders to use full lane of traffic while giving uphill riders a dedicated space to ride at slower speeds..	Where there is adequate pavement width lane configuration, and on street parking may need to be modified to apply bikeway treatments. Costs can be minimized if included in plan from beginning.
EW-5	Valley Mall Bikeway 3 rd St SE. to Sunset Hwy.	Bike Lane Sharrows	Evaluate Lane capacity needs and add bike lanes or sharrows as design and capacity will allow. Provides key access to jobs and Loop Trail. Evaluate re-designation of shoulder to bike lane between Grant Road and 3rd St. SE.	Applying a “road diet” approach may provide opportunity to reduce the width and number of lanes between Sunset Hwy and Grant Road. Parking downtown needs to be preserved in design and final lane configuration. Costs limited to paint removal, new striping and signage installation. Costs may increase if lane configurations at intersections change locations for loop detectors.



DOWNTOWN BIKEWAYS CONNECTION: Nearly all of the existing bikeways in Wenatchee end short of reaching downtown. With its close proximity to the majority of residences in the area Downtown can be a very bike friendly place, as long as the access is improved.

Price Range \$45K-\$54K (FS-1,2,3)

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
FS-1	First Street Bikeway Princeton to Chelan Ave.	Neighborhood Bikeway	1st Street provides the greatest opportunity for developing a bikeway connection attractive to the largest variety of rider types. Traffic Calming, intersection treatments and shared lane markings are all that are needed on this section. Removal of traffic signal at Miller St. should be evaluated to aid in traffic calming..	Roadway constraints will be determined by the type, and frequency of traffic calming deemed appropriate to create bikeway. On street parking may not be affected. Costs associated with traffic calming will raise overall cost of project, however most improvements fall into paint and signage installation.
FS-2	First Street Bikeway Chelan to Wenatchee Ave.	Bike Lane/Sharrows	Evaluate Lane capacity needs and add bike lanes or sharrows as design and capacity will allow. Provides key access to jobs and Loop Trail.	In order to add bike lanes for this section on street parking may need to be removed and travel lanes may need to be narrowed as a result. Costs will be limited to paint and signage installation, unless traffic signal activation changes are needed.



DOWNTOWN BIKEWAYS—continued

Price Range \$55K-\$66K (MB-1, CB-1, OB-1)

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
FS-3	<p>First Street Bikeway Wen. Ave.to Columbia</p>	<p>Contra-flow bike lane, Bike signal</p>	<p>Allows westbound riders exiting River Walk crossing bridge to travel in street. Must include bike signal for Westbound crossing of Wen. Ave.</p>	<p>Contra Lane will require striping existing roadway reducing lane with by 4-6'. One planting area at base of bridge may need to be removed to create safe merge area. Bike signal will need to be installed westbound, signal activation may require cutting into pavement. Bike signal may push costs up, otherwise limited to striping and signage.</p>
MB-1	<p>Methow Bikeway Orondo to Crawford</p>	<p>Neighborhood Bikeway</p>	<p>Traffic Calming, intersection treatments and shared lane markings. Primary N-S connection for South Wenatchee Neighborhoods</p>	<p>Roadway constraints will be determined by the type, and frequency of traffic calming deemed appropriate to create bikeway. On street parking may not be affected. Costs associated with traffic calming will raise overall cost of project, however most improvements fall into paint and signage installation.</p>
CB-1	<p>Cherry Bikeway Western Ave to Miller Ave.</p>	<p>Bike Lanes</p>	<p>Creates a connection between the Western Bikeway and the Orondo Bikeway, providing direct access to downtown and the Loop Trail.</p>	<p>Bike Lanes will require a reduction in vehicle travel lane widths and may also force removal of on street parking. Costs would be limited to striping and installation of signage.</p>



OB-1	Orondo Bikeway Okanogan to Columbia	Climbing Lane (Bike Lane/Sharrows)	Orondo bike lanes currently start/end at Washington St. Shared lane markings going downhill with a bike lane going up will connect existing bike lanes to waterfront. Critical area to raise driver awareness	Many challenges here with the intersections and high traffic and turning volumes. Bike lanes uphill may require some parking to be removed. Costs should be limited to installation of signs, striping and lane markings.
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EXISTING BIKEWAY UPGRADES: Bikeways identified below need minor re-configuration of the existing roadway in order to improve the visibility and comfort level of the existing bikeway. Both are currently shoulder bikeways

Price Range \$60K-\$72K

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
BU-1	Miller Ave. Bikeway 5th to Cherry	Bike Lane	Miller is the most direct connection between the Fifth Street and Orondo Street Bikeway. Current roadway has a combination of painted shoulder and on street parking; the proposed improvement would establish a designated bikeway, by way of converting the shoulder/parking to a bike lane.	Road Diet techniques should be applied, on street parking will need to be removed and travel lanes may need to be narrowed as well. Costs will be limited to paint and signage installation, unless traffic signal activation changes are needed.
BU-2	Easy St. Bikeway SR2/97 to School St.	Bike Lane	Mark and sign existing shoulder as designated bike lane for access to/from Sunnyslope.	Current shoulder has sufficient width; restrictions to parking on shoulder would be required. Costs will be limited to paint and signage installation, unless traffic signal activation changes are needed



SEPARATED BIKEWAY CONNECTIONS: Many areas served by the existing network have significant barriers to non-motorized travel in the form of heavy vehicle traffic and poor connections to regional bikeways. Removing these barriers will require the highest level of funding, design and public engagement.

The first step to implement any of the projects listed below will be a detailed engineering cost estimate of the project.

Price Range 2.25M-5.0M (SB-1,3,4)\$3M-\$5M(SB-5)

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
SB-1	<p>North End Bikeway N. Wenatchee Ave. Bridge</p>	Separated Bikeway	<p>Improve existing sidewalk by widening or cantilever. Highly utilized existing route for bikes needs safety improvements.</p> <p>Creates connection to Maiden Lane Bikeway via Pioneer Trail connector.</p>	High cost project requiring WSDOT cooperation, structural engineering and possibly right of way acquisition.
	<p>North End Bikeway Horse Lake Rd. to Walnut</p>	Separated Bikeway	<p>Create Multi-use trail connection to bicycle network at Walnut along Pioneer Irrigation ROW.</p> <p>Provides off street option for non-motorized travel in the most congested section of North Wenatchee Ave.</p> <p>Connects to the Loop Trail via the Walnut/Hawley St. Bikeways.</p>	<p>High cost project requiring paving and grading of existing ditch right of way.</p> <p>Crossings at Horse Lake, Maiden Lane and Walnut would need to be engineered to provide highest level of safety and traffic operations.</p> <p>Right of way acquisition may also be needed to complete project.</p>



SEPARATED BIKEWAY CONNECTIONS—continued

ID	Section	Recommended Improvements	Detail	Constraints & Cost info
SB-3	<p>Easy St. Bikeway</p> <p>Easy St @ Hwy2/97 to Loop Trail</p>	<p>Separated Bikeway</p>	<p>Off highway multi-use path from intersection of 2/97 and Easy St. to Loop Trail access at Euclid.</p> <p>Creates direct off street connection to the Loop Trail from Sunnyslope, providing access to all levels of riders</p>	<p>Relatively high cost project requiring significant grading and construction of multi-use path and appropriate crossing treatments at either end of the section.</p> <p>It is anticipated that the whole project will fit within existing WSDOT right of way parallel to US 2/97.</p>
SB-4	<p>Bridge St. Bikeway</p> <p>Bridge Street to Pipeline Bridge</p>	<p>Bike/Ped Bridge</p>	<p>Loop Trail connector for South Wenatchee via a pedestrian bridge over the Rail Road Tracks at the base of Bridge St.</p> <p>Will offer a direct connection to the Loop Trail for the South Wenatchee Urban Area.</p> <p>Details regarding connecting bikeways to this are still unclear. This area needs a closer look.</p>	<p>High cost project requiring cooperation of BNSF.</p> <p>Development of project will need to include solutions to create adequate access to bridge from the west side of Wenatchee Ave and Mission Ave.</p> <p>Engineering, design and construction costs for the bridge are anticipated to create the greatest costs associated with the project.</p>
SB-5	<p>Rocky Reach Trail Extension</p> <p>Odabashin Bridge to Lincoln Rock St. Park</p>	<p>Multi Use Path</p>	<p>This extension has been in development for many years and will provide an additional 5 miles of trail to the North of the existing Loop Trail.</p>	<p>Funding for the project is the only thing holding this back at this point.</p>



OBJECTIVE TWO—INCREASE ROADWAY SAFETY

The real or perceived unsafe nature of roadways for bicycle use is a significant barrier to cycling identified through surveys conducted in the development of this plan. Efforts to change roadways and maintain bikeways to increase safety for bicyclists can provide additional benefits for pedestrians, motorists, and freight users within the same roadway.

Action steps within this objective will focus on identification of safety concerns, improvement of intersections, maintenance of bikeways, evaluating needs for traffic calming on low volume streets and increased education and enforcement efforts for motorists and bicyclists alike.

OBJECTIVE 2. ACTION ITEMS

Action Item 2.1. IDENTIFY PRIORITY SAFETY NEEDS

This plan recommends that jurisdictions work with the RBAB and the community to develop methods or tools for identifying specific priority roadway safety issues.

Records of accidents/incidents can be used to identify problem locations; however there are many near-miss scenarios that do not make it on a report. In developing a method or tool to identify these scenarios and potential hazards the jurisdiction can be more responsive to the needs identified.

Once priorities and issues are identified solutions for improving safety should work through a joint RBAB/TAC committee process and should be implemented within the framework of this plan.

Action Item 2.2. MAINTAIN BIKEWAYS

This plan recommends that bikeways are maintained in such a way to ensure preservation of the capital improvements and to provide safe and comfortable facilities for cyclist to ride in.

The regular sweeping of bike lanes contributes to the overall safety of the roadway by providing a clear riding area for bicyclists outside of the vehicle travel lane. Excessive dirt, debris, or other objects within bike lanes force riders to move out of the lane and can create a fall hazard. All jurisdictions are encouraged to evaluate their street sweeping programs and consider modifications which could ensure that those roadways with bike lanes are regularly maintained.

Snow removal in bike lanes should be considered where appropriate and as bicycle use dictates.

Roadway surface conditions are a significant factor in creating a comfortable and safe riding environment. Prioritization of bikeway maintenance can provide riders with a less obstructed roadway surface which can encourage more people to look at bicycle riding as a real transportation option.

Action Item 2.3. BICYCLE FACILITY EDUCATION

This plan recommends that jurisdictions develop outreach programs for informing and educating drivers and bicycle riders about new bicycle facilities and how each is expected to use them safely.



With development of the network and implementation of the facility improvements (e.g. Sharrows, Neighborhood bikeways, Advisory Lanes, etc.) it will be important to educate all road users on these new and likely unfamiliar roadway markings.

Jurisdictions should work with local law enforcement to educate users on the new facilities, including the following strategies:

- Develop web page content dedicated to education and information regarding the specific treatments to be used on all jurisdiction websites.
- Where appropriate, install temporary warning flags, signs, cones or warning lights at locations where new facilities are installed.
- Temporarily increase enforcement patrols to adjust behavior after a new facility is installed.

Action Item 2.4. RIDER EDUCATION PROGRAM

This plan recommends that jurisdictions should develop a centralized education program to provide training for bicyclists.

As the Bicycle Network develops and more people bicycle, new programs will be needed to educate bicyclists of all ages and abilities about how to safely co-exist within the roadway environment.

Examples of programs may include:

- Bicycle Commute Basics
- Bicycle Rules of the Road
- Safe riding habits for families
- Bicycle Rodeos for school age children

It is easy to assume that bicycle riders should know the “Rules of the Road,” but a large percentage of bicycle riders are either too young to drive or don’t have drivers licenses. Development of training programs for all riders will increase safety and awareness for all roadway users.



Action Item 2.5. ENCOURAGE AND SUPPORT ENFORCEMENT

This plan recommends development of enforcement emphasis programs which reinforce and support the proper use of bicycles and safe operation of motor vehicles where bikeways are present.



Bicycles and motorists share many of the same laws regarding travel in the roadway. The perception that one group or another is allowed to break these laws at will without repercussion creates conflict. Bicyclists running stop signs, motorists passing too closely or passing illegally all contribute to crashes.



In order to increase safety local law enforcement needs to enforce laws that reduce bicycle/motor vehicle crashes and increase mutual respect between all roadway users.

Roadway safety is a shared responsibility between all users. Bicycle related enforcement focus areas should be identified through a collaborative process involving local government, police departments, the RBAB and local cycling groups.

Action Item 2.6. DEVELOP PARTNERSHIPS

This plan recommends development of a community coalition for development, funding, and implementation of this plan.

In order to fully develop and fund the education and encouragement portion of the plan local jurisdictions and enforcement agencies must develop partnerships with local, state and national bicycle advocacy organizations as well as local school districts, health districts and health care organizations.

Local business should not be overlooked when seeking partnerships in the development of an education and encouragement program. Sponsorship of promotional materials, maps, equipment or advertising of events can provide significant revenue towards offsetting the costs of development and distribution.

OBJECTIVE 3—ENCOURAGE BICYCLING ACCEPTANCE AND USE

Building acceptance of bicycling as a transportation option is primary to the development and successful implementation of this plan.

Action steps for this objective will work towards creating a bicycling community, one that recognizes and celebrates the benefits of bicycling, develops education programs, improves way finding and promotes bicycle friendly events designed to encourage development of new riders within our community.

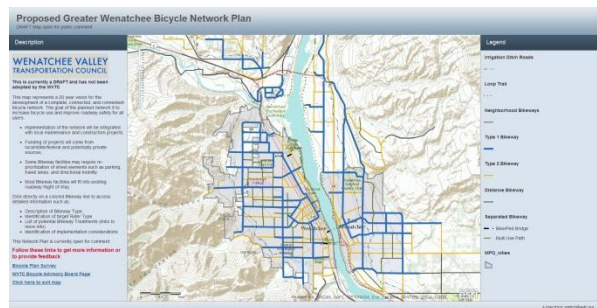
Action Item 3.1. DEVELOP BICYCLE RESOURCE CENTER

This plan recommends creating a variety of resources for distributing information, offering guidance and providing encouragement for bicycle transportation.

Creating a source for local and visiting riders to find out more about the bicycle network, tips for safe riding, rider education and businesses that accommodate and encourage bicycles will encourage many people to try riding a bike for transportation.

Key components should include:

- Developing and maintaining a current Bikeway map and guide
- Bicycle resource information shared by all jurisdictions
- Training and information for new riders--route planning, safety instruction, local laws



- A public service marketing campaign to encourage riding bicycles for transportation and sharing the road.
- Distribution of information for drivers and riders regarding new bicycle facilities
- A variety of ways to highlight the benefits of riding a bike for short trips

This may be in the form of a web site, community program, or through a local organization with the purpose of developing ways to make it easier for the community to ride a bike if they choose. Partnerships with local Health District, and School Districts for development and funding of programs should be sought.

Action Item 3.2. DEVELOP WAYFINDING PLAN

This plan recommends installation of visible, permanent, and attractive signage which allows riders of any level to easily navigate the network of bikeways. Installation should follow development of a route-finding plan for identifying primary bikeway corridors, and establishing signage standards.



FIGURE 6-NEW WAYFINDING SIGN

Wayfinding signage should provide the less confident or visiting bicycle riders information that allows them to easily find and access the most comfortable and direct route to major destinations within the community.

All current and future bikeways should be considered when developing the wayfinding plan. Signage needs and rider guidance should follow AASHTO and NATCO design guidelines.

Once a wayfinding plan is adopted, existing signage should be modified or removed if not specified in the plan. Implementation of signage should be planned and coordinated with the development of the network bikeways.

Wayfinding signage is expected to encourage the “interested but concerned rider” and will raise bicycle awareness in the community.

Additional signs may also provide safety information, rider education and resource information for riders. Locations for installation of bikeway network maps should be included as part of the Wayfinding plan.

Funding for the upgrading of signs may come from local partnerships with health, employer, transit, or community organizations. Funding for installation of new signs should be included in project costs associated with the development of the bikeway.



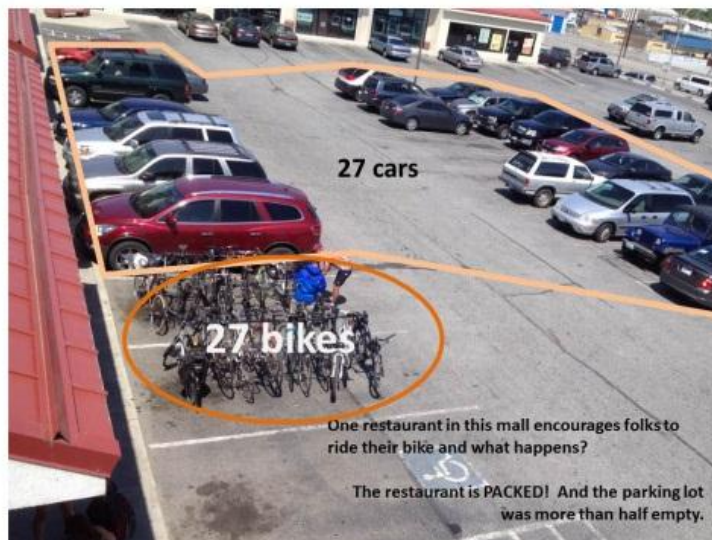
Action Item 3.3. IMPROVE BICYCLE ACCESS TO MAJOR DESTINATIONS

This plan recommends the jurisdictions work with local businesses, transit and community organizations to develop ways to incorporate bicycle facilities into major public and private facilities on a permanent or temporary basis to encourage people to ride their bicycle.

In order to further encourage and raise acceptance for bicycle use within our community it is important that we encourage use at major destination locations. Many current event venues, transit hubs, shopping centers and recreational sites can be accessed by bicycle. Implementation of this plan and further development of on-street bicycle facilities will promote the choice to ride to these destinations rather than drive.

CREATE PERMANENT CONVENIENT, SECURE, AND ATTRACTIVE BICYCLE PARKING

Large venues, such as arenas, shopping centers or public recreation sites, can do a great deal to encourage bicycle use by providing bicycle parking as close as possible to the front door. The space required to park 12 bikes is equivalent to that of one car.



TRANSFORMATION OF A SINGLE VEHICLE SPACE CAN SIGNIFICANTLY EXPAND OVERALL PARKING CAPACITY FOR THE FACILITY.

CREATE BICYCLE COMMUTER STATION(S)

Although many employers would like to provide better amenities for their employees who bicycle commute it may not be feasible. To help with this challenge development of a downtown commuter station that provides secure parking, and shower/locker facilities has proven successful in many cities. Partnerships may be developed between City & County Government, LINK Transit, and local businesses to facilitate development, promotion and operation of this type of facility.

PROVIDE TEMPORARY SPECIAL EVENT PARKING

For one time or seasonal events special “Bicycle Valet” parking can be offered to accommodate visitors and further encourage travel by bicycle. These can be fully operated by volunteers and are often used as fund raisers for local organizations.

CREATE SAFE ROUTES THROUGH LARGE PARKING LOTS

Shopping malls, grocery stores, and shopping centers are all surrounded by expanses of parking lots which are a significant barrier to bicycle access. Working with the private landowner to identify and mark (green lane) a way to the front door for bicycles and pedestrians is a sure way to increase use.





PHOTO 1-BIKESHARE KIOSK

DEVELOP BIKE SHARE PROGRAM

Bike share programs provide bicycles for public use for visitors and residents. Rental of the bicycles are very inexpensive to the user and are meant for short trips of 30 minutes or less. Investigation into the feasibility of this for integration into our Local transit program is highly recommended. Bike Share programs have proven to increase bicycle use in communities as well as raise awareness.

INCENTIVIZE EMPLOYMENT CENTERS

Employers should be encouraged to provide attractive “Long Term” bicycle parking options for their employees, including shower or locker facilities for bicycle commuters. Incentivizing development of these facilities through development regulations, or tax benefits should be evaluated through discussion with the business and development communities.





CHAPTER 3

BICYCLE TRANSPORTATION CHARACTERISTICS

The intent in developing the Bicycle Master Plan is to create transportation options by providing guidance to the local jurisdictions on ways to increase bicycle use and improve roadway safety. By providing bicycle facilities that are comfortable, connected, and convenient--non-motorized transportation can become a real option for residents.

Motorists and pedestrians will share the benefits created by improved roadways for all by providing: traffic calming, more predictable movements of all users, dedicated space for each user type and higher acceptance levels of the shared roadway space.

Consideration for the type of riders and the type of trips riders may be taking, shaped the development of this plan. Implementation of this plan should strive to serve the largest group of potential riders in order to achieve the best results. This plan will provide a strong foundation for success by focusing on specific rider type groups and facilitating their ability to travel throughout the community for any type of trip.

Ultimately the development of a convenient, comfortable, and connected bicycle network must also prove to be cost effective for the jurisdictions responsible for implementation and maintenance. These four elements create the foundation for development of this plan and the bicycle network, additionally they can be used in evaluation of implementation strategies and prioritization, design and development of additional bikeway facilities.

Many, if not all, of the proposed bikeway treatments can offer additional benefits to motorists and pedestrians who share the roadways. Dedicated bicycle facilities provide traffic calming, more predictable movements of all users, dedicated space and higher acceptance levels of the shared roadway space.



“FOUR C’s”

The Bicycle Master Plan strives to create a network of bikeways that provide a comfortable, connected, and convenient non-motorized transportation option for the residents of the communities which it serves.

This network and associated bicycle facilities (such as bicycle parking, signage, and programmatic efforts) must also prove to be cost effective for the jurisdictions responsible for implementation and administration of the Bicycle Master Plan.

These elements, the 4 C's of the Bicycle Network Master Plan, are; Comfortable, Connected, Convenient, and Cost Effective, and are explained in more detail below.

COMFORTABLE

In developing the bicycle network for the Greater Wenatchee Metropolitan Area it was assumed that 50% of our population will not choose to ride a bicycle for transportation purposes if they are not comfortable riding on the streets.

Comfort in this context encompasses a variety of variables including but not limited to:

- Perceived safety of route
- Individual skill level on a bicycle
- Ability to interact with roadway traffic or separation from it
- Familiarity with a route

Because this represents such a large number of the community and provides the largest opportunity to affect a change of travel mode it is important that we design the network to serve this segment of the community.

CONNECTED

Using the current system for everyday transportation purposes is very challenging unless you are a very confident and skilled bicycle rider.

Currently the plan area has a limited number of dedicated bikeways. Bicycle riders are often challenged by the fact that many of the current bikeways do not connect to other bikeways, or useful destinations, and force users to go out of their way.

Disconnected bikeways and bikeways that do not provide direct routes or bikeways that require excess travel to locate safe routes only act as barriers to the goal of increasing bicycle use.

The bicycle network proposed in this plan has been developed to offer riders, of any ability, the opportunity to ride their bicycle for transport or pleasure on a well-connected network of bikeways within the local road system which provides access to business, residential, community and recreational destinations..



CONVENIENT

The decision to use a bicycle for general transportation purposes like going to the store, the office, a restaurant, or just riding for pleasure is greatly affected by how convenient it is.

Many factors go into convenience including but not limited to:

- Distance of travel
- Proximity to a safe and comfortable route (from home/work)
- Directness of route
- Bicycle parking options at a given destination

This plan outlines a network which can provide a comfortable route for the majority of the population within 1/4 mile of most households and major business/employer centers.

COST EFFECTIVE

Due to the downward trend of funding for transportation projects whether motorized or non-motorized it is imperative that each jurisdiction be vigilant in defense of their budgets and their ability to get projects done.

For this reason it is extremely important to work improvements for bicycling into the planning process as early as possible. Early consideration for bicycle facilities can offer cost savings in design, engineering and often construction of the project.

A “Complete Streets” policy, which requires that all road projects consider all users, and ensures that from the beginning of a project the roadway, is evaluated from a motorized as well as non-motorized perspective, may be considered to ensure early consideration of non-motorized travel in roadway projects.

Further consideration for long term costs of maintenance and upkeep of the bikeways should also be acknowledged in the planning process, however these costs will often be quite low and the addition of bicycle facilities can prove to lengthen the lifespan of the roadway due to less vehicle traffic.



**Orondo St (in distance)
Does not connect to
trail.**

PHOTO 2-ORONDO ST. DISCONNECT





RIDER TYPES

In order to effectively increase bicycle use for general transportation purposes it was necessary to identify a specific rider type and design facilities and programs around the group with the most potential for change.

It is important to understand these riders and how they may tend to use or not use a given roadway depending on the availability of bicycle facilities and their ability and/or comfort with the facility.

RIDER TYPE BACKGROUND

Determination of the Plan Rider Types was made after review and discussion of the current trends

in rider type definition. Within the non-motorized planning world there are generally two types of rider classification methods; one is based on the skill of the rider where the other is based on the rider comfort on a given bikeway. The following pages present brief descriptions of each of the methods.

FEDERAL HIGHWAY ADMINISTRATION CLASSIFICATION

The FHWA classifies riders in three ways (A, B, C) based on skill:

- A. Advanced Cyclists whose greater skill enables them to share roads with motor traffic. Moreover they are unwilling to sacrifice speed for separation from traffic.
- B. Basic Adult Cyclist, who lack the “skill” to confidently integrate with fast or heavy traffic
- C. Children Cyclists, less capable than class B at negotiating with traffic and more prone to irrational and sudden movements.



The FHWA does not attach any percentage or estimation of population potential for a given rider type.

AASHTO GUIDANCE

The 2012 AASHTO Guide for the Development of Bicycle Facilities assigns skill and confidence to the rider types, but limits it to two categories. The updated guide categorizes riders as:

- Experienced and Confident
- Casual and Less Confident

AASHTO supports the idea that developing facilities for the “Casual and Less Confident” is the key to creating an effective and useful bikeway network that will provide the greatest opportunity to increase bicycle use within the community.



THE PORTLAND METHOD

Roger Geller, Bicycle Coordinator for the City of Portland, identifies rider types based on a survey of resident’s comfort with different levels of traffic stress on roadways with and without bicycle facilities.

This survey also estimates what percentage of the population fit into each rider type group.

The four types are as follows:

Strong and Fearless <5% of population

They are comfortable riding when and where they need to regardless of distance, or bicycle facilities.

Enthusied and Confident >15% of population

This group is comfortable riding with traffic as long as there is some type of bicycle facility available. Bike lanes and wide shoulders are all this rider needs to get to where they want to go. They don’t necessarily want to travel long distances by bicycle, but use the bike for many shorter trips.

Interested but Concerned > 50% of population

Riders in this group are not extremely experienced, but have a desire to use their bicycle more. They are not comfortable riding in or around any significant traffic in bike lanes or on wide shoulders. Children, riding on their own or with their parents prefer residential streets with low motor vehicle speeds, and shared use paths are included in this group.

No Way-No How < 30% of population

There are no riders in this group and for whatever reason; personal, physical, political, etc.; they will not ride a bicycle for transportation or recreational purposes. This plan recognizes this group and does not intend to change their ways.

Population by Rider Type

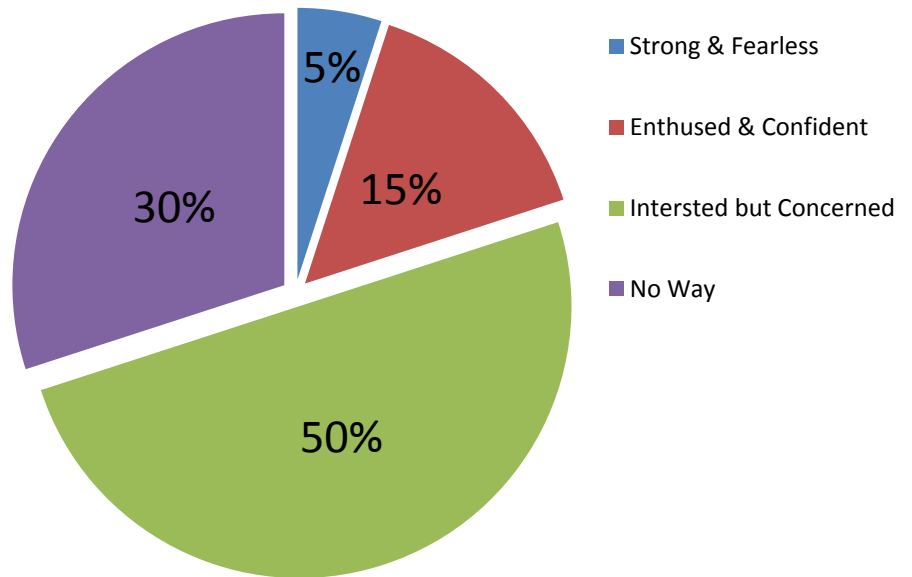


FIGURE 7-RIDER TYPE BY POPULATION





PLAN RIDER TYPES

This plan determines that a categorization focusing on comfort level, as proposed in the Portland Method, will best address the largest potential group of riders.

In addition to the categories presented by the Portland Method it was felt that children and new riders share a unique set of skills and challenges, and therefore dictate a specific designation.

The following rider types are specific to this plan

- Children and New Riders (CN)
- Interested But Concerned (IBC)
- Enthused and Confident (EC)
- Strong and Fearless (SF)

TRIP TYPES

Using a bicycle for transportation is characterized in the same way vehicle use is; making a trip to work, to school, to the store or to just get across town. As with motor vehicle traffic there are different reasons for each trip and different reasons for routes chosen for these trips.

- Destination Type
- Distance/Route Type
- Rider Priority

Rider needs are all subject to the individual and their comfort or ability level with riding a bicycle on the roadway, which will differ between rider types.

The following tables are for general reference only, to be used as a way to estimate the effectiveness of bicycle facilities proposed in the plan.

“Most [car] trips Americans make are short: 50% are less than 3 miles, 40% are less than 2 miles, and 28% are less than 1 mile.”

US Department of Transportation, 2009



TABLE 2-TRIP TYPES

COMMUTE TRIP-REGULARLY RIDES TO A SPECIFIC PLACE

Destination	Distance	Route Type	Rider Priority	Rider Needs
Employment Locations Schools Community Buildings Public Health Centers Transit Centers	1-10 miles One Way	Prefers direct route over routes that will take more distant path. Typically will ride in bike lanes or shared roadways with traffic when necessary to shorten trip distance or time. Will often ride regardless of weather conditions, providing that the route is accessible.	1. Time 2. Distance 3. Safety	Long term bike parking Changing room/showers Options for return trips

TRANSPORT TRIP-GENERAL TRAVEL AROUND TOWN

Destination	Distance	Route Type	Rider Priority	Rider Needs
Business Centers Retail Centers Children's School Farmers Markets Daycare Shopping Socializing Community Events Recreational Events Playgrounds Ball fields Parks	.5 - 3 miles One way	Prefers safety over directness of route. Often carrying a small load of some sort (groceries, kids, recreational equip). Typically will seek out the quiet back streets, but will choose not to ride if route involves high levels of traffic interaction.	1. Safety 2. Convenience 3. Distance	Short term bike parking Well-marked routes Comfortable intersection crossings

RECREATIONAL TRIP-RIDING FOR THE SAKE OF RIDING

Destination	Distance	Route Type	Rider Priority	Rider Needs
Regional Trail Systems Local Trail Systems Bakeries Wineries Campgrounds Water Access Sites	Any- depending on purpose of trip	These trips are often taken for the journey more than the destination. Routes may involve local roadways, state highways, county roads and shared-use pathways.	1. Aesthetics of route 2. Safety 3. Distance	Well-marked routes Short term bike parking Route Connectivity



The 2012 AASHTO Guide identifies “Trip Purpose” as one of the key factors influencing bicycling behavior, and identifies trip purposes in four ways:

- **Utilitarian/Nondiscretionary**

Trips that are needed as parts of a person’s daily activities...while some people may choose to bicycle for transportation; others may use bicycles for utilitarian trips because they do not have access to transit an automobile or possess a driver’s license, or are otherwise dependent upon bicycling.

- **Recreation/ Discretionary**

Recreational trips include trips made for exercise and/or leisure. It is assumed that any trip of this sort is by choice and not by necessity.

This plan focuses primarily on the “Utilitarian/Nondiscretionary trip purpose.



CHAPTER 4

EVALUATION OF EXISTING FACILITIES

The current bicycle facilities have been in place since the late 1990's with limited, ad hoc improvements in the last 10 years. Within the MPO there are approximately:

9 miles of bikeway with designated on road space (bike lanes).

19 miles of bikeway with "Bike Route" signage only (shared lanes).

14 miles of Shared Use Path (Apple Capital Loop Trail)

Although there are 19 miles of signed "bike routes," this does not affectively create a bicycle facility due to a lack of lane markings or intersection treatments to facilitate or encourage bicycling on these routes.

The existing bikeways (lanes and routes) lack connectivity and therefore lack function as a network whereby someone could easily and comfortably ride from one location to another for commute, transport or recreation.

The current facilities do not serve the local schools, parks, community centers, business centers or transit destinations very well. Users of the current facilities must possess a higher level of riding experience, and knowledge of local road characteristics and routes in order to navigate safely and comfortably through the community.

The Apple Capital Loop Trail is heavily used by commuters, where they regularly encounter: congestion, forced slow speeds and in general a longer more indirect route than the local roadway system could offer. Commuters are willing to trade these inconveniences for the higher level of safety and lack of traffic offered by the shared-use-path over the local roadways which lack dedicated bicycle facilities.

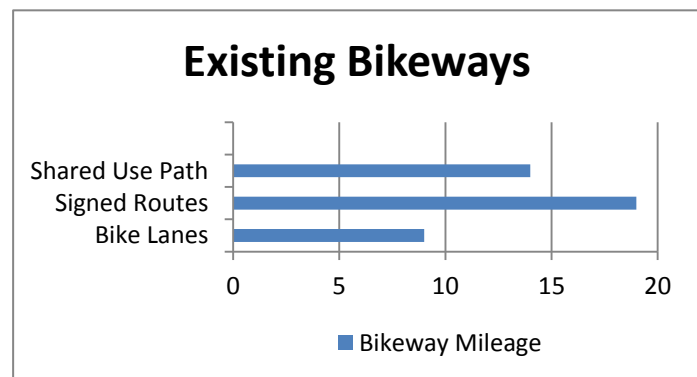
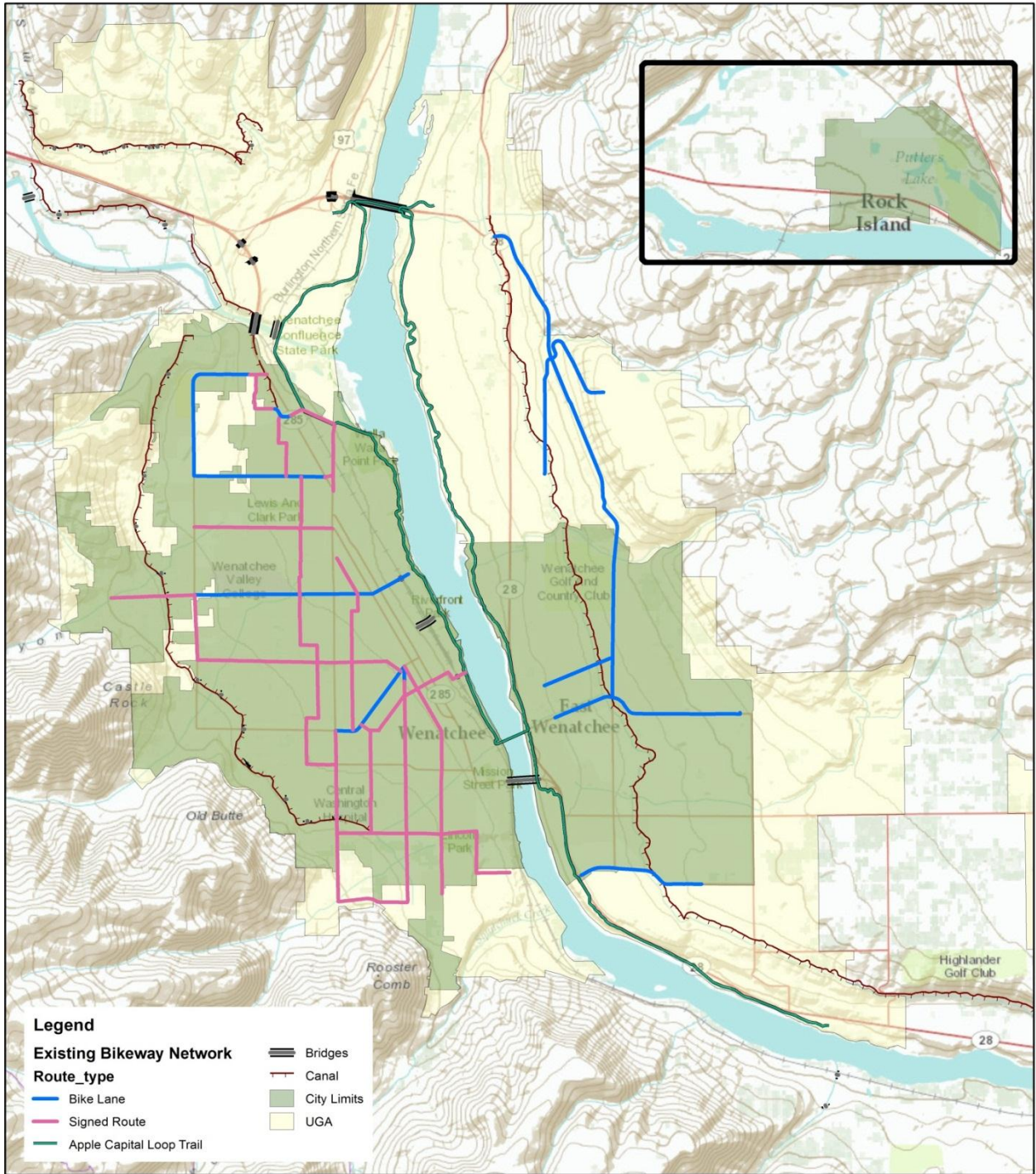


FIGURE 8-BIKEWAY MILEAGE (2010)

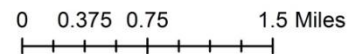




Bicycle Network: Existing Bikeways

This map represents the existing bikeways within the MPO Boundary.

Signed routes do not have any roadway markings of any kind, other than route signage.



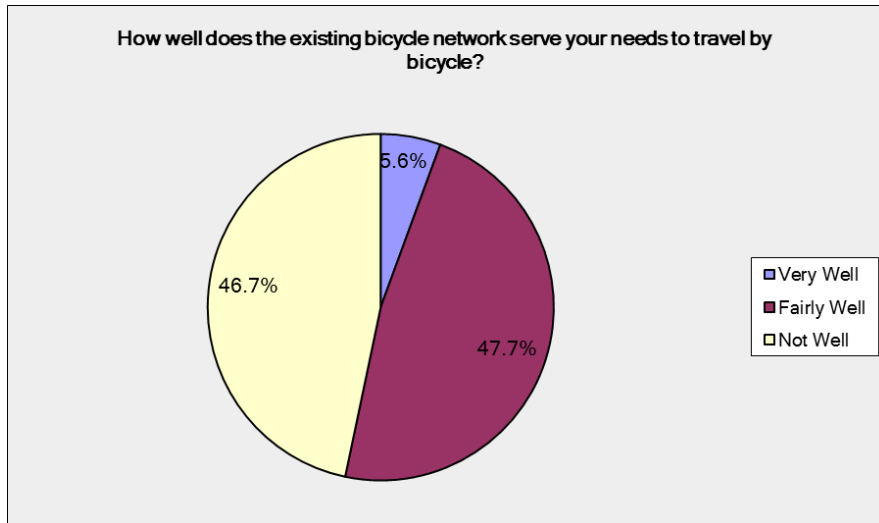


FIGURE 9-SURVEY QUESTION 19

BIKE LANES

Existing Bicycle Lanes within the MPO area have been placed on arterial roadways and collector streets which offer some benefit to those riders who use them by providing dedicated space on some of the busier roads.

Current bike lane concerns:

- Tend to terminate in dangerous, and/or intimidating intersections,
- Fail to make connections with other bikeway facilities, and
- Inconsistent width, vary from 4-6'
- Inconsistent markings

On street parallel parking is located next to some of the lanes creating a dangerous potential for “dooring” of bicyclists where a driver opens a vehicle door into the bikeway travel lane blocking the lane for the cyclist.

Many of the bike lane symbols used are not of the MUTCD standard. Directional arrows are not consistently used in conjunction with the bicycle lane. Markings differ between jurisdictions, as well as within individual jurisdictions.

Bike lanes generally terminate prior to intersections (as allowed by MUTCD) or follow the right shoulder into the intersection. Both of these scenarios can create a dangerous situation with right turning vehicles, and does little to make less experienced riders comfortable.

Signal detection is varied with no lane markings identifying optimal bicycle placement for detection.



FIGURE 10-EXISTING BIKE LANE SYMBOLS



SIGNED BIKE ROUTES

Roadways with signed bicycle routes are primarily on local streets with limited traffic and generally slow speeds most existing Signed Bicycle Routes do not have a separation of vehicle and bicycle traffic lanes.



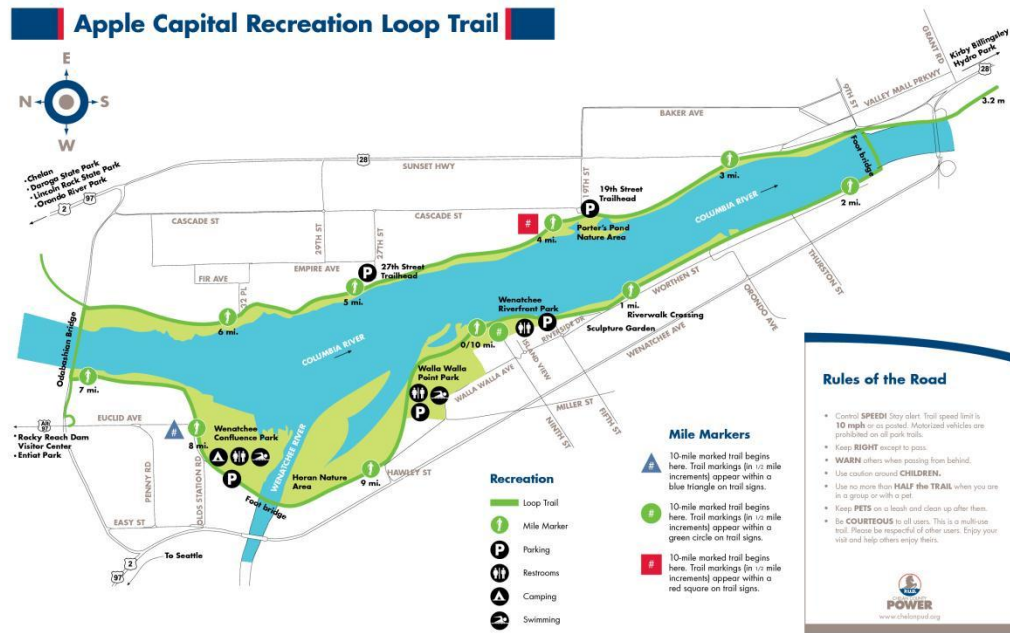
PHOTO 3-EXISTING BIKE ROUTE SIGNAGE

Current Signed Bike Route concerns:

- “Bike Route” signs only indicate that the rider is on a route, the lack of destination information confused riders unfamiliar with routes and where they lead
- There are no visible lane markings or additional signage to alert drivers to presence of bikes
- Current routes do not follow the most direct path and often end before reaching major destinations
- Routes are hard to follow for people unfamiliar with the street network

Many of the roadways identified as “Bike Routes” are also used as bypass routes for motorists who are trying to avoid lights and/or traffic on parallel arterial or collector roadways. The bypass activity on the routes often creates heavy traffic and higher speeds which act as barriers to riding for less experienced and confident riders.





MAP 2-PUD LOOP TRAIL MAP

SHARED-USE-PATHWAYS

Currently there is one shared-use-path that serves both the Wenatchee and East Wenatchee sides of the Columbia River. This path, the “Apple Capital Loop Trail” or “Loop Trail” for short, is approximately 11 miles long and travels in a roughly north-south orientation, as the name implies, creates a loop. There are approximately 4 miles of additional small sections of pathway connecting to this trail, extending from the loop or making small connections within the communities.

Current Loop Trail concerns:

- Congested—the diversity of users (bikes, walkers, dogs, skating) is filling the current space of the trail in many popular areas
- Provides the only non-motorized route across the Columbia River that accommodates all rider types
- Provides the only north/south route for most users
- Riders often have to travel longer distance to use it
- The trail is managed by multiple jurisdictions
- 10 mph speed limit—too slow for commute riders

There are also a number of very popular, informal and unmanaged, shared-use-paths within the community of Wenatchee and East Wenatchee. These unauthorized pathways exist on the service roads that parallel the irrigation ditches which serve both communities and have been used for many years.

Currently these are not maintained for pathways and presently have “No Trespassing” signs posted by the irrigation districts who manage them. Bicyclists using these routes encounter weeds (puncture vine), and surface conditions (loose gravel) which limit the use to mountain bikes and other large tire bicycles.



This plan does not intend to encourage further trespass by users but does recognize that the connectivity and popularity of these informal pathways should not be overlooked, as they traverse each side of the river through primarily residential areas and offer pedestrians and bicyclists a way to move about with minimal exposure to traffic.



CHAPTER 5

BIKEWAY DESIGN

GUIDELINES

Because of the multi-jurisdictional make-up of the MPO planning area, it is important that bikeway design be consistent throughout the network to improve safety and increase use and awareness throughout the region.

Bike Lane widths, lane markings, signage and intersection treatments should be easily recognizable and provide the same level of comfort, direction and roadway space between all jurisdictions involved.

This plan does not seek to develop guidelines unique to our area but recommends that design guidelines for this plan follow the latest recommendations by AASHTO as presented in the Guide for the Development of Bicycle Facilities (2012), MUTCD, WSDOT Design Manuals, or the NACTO Urban Bikeway Design Guide.

The NACTO Urban Bikeway Design Guide is based on the experience of the best cycling cities in the world. The designs in this document were developed by cities for cities, since unique urban streets require innovative solutions. Most of these treatments are not directly referenced in the current version of the AASHTO Guide to Bikeway Facilities, although they are virtually all (with two exceptions) permitted under the Manual on Uniform Traffic Control Devices (MUTCD).

For the purposes of this plan a bikeway is to be defined as:

Any road, street, path or way which in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.



DESIGNATED ON-ROAD BIKEWAY

Designated on Road Bikeways are defined as a portion of the roadway designated for preferential use by bicyclists. These are commonly known as Bike Lanes, which may have widths that can vary from 4 feet to 10 feet depending on specific designs.

Depending on the specific design (see list below) this bikeway can provide moderate to high comfort levels for most bicycle users, including roadways with heavy or faster moving traffic. This treatment type guides and encourages more predictable movements by the bicycle rider, and the motorists in busy traffic situations by providing dedicated space within the roadway for each.

Intersection treatments for this type of bikeway should ensure that where possible the lanes carry to and through the intersection providing a higher degree of safety for riders.

DESIGN TYPES:

- Standard Bike Lane
- Buffered Bike Lane
- Climbing Lane
- Cycle Track



PHOTO 4-DESIGNATED ON ROAD BIKEWAY EXAMPLES



MARKED SHARED ROAD BIKEWAY

All roadways are open for use by bicycles regardless of the presence of specific bikeway facilities or designation, unless restricted by local, state or federal guidelines. For this reason all roadways within the MPO are by default “shared.” However only those with additional lane markings and signage will be considered to be a “Marked Shared Road Bikeway.” Marked Shared Road Bikeways, identified in the network plan map, should include the application of Shared Lane Markings (Sharrows) which provide guidance for riders and raises the awareness of motorists. These will differ only slightly from any other road in that they will have markings indicating shared space within the lane of travel.

Marked Shared Road Bikeways are recommended in areas where bicycles can travel at or near the posted speed limit. Primary use will be in Neighborhood Bikeways which provide a high level of comfort for all rider types, and should see the lowest traffic volumes.

Sharrows are also recommended in the more urban downtown settings where there is limited roadway space and bicycle traffic is able to move at the same speed as vehicles.

DESIGN TYPES:

- Sharrows
- Neighborhood Bikeway
- Advisory Lanes
- Signed Bike Route



PHOTO 5-SHARROW (SHARED LANE MARKING)



“Bicycles may be operated on all roadways except where prohibited by statute or regulation.”—AASHTO guide 2012



SHOULDER BIKEWAY

Shoulder Bikeways are not marked for exclusive use of bicycles. Shoulder Bikeways are found on roadways with paved shoulders that provide a suitable area for bicycling outside of the travelled lane.

A proper shoulder can offer a moderate comfort level to the more experienced rider, less experienced riders will still have challenges with traffic moving at higher speeds.

This type of bikeway is applicable where shoulder widths are greater than two feet (4' min. preferred) delineated by a painted fog line.



PHOTO 6-SHOULDER BIKEWAY

Because these are not exclusive to bicycle use riders will need to be aware of cars, signs, and other items claiming space within the shoulder.

SHARED USE PATH

Shared Use Paths are for non-motorized use only and not exclusive to bicycles. They are physically separated from motor vehicle traffic either within the roadway right of way or as an independent right of way. These are typically used by pedestrians, joggers, skaters, and bicyclists as two way facilities.



PHOTO 7-APPLE CAPITAL LOOP TRAIL

Proposed shared-use paths are in corridors not well served by the street network, and are meant to create short cuts that link bikeways, and as elements of a community trail plan.

This facility type can accommodate the most tentative of bicycle users offering the highest comfort level.



DESIGN RESOURCES

All bikeway treatments outlined in this plan can be found in one or more of the following design guideline manuals produced by state and national transportation bodies.

AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES (2012)

The currently updated and adopted AASHTO Guide provides more specific design guidance on network design considerations, developing bikeways to attract riders, and focuses on the “utilitarian/nondiscretionary” rider. This new guide also provides design detail for route-finding, shared lane markings, signal actuation, and traffic calming.

NACTO URBAN BIKEWAY DESIGN GUIDE (2012)

The National Association of City Transportation Officials Urban Bikeway Design Guide provides the most up to date design guidance for bicycle facility and bikeway planning.

“The NACTO Urban Bikeway Design Guide is based on the experience of the best cycling cities in the world. The designs in this document were developed by cities for cities, since unique urban streets require innovative solutions.”—NACTO

MUTCD PART 9: TRAFFIC CONTROL FOR BICYCLE FACILITIES (2009)

The Manual for Traffic Control Devices provides guidance as to the proper size, shape, color, language and placement of signage, lane markings, striping and hazard warnings for bicycle facilities.

WSDOT DESIGN MANUAL CHAPT. 1520 (JULY 2010)

The WSDOT Design manual, at this time, identifies only two treatment types for bikeways which; Bike Lanes, Shared Roadways.

According to the WSDOT design manual:

“When the bikeway falls outside of state highway right of way or beyond the curb on city streets designated as state highways, it is recommended that designers use the AASHTO Guide for the Development of Bicycle Facilities.”



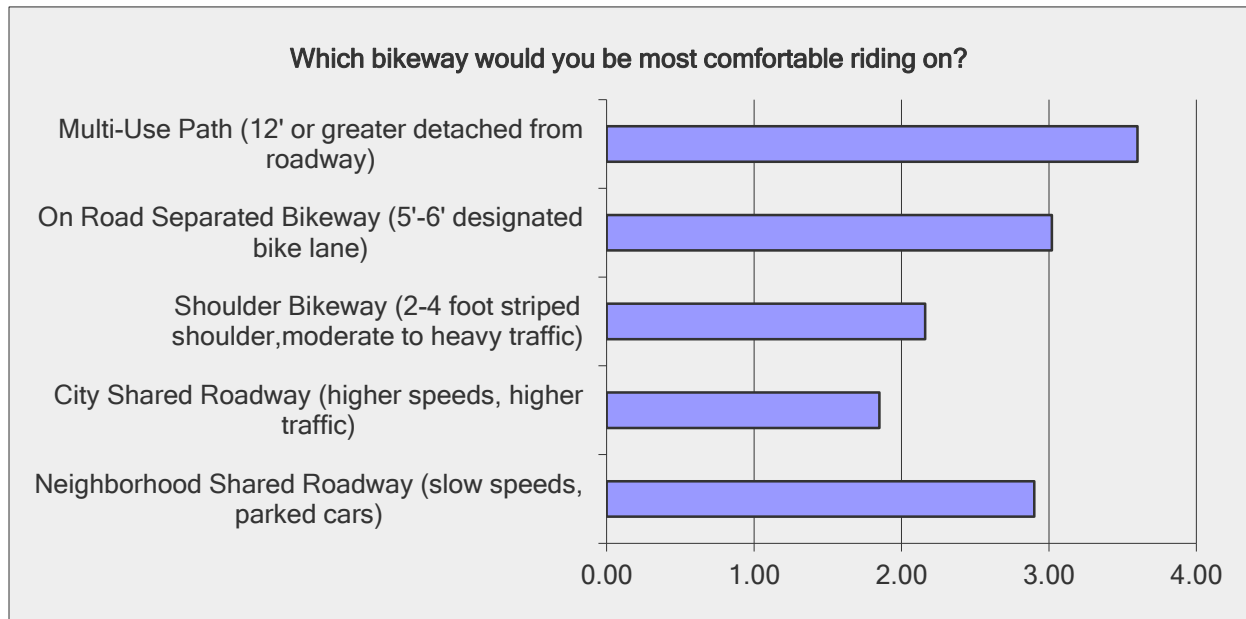


FIGURE 11-BIKE PLAN SURVEY 1--QUESTION 21

FUNCTION & DESIGNATION

The network plan (map 3) was developed in such a way that focuses on achieving an acceptable to high level of comfort for the greatest number of riders.

Because a rider's willingness to choose to ride a bicycle for transportation purposes is highly responsive to bikeway design as well as roadway character (traffic, speeds, parking), design techniques applied to any given roadway can provide a variable level of comfort and safety for the rider.

Bikeways in this plan will be identified in the following four functional ways; this designation does not imply a specific design for the bikeway but an expectation of comfort level for a given rider

NEIGHBORHOOD BIKEWAYS—ALL RIDERS:

These bikeways will be designed to be attractive, safe and comfortable to all riders including new riders and/or children by providing low speed, low traffic routes to travel between destinations. These bikeways will focus on traffic calming measures and reducing barriers to riding on local streets.

TYPE 1 BIKEWAYS—INTERESTED BUT CONCERNED RIDERS:

Are the most common bikeway identified in the network plan. These will create direct North-South, East-West connections to most destination zones through the community. These bikeways will be designed to be attractive, safe and comfortable for the IBC rider. Children and new riders should be able to ride these roadways accompanied by experienced riders.

TYPE 2 BIKEWAYS—ENTHUSED AND CONFIDENT RIDERS:

Built to accommodate existing bicycle use on roadways and improve safety by facilitating more predictable movements by bicyclists and motorists in higher traffic areas.



These bikeways will be designed to accommodate existing and future bicycle use on roadways with higher traffic volume and/or speeds and those with high utilization and turnover of on street parking. These bikeways are more likely to use Shared Road Bikeway designs.

Riders with less experience and/or confidence may not choose to use these roadways. Proposed roadways may serve as the only way to reach a destination zone in some areas. Bicycles may or may not have their own roadway space designated.

DISTANCE BIKEWAYS—STRONG AND FEARLESS:

These bikeways are indicated on those roadways that are used by long distance bicycle commuters, travelers, and recreational riders that access more distant locations outside of the urban area. Roadways in this category are primarily rural county roads with limited pavement widths and shoulders.

The “Interested but Concerned” rider presents the largest group within the population that may choose to ride a bike given a safe, comfortable and direct route; therefor, the bikeway network reflects the effort to attract these riders with the majority of bikeway mileage falling into the Type 1 or Neighborhood Bikeway category.

Depending on the bikeway design and roadway character, the bikeway function designations are expected to identify bikeways that will attract or accommodate riders in varying levels from all riders to only the “strong and fearless.”

The plan does not call out specific bikeway treatments for the functional designation, but instead encourages the local jurisdiction to evaluate each project and develop facilities to meet the bikeway function goal that fits best within the character of the roadway and surrounding land use. Features such as lane widths, parking location and lane configuration will need to be evaluated, along with other roadway use considerations prior to final implementation of each project.





CHAPTER 6

PLAN IMPLEMENTATION



PHOTO 8-SHARED RIGHT TURN LANE @ 5TH AND MILLER INTERSECTION

As development and re-development happens in the region it is important to recognize the community desire for transportation choices. Studies continue to show a trend towards adults driving less and fewer young drivers on the roadway, for many reasons it is much more viable and important that our community be designed for access via car, bike, bus or foot.

Nothing in this Bicycle Master Plan is intended to mandate construction or retrofit of roadways primarily for the benefit of bicycle users; this Bicycle Master Plan is not intended to constitute an ordinance or policy under local law and its implementation is subject to the priorities set by the individual jurisdictions regarding bicycle transportation in the community.

Work to implement this Bicycle Master Plan will be subject to normal budget, legal, and regulatory mechanisms in each jurisdiction and should be carried out in close consultation with interested stakeholders surrounding the project areas and the RBAB.

Full dedication towards achieving the goals of increasing bicycle use and improving roadway safety, requires integration of the bicycle master plan with all applicable local planning documents and appropriate regulations.



LONG TERM VISION

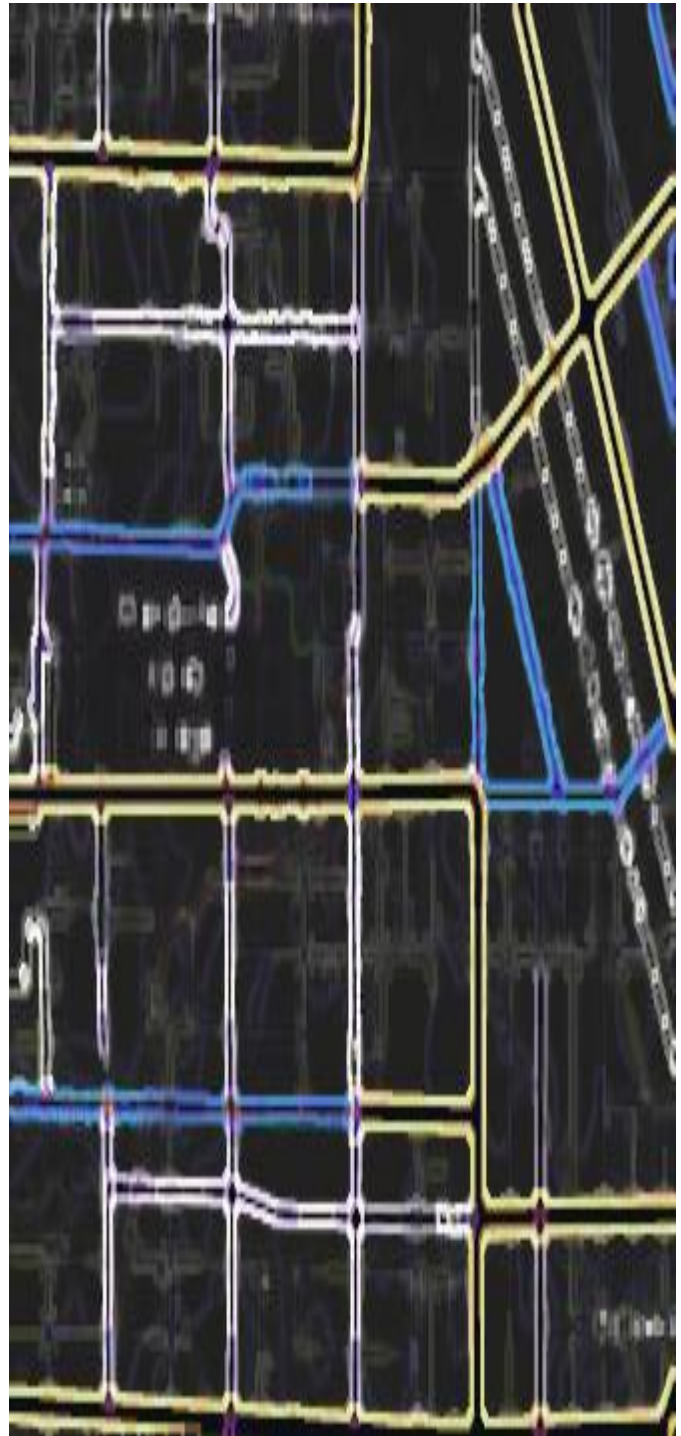
The vision presented by this plan represents a 20 year window of opportunity for improvement and development of the full bicycle network as detailed in the 20 year map (Map 1).

As roadways are improved, widened, and constructed to meet the needs of a growing community the vision of this plan allows the local jurisdictions to streamline their planning and design process by offering a blueprint for the future of the bicycle network.

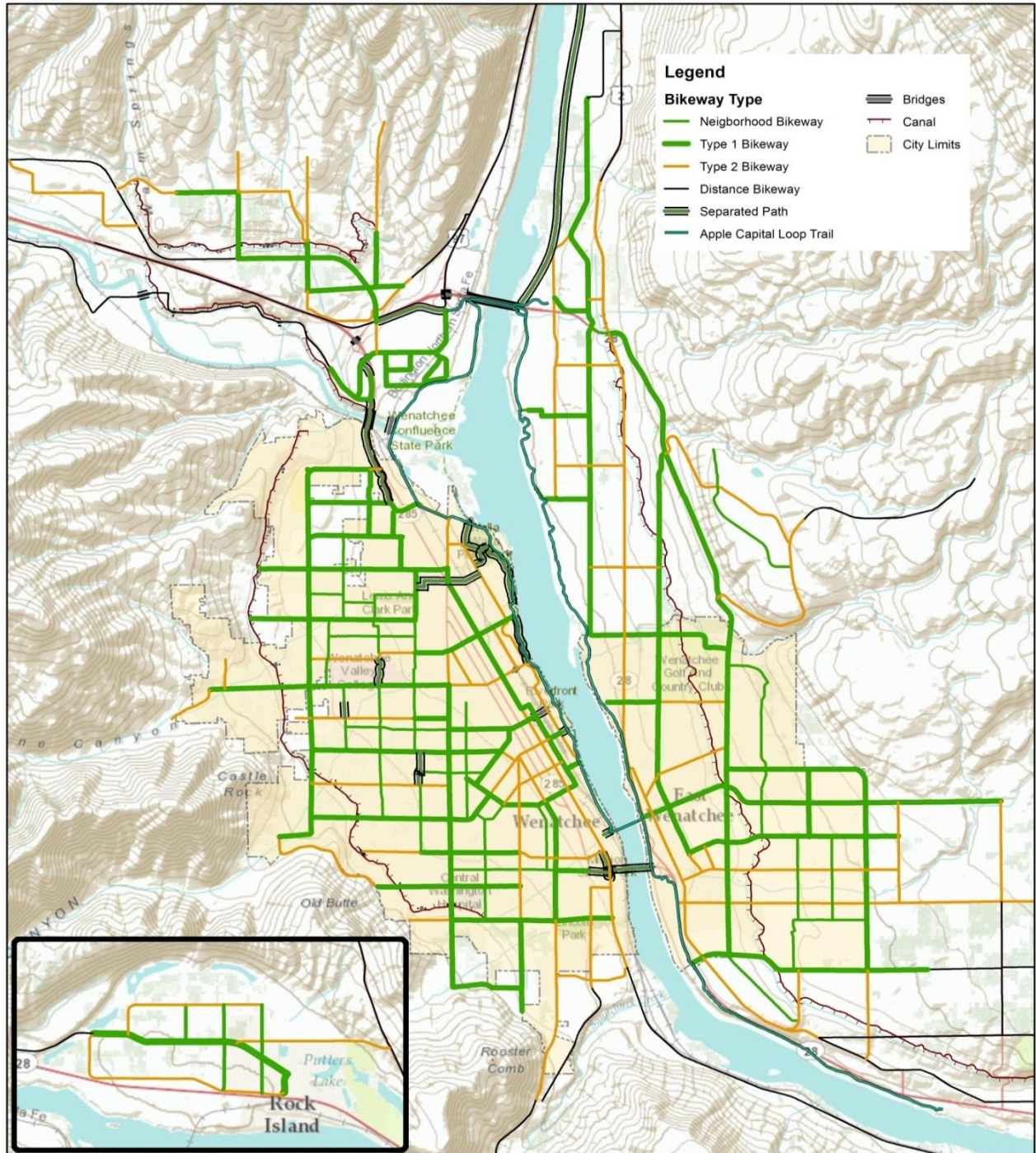
All bikeways are subject to public input, and evaluation of current and future demand during the planning and design stages. Context sensitive design should be used to ensure the facility proposed fits the street and neighborhood environment best.

In addition to roadway improvements education, enforcement and encouragement activities and programs will improve and raise the acceptance level for bicycle use within the community.

Through careful planning, continuous improvement, and consistent encouragement, more people within the community will make the choice to ride their bicycle more, which will reduce congestion, pollution, wear and tear on the roadways while at the same time improving the livability, health and wellness of our community.

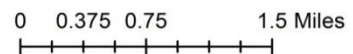


MAP 3-PLANNED NETWORK (20 YEAR VISION)



Bicycle Network: 20 Year Vison

This map represents a 20 year vision for development of a connected bicycle network serving all of the 2012 MPO area.



SHORT TERM IMPLEMENTATION PRIORITIES

To ensure that projects identified within this plan are implemented in the most cost effective manner they should be fully integrated into the transportation planning for the region.

In order for this plan to achieve the stated goals of increasing bicycle use and improved roadway safety for bicyclists it is most important to develop a network of bikeways that accommodate all users and trip types within a reasonable distance from the places where people live, work and play.

Opportunities to improve the existing network are most easily capitalized on when the planning process for a road project begins. If accommodations for bicycles are considered early in the planning stages of street improvement project efficiencies in planning, design, and construction can be maximized and costs reduced.

Projects identified as “Short Term” are prioritized for implementation within the first 3-5 years after plan adoption. With exceptions for the Stand-alone projects nearly all of the proposed short term improvements to the bikeway network can be included in roadway projects that are already in the planning stages.

Many of the projects outlined in this plan can be completed in the cycle of surface preservation for the local roadways and may require little more than extra paint for lane striping and markings or extra signage for route-finding.

Policy actions, encouragement, acceptance programs and enforcement projects as detailed in the objective action items can be implemented quickly if the jurisdictions choose.

The RBAB will play a key role in implementing the plan, and should be included in the plan review of all roadway projects to ensure consistency through implementation of the project. This group will also be critical to development of programmatic improvements that cross jurisdictional boundaries.

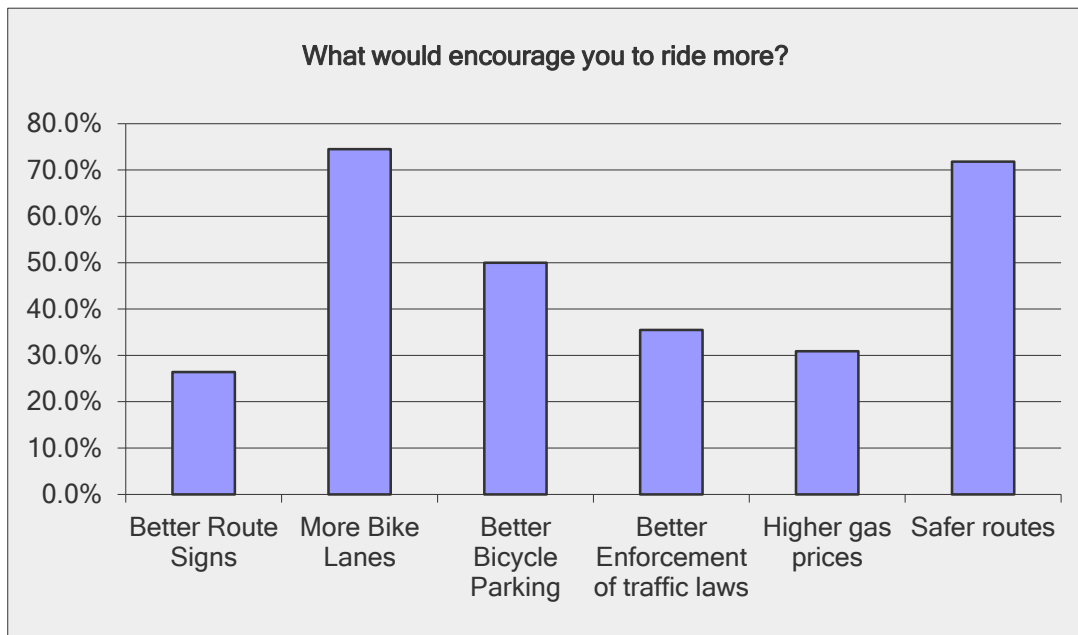


FIGURE 12-BIKE PLAN SURVEY 1-- QUESTION 25



PLAN FUNDING

Funding for all road projects come from the distribution of property taxes and gas taxes to a jurisdiction’s general fund or road fund and are supplemented regularly by state and federal grant programs. Funding for implementation of this plan will come from these sources as well.

Funding sources often encourage projects that include accommodations for bicycle and pedestrian facilities. Grant applicants can achieve higher scores and increase the probability of award also by including these elements in a project.

Costs associated with bicycle facilities, can be eligible for funding through most local, state and federal grant funding programs. Jurisdictions should become familiar with funding sources that encourage inclusion of non-motorized elements into street projects.

Local fundraising such as a levy or bond campaign, distribution of vehicle tab fees or a self-tax (LID) should be considered for larger implementation projects, or as a means to fund projects for specific areas.

Bicycle registration programs are sometimes used to generate revenue for small projects or as part of a larger encouragement and acceptance campaign. Funds generated will likely be small and could potentially have high costs associated with the fundraising or management/implementation of the effort. Funding from these sources is not likely to offer a significant amount towards roadway projects, but may offer a benefit of improving the community’s acceptance of bicycle projects.

The WVTC board may also choose to supplement or fund planned or Stand-alone projects through the STP funding process. Likewise the NCRTPo may also have the ability to allocate discretionary funds available through the Transportation Alternatives funding program specific to bicycle and pedestrian projects.

Bicycle improvements offer a high return on investment; improving community health, reducing pollution, and improving the overall livability of the community.

POSSIBLE FUNDING SOURCES

<i>FEDERAL</i>	<i>STATE</i>	<i>LOCAL</i>
SAFETEA-LU	Fuel Taxes	General Fund
Federal Safety Funding Programs	Safe Routes to School Grants	Car Tab fees
City Safety Program	Pedestrian and Bicycle Safety Program	Bond or Levy
County Road Safety Program	WWRP-Trails	Local Improvement District
Transportation Alternatives	Small City Sidewalk Program	Community Fundraiser
CMAQ (Congestion Mitigation Air Quality)	NOVA	Bicycle Registration
National Scenic Byways Program	Complete Streets/Main street	
Community Development Block Grants	Highways	
STP-Surface Transportation Program		

For a full list see appendix (pg. 140) for funding sources specific to project types.



IMPLEMENTATION METHODS

Short and long term implementation of the bikeway construction projects identified in this plan will follow one of three paths. Regardless of the path steps will need to be taken to ensure that the projects are responsive to the needs of the public, the stakeholders, and the jurisdiction.

Proactive planning and presentation of roadway projects which include bicycle improvements should include review by the RBAB prior to design completion.

Implementation of projects identified in this plan will fall into one of three categories:

ANNUAL MAINTENANCE & SEASONAL CHIP SEAL PROGRAM

Many projects outlined within this plan can and should be implemented as part of the annual maintenance and chip seal programming of local roadways.

Seasonal chip seals and re-painting of roadways will offer many opportunities to implement the plan where lane configuration, the addition of shared lane markings or route finding signage are the only necessary changes to be made.

Some projects may incur additional costs, which may or may not require discretionary spending from the jurisdiction. It is anticipated that projects in this category are of the lowest cost to implement.



PLANNED ROADWAY CONSTRUCTION PROJECTS

Large scale improvements to the bicycle network can be achieved when coordinated with planned construction projects. The Regional Transportation Improvement Program outlines construction projects for 3-6 years. New roadways, overlays, and re-construction projects within this program all provide opportunities to improve access to new neighborhoods, retail/employment locations and the urban core.



Land use planning and development regulations should support inclusion of bicycle facilities in new roadway projects. Efforts made during the planning and design process to

include bicycle facilities in roadway re-construction and preservation projects can achieve significant short and long term cost savings.

Bikeways should not be considered an independent element of new roadway or re-construction projects, but as part of the complete design for the project addressing the needs of all users. Incorporation of bicycle facilities into roadway projects early in the planning stages provides jurisdictions the opportunity to work through challenges associated with new bikeway designs.





PHOTO 9-RIVERWALK CROSSING

STAND-ALONE PROJECTS

Stand-alone projects are those bikeway projects that are determined to be a priority and “need to happen” regardless of whether it fits within the above categories. These projects will be built independent of other planned roadway projects.

This plan recommends development of a funding strategy for Stand-alone projects as they are prioritized by the community. Funds for Stand-alone projects may come from a variety of sources including, local funding, state/federal grants and possibly LID revenues.

Stand-alone projects are likely to be of the highest cost to implement, but may also return the highest value to the community and greatest improvement to the effectiveness of the bikeway network.



POLICY RECOMMENDATIONS

Policy Action 1. ADOPT BICYCLE MASTER PLAN

This plan recommends adoption of this plan in part, or in whole, into the transportation element of the respective comprehensive plans, of the MPO member jurisdictions.

Policy Action 2. ADVANCE BICYCLE FRIENDLY DEVELOPMENT REGULATIONS

This plan recommends that each jurisdiction evaluate their zoning and development code and identify opportunities to incentivize new development to support and encourage bicycle use.

Long and short term Bicycle parking, on road facilities, and multi-use paths connecting neighborhoods all should be encouraged or incentivized for new development. Developers should be aware of the benefits of bicycle friendly development and the ability of such improvements to have positive impacts to the bottom line of their projects.

Development of guidelines and policy that encourages and incentivizes including bicycle facilities in business centers, employment centers, residential development and retail locations supports the goals set for this plan.

Policy Action 3. COMMIT FUNDING FOR BICYCLE PLAN IMPLEMENTATION

This plan recommends that annual funding be identified, prioritized and allocated through the MPO and/or jurisdictions specific to the purpose of implementing the bicycle master plan, whether it is for education, encouragement, enforcement or bikeway construction.

There are a number of non-motorized projects which will require local funding to complete. Jurisdictions have several resources available to create a local, sustainable funding source for specific non-motorized projects. It is recommended that each jurisdiction evaluate the need for this type of funding and develop a program to fit the needs and desires of the community and region.

Potential funding scenarios

- **License Tabs**—Specific dedication of funding from license tab fees, limited to stand alone projects and not lumped into general fund for projects.
- **Develop local funding initiative**—Evaluate local support for self-tax, bond or levy dedicated to development, construction and maintenance of non-motorized network.
- **Dedicate specific STP funding**—The MPO has the ability to prioritize funding for non-motorized projects. A certain percentage could be set aside for funding of retrofit or high priority non-motorized projects.

Local dedicated funding may be required for: maintenance of bikeways, spot improvements, Stand-alone projects, and education, outreach, enforcement and encouragement programs. Continued support for maintaining the role of the RBAB for the MPO should be considered a priority.



EVALUATION

The following are suggestions for evaluation that may be used to measure success of programs, completeness of projects and achievement of the goals to increase use and improve safety as outlined by this plan.

SET GOAL TO ACHIEVE BICYCLE FRIENDLY COMMUNITY STATUS

By setting this as a goal for the community the leadership communicates the commitment to improve conditions for bicycles, encourage ridership, improve safety and increase acceptance of bicycles for transportation in our community. By achieving this goal the community will be measured against similar communities in the country and receive feedback on how and where improvements can be made.

DEVELOP ANNUAL BICYCLE REPORT

The RBAB can play a role in an annual evaluation of the bicycle network and the effectiveness of encouragement, awareness and enforcement programs. This report should include annual bicycle counts, crash information as well as details regarding bikeway mileage gains, barrier elimination and milestones reached.

BI-ANNUAL PLAN REVIEW

As this plan is implemented it will need occasional review to update information, review planning and review priority projects. The bi-annual review will allow the jurisdictions to stay current with the planning and ensure that future projects are included early. Review will also provide additional opportunities for public feedback and review of the plan and projects proposed.

Successful implementation of this plan will not be readily apparent without employing some type of measurement of effectiveness. In order to continue to evolve and respond to the needs of the community a method of evaluation will need to be identified, and implemented with this plan.





APPENDIX

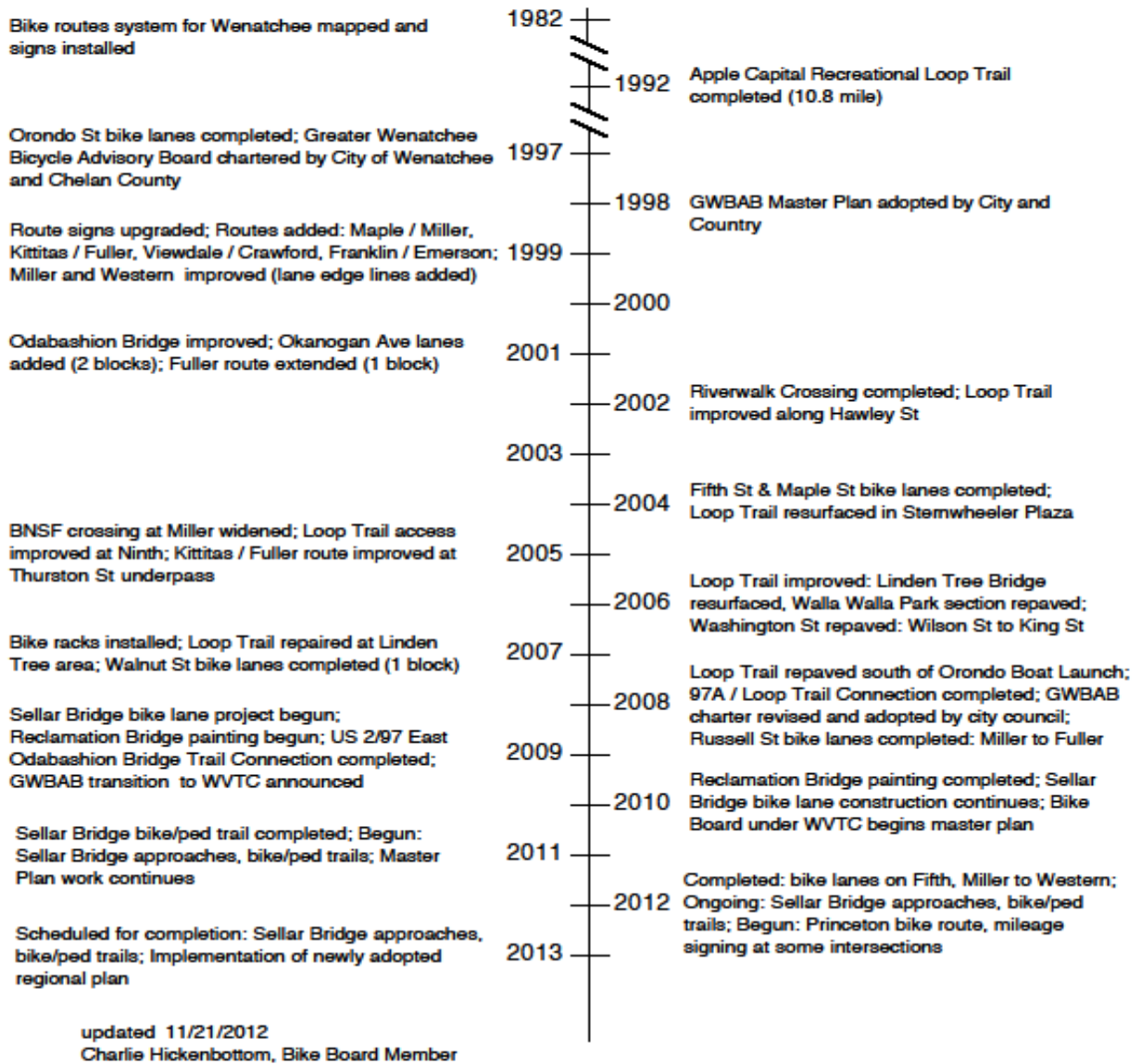




APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

BICYCLE PLANNING HISTORY

Bicycle History Timeline
Greater Wenatchee Area





APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

BIKEWAY TYPE DESCRIPTIONS

NEIGHBORHOOD BIKEWAYS are designed to be attractive, safe and comfortable to all riders including new riders and/or children by providing low speed, low traffic routes to travel between destinations. Length of individual sections will be relatively short, sections may be connected via other Bikeways to travel longer distances.

Potential Street Treatments:

- Traffic Calming
- Shared lane markings
- Way finding

Potential Street Trade Offs

- Restriction or reduction of vehicle turning movements at intersections
- Restriction or reduction of vehicle through movement at intersections
- Reduction of speed limits to 20mph
- Removal or limitation of on street parking

Vehicle traffic may be reduced and/or slowed to achieve the desired bikeway level, travel lanes will be shared by cars and bicycles. Roadways may be re-prioritized for bicycle traffic, allowing local vehicle access but preventing cut through access to nearby arterial roadways.

TYPE 1 BIKEWAYS will be designed to be attractive, safe and comfortable for the largest segment of potential bicycle riders. Children and new riders should be able to ride these roadways accompanied by experienced adults. Length of sections will be longer and provide more direct routes than "Neighborhood Bikeways." Sections will create Primary North-South, East-West connections to most destination zones.

Potential Street Treatments:

- Bike Lanes
- Buffered Bike Lanes
- Contra Flow Bike Lane
- Advisory Lanes
- Protected Cycle Tracks
- Intersection Treatments
- Shared Lane Markings
- Bicycle Signals
- Way finding

Potential Street Trade Offs

- Restriction or reduction of vehicle turning movements at intersections
- Reduction of vehicle travel lanes
- Reduction of vehicle lane width
- Removal or limitation of on street parking
- Widening of roadway/intersection areas



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

Primary Bikeways will be attractive to commuters, and utility riders providing a comfort level and directness of travel to allow for efficient travel and timing. Bicycles should have their own designated space on these roadways, shared lane markings maybe used on slower low traffic roadways or for short sections where extra lane space is restricted .

Special attention should be made at intersections and connections to other network sections so that cyclists can safely and easily transit these locations.

TYPE 2 BIKEWAYS are designed to accommodate existing and future bicycle use on roadways with higher traffic volume and/or speeds, high utilization and turnover of on street parking. Secondary Bikeways are not intended to attract new cyclists, but more so to accommodate existing bicycle use on these roadways and reduce conflict between users. Riders with less experience and/or confidence may not choose to use these roadways. Proposed roadways may serve as the only way to reach a destination zone in some areas. Bicycles may or may not have their own roadway space designated.

Potential Street Treatments:

- Standard Bike Lane
- Shared Lane Markings
- Climbing Lanes
- Advisory Lanes

Potential Street Trade Offs

- Restriction or reduction of vehicle turning movements at intersections
- Reduction of vehicle travel lanes
- Reduction of vehicle lane width
- Removal or limitation of on street parking
- Widening of roadway/intersection areas



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

DISTANCE BIKEWAYS are indicated on those roadways that are used by bicycle commuters, travelers, and recreational riders to access more distant locations outside of the urban area. Roadways in this category are primarily rural county roads with limited pavement widths and shoulders.

Distance bikeways will be used by the most confident and experienced riders primarily. These bikeways may be linked with other bikeways to make safe and comfortable connections within the more urbanized areas.

Section lengths will generally be long due to the proximity of these bikeways from the destination zones and for the fact that they act as connector routes between communities.

Bicycles may or may not have a dedicated space within the roadway. Proposed improvements in this category also highlight raising drivers' awareness of bicycle use in the roadway or along the shoulders in these more rural settings.

Potential treatments for these bikeways are as follows:

- Shared Lane Markings
- Advisory Lanes
- Way finding Signage
- Shoulder Bikeways





APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

BICYCLE FRIENDLY COMMUNITIES

FIGURE 13-BFC RANKING WA. ST
(League of American Bicyclists, 2013)

Washington

State Rank: 1 out of 50

Explore state rankings.

Washington's Bicycle Friendly Communities

		Engineering	Education	Encouragement	Enforcement	Evaluation
Bainbridge	Bronze	★				
Bellingham	Silver	★	★	★		★
Olympia	Silver	★	★		★	
Port Townsend	Silver	★		★		
Redmond	Silver	★	★	★		
Seattle	Gold	★	★	★	★	
Snohomish	Bronze	★		★		
Spokane	Bronze	★				
Tacoma	Bronze			★		
Vancouver	Bronze			★		

Development of programs, policies, and design standards within this plan will be focused on the principle elements defined by the 5-E's which the League of American Bicyclists use to evaluate the "bicycle friendliness" of communities.

- *Engineering*
- *Education*
- *Encouragement*
- *Enforcement*
- *Evaluation*





APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

PRIORITY PROJECT COST DETAIL

ID	FULL_NAME	Bikeway_Ty	LENGTH (mi.)	Per ea	Total Estimated
WA-1/WA-2	Wenatchee Ave (DWTN)	Shared Roadway	0.01	\$500 per 1/10 mi.	\$ 500.00
	S. Wenatchee Ave	Bike Lane	1.01	\$9.00 pf	\$ 7,995.20
	Wenatchee Ave (maple-5th)	Buffered Bike Lane	1.08	\$6.00 pf	\$ 34,214.40
	N. Miller St.	Bike Lane	0.1	\$3.00 pf	\$ 1,584.00
	Maple St	Bike Lane	0.06	\$3.00 pf	\$ 950.40
				2.26	
F-1	5th St.	Bike Lane	0.6	\$3.00 pf	\$ 9,504.00
			0.6		\$ 9,504.00
WE-1	Western Ave. South	Buffered Bike Lane	0.5	\$9.00 pf	\$ 23,760.00
	Western Ave. North	Buffered Bike Lane	0.88	\$9.00 pf	\$ 41,817.60
	Western Ave	Buffered Bike Lane	0.74	\$9.00 pf	\$ 35,164.80
	Western Ave	Buffered Bike Lane	0.47	\$9.00 pf	\$ 22,334.40
	Western Ave	Bike Lane	0.13	\$9.00 pf	\$ 6,177.60
				2.72	
PB-1/PB-2	Princeton	Bike Lane	0.38	\$3.00 pf	\$ 6,019.20
	Pine St.	Bike Lane	0.2	\$3.00 pf	\$ 3,168.00
	N. Tacoma	Shared Roadway	0.24	\$500 per 1/10 mi.	\$ 1,200.00
	Princeton Ave	Bike Boulevard	0.25	\$25K per mi.	\$ 6,250.00
	Princeton St.	Bike Boulevard	0.74	\$25K per mi.	\$ 18,500.00
			1.81		\$ 35,137.20
LA-1/LA-2	9th St. NE	Bike Lane	1.5	\$9.00 pf	\$ 71,280.00
	Hawley	Bike Lane	0.12	\$3.00 pf	\$ 1,900.80
	Hawley	Shared Roadway	0.22	\$500 per 1/10 mi.	\$ 1,100.00
			1.84		\$ 74,280.80
LA-4	DOT Cascade Access	Multi Use Path	0.14	\$190 pf	\$ 140,448.00
	37th St. NW	Shared Roadway	0.28	\$500 per 1/10 mi.	\$ 1,400.00
			0.42		\$ 141,848.00



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EW-1/EW-2	Eastmont	Bike Lane	1.25	\$3.00 pf	\$	19,800.00
	N. Baker Ave.	Bike Lane	1.8	\$3.00 pf	\$	28,512.00
			3.05		\$	48,312.00
EW-3,4,5	10th St. NE	Bike Lane	1.21	\$3.00 pf	\$	19,166.40
	Valley Mall Pkwy	Bike Lane	1.54	\$3.00 pf	\$	24,393.60
	19th St	Climbing Lane	1.08	\$3.00 pf	\$	17,107.20
	10th St. SE	Shoulder Bikeway	1.13	\$3.00 pf	\$	17,899.20
			4.96		\$	78,566.40
FS-1/FS-2/FS-3	1st St.	Bike Boulevard	1.36	\$25K per mi.	\$	34,000.00
	1st St.	Bike Lane	0.19	\$9.00 pf	\$	9,028.80
	1st St.	Contra-flow Bike Lane	0.063	\$3.00 pf	\$	997.92
		1.613		\$	44,026.72	
MB-1/CB-1	Methow	Bike Boulevard	1.3	\$25K per mi.	\$	32,500.00
	Cherry St.	Bike Lane	1	\$3.00 pf	\$	15,840.00
	Orondo	Climbing Lane	0.39	\$3.00 pf	\$	6,177.60
			2.69		\$	54,517.60
BU-1/BU-2	S. Miller	Bike Lane	0.7	\$9.00 pf	\$	33,264.00
	N. Miller St.	Bike Lane	0.3	\$9.00 pf	\$	14,256.00
	Easy St.	Bike Lane	0.8	\$3.00 pf	\$	12,672.00
		1.8		\$	60,192.00	
SB-1/SB-3/SB-4	Wenatchee River Crossing	Bike/Ped Bridge	0.2	\$1million per	\$	1,000,000.00
	Pioneer Trail South	Multi Use Path	0.75	\$190 pf	\$	752,400.00
	Easy St Connector	Multi Use Path	0.5	\$190 pf	\$	501,600.00
	Bridge St.	Bike/Ped Bridge	0.07	\$1million per	\$	1,000,000.00
			1.52		\$	2,254,000.00
Total Mileage			25.283	Total Cost	\$	3,014,883.12



PUBLIC PROCESS

▶ DON'T MISS THIS OPPORTUNITY

Come and shape the future for Bicycle Transportation in the Greater Wenatchee Area!

The Regional Bicycle Advisory Board will be holding two open house work sessions at the end of February to get specific information regarding the community's needs and desires for bicycle transportation in the greater Wenatchee, East Wenatchee area.

The meetings will be held from 4-7pm on the 23rd and 28th of February.



All are welcome and encouraged to participate, riders and non-riders alike!

▶ DETAILS

Thursday February 23, 2012

4-7pm

Wenatchee Community Center

504 South Chelan Ave

Wenatchee

Tuesday February 28, 2012

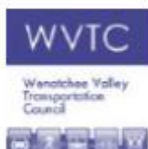
4-7pm

Eastmont Jr. High School

270 9th St. NE

East Wenatchee

For More information or to take our survey scan the QR code below with your smartphone



Bicycle Plan Open House



The Wenatchee Valley
Transportation Council
Phone: (509) 663-9059
email: info@wvtc.org

1350 McKittrick Street
Suite B
Wenatchee, WA 98801



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

COMMENTS RECEIVED

April 17th, 2013

Comment:

To the Wenatchee Valley Transportation Council (WVTC):

Our names are Alicia and Monica and we are doing a volunteer year in the Wenatchee community. Our year is lived intentionally, focusing on the values of community, spirituality, simple living, and social and ecological justice. This service program is meant to challenge us to live out these values both at home and in our placement sites, which are non-profit agencies devoted to social change. We choose to live on a small budget, share experiences with each other in community, and try to have as little negative impact on our environment as possible. Today we have a plea for the City of Wenatchee: pass the Bicycle Master Plan.

Our community tries to live simply by riding our bikes. Living roughly 30 minutes from our placement sites by foot, using the bike has contributed to our ease and efficiency in commuting to work. By biking, we are able to travel quickly without contributing to air pollution or having to pay for gas. We realize this is a driving town. Most residents own a car, if not two, and unless one lives right in the downtown area, we can understand why that is so. But that does not mean the car rules the road; the car is not the only means of transportation. By passing the Bicycle Master Plan, Wenatchee is setting a more inclusive precedent, implying that this city values all sorts of transports, motorized or not, and respects the efforts of intentional communities like ours.

On a more personal note, as women, bikes represent a safer means of travel. Whether we like it or not, it is a reality that it is riskier for women than men to walk alone in certain places after dark. With a bike, we- as women- feel more secure that we could out-pace any questionable person who is on foot. Furthermore, as people, bike lanes are safer than trying to fight vehicles five times our size in the road. While the extra-wide sidewalks prohibit bike and skateboard usage, we have had to squeeze between parked cars and moving motorized vehicles, almost getting hit three times in one setting at no fault of our own. By passing the Bicycle Master Plan, Wenatchee is making a street safer for men and women alike, as well as setting a precedent that exemplifies the city's devotion to keeping its citizens safe.

We understand the concerns of this plan. We understand it might make life a little harder with the detours for a few months. But, in the end, we will have a safer Wenatchee and will have said to the people through this act that we care about safety, and realize not all people have the privilege of a car. Some people travel in cheaper, more environmentally friendly ways. And that is why we plea: pass the Bicycle Master Plan.

Sincerely,

Alicia Bissonnette Monica VanBladel



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

April 13, 2013

Comment: Jack Feil

The council is putting far too much emphasis on biking when the big problem facing us is motor vehicle congestion and safety. There is a very small percentage of the population that can or will use bicycles as a mode of transportation. What the reasoning behind this?

Response:

Good Morning Jack,

Good question, thanks for asking, I'll give you a very direct answer. Over the past decade we have invested most of our time and resources developing plans for highway/roadway expansion, to the point that we now have well over a half-billion dollars of identified but unfunded "need" for our roads, focused almost solely on congestion relief, safety, preservation and freight mobility. Our recent focus on bicycle transportation represents an effort to backfill an area where we had basically done nothing in the past – we were starting almost from scratch on bicycles. As the bike plan wraps up, we're already transitioning our main focus to developing an updated truck routes plan for the valley and looking into pedestrian safety needs. That's the way the council works - we tend to focus on one or two things at a time, and bicycles have been very visible lately.

You are quite correct – much like public transit or even motorcycles, only a small percentage of people in the community choose to get around on their bicycle. So why do they matter? Let me offer you this perspective: when the real-world price of unclogging our roads costs the public hundreds of millions of dollars (that we don't have), finding ways to provide at least some people with low-cost alternatives to sitting in traffic and themselves contributing to even more congestion is, in our view, a rational and cost-effective response. Plus, with an increasing number of people of all stripes riding bicycles for transportation, there is much that can be done, inexpensively, to improve their and everyone else's safety.

Bottom line - we do know that many folks simply don't care to see bicycles on the road, and for them this next statement will be hard to accept, but better bicycle accommodation throughout the community can, in fact, make our roads function better for everyone.

Best Regards,

Jeff

Jeff Wilkens, Director



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

March 25, 2013

Comment: Rob Lacey

Love the updates on 5th St between Western and Miller. I use the route daily for shopping, riding to the trail going to the library etc.

Hope more can support the downtown downtown bicycle plan along Wenatchee Ave. Numerous studies have shown that community businesses are helped by increased bike traffic but locals seem to think the bike will crowd out business from large pickup and SUV clients. This is sad.

Need more community education. I hope that there will be some bike lanes on Wenatchee Av inspite of protests by uninformed and unconvinced.

Thanks for the good work. Ride on! Rob Lacey Urban biker.

Response:

Rob,

Thanks for the comments! It's good to see you out riding. We will pass this on to the city as well.

Cheers,

Patrick Walker

March 10, 2013

Comment: Andrew Thompson

Thank you for continuing to advocate for safe bike routes throughout the Wenatchee Valley. Please keep creating safe routes through the downtown area as a priority. This is currently the hardest place to navigate safely. Part of our valley's long term future is will be "green" business and tourism. Having safe bike route into and out downtown enables bike-based shoppers to access those businesses.

Response:

Andrew,

Thanks for taking the time to review the Draft Bicycle Master Plan. Your comments will be added and shared with the WVTC board. As the plan states we are working towards making riding a bicycle for general transportation a real option for our community and the downtown core is an important focus area for us.

Please don't hesitate to contact me with any other questions or concerns.

Patrick Walker



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

March 3, 2013

Comment: Vicky Cibicki

Since this is a 20 year vision for the Wenatchee Valley, be bold and extend it all the way to Cashmere...better yet, Leavenworth. The Pioneer Water Users Association enclosed their ditch. It runs from Monitor to Wenatchee with a nice hard surface, perfect for pedestrians and cyclists. This would be a step in the right direction to begin a trail from the upper Wenatchee Valley to Wenatchee. Now that is visionary!

Response:

Vicky,

Thanks for taking the time to look at the plan. We agree wholeheartedly that connecting to Cashmere would offer a tremendous benefit to our community. However the "vision" for this plan is limited to the MPO Boundary, which at this time does not include Cashmere. However I expect that by the next update (2 years) Cashmere will be part of the MPO and we can add this important connection to the network.

Cheers,

Patrick Walker

March 2, 2013

Comment: Larry Tobiska

I applaud the work done on this project. Thank you.

One deficit that affects me almost daily is the lack of a route across the WVC campus. I find myself using sidewalks with a lot of people on them at times and this is not particularly safe. I don't see anything in the plan that addresses this problem.

Response:

Larry,

Thanks for spending some time looking at the plan. The connection to and through WVC is important and the 20 year Network Map does show a proposed multi-use path through the college. As this plan is implemented we will be working closely with the college to identify the best route that provides the least conflict potential on the busy campus. In the short term the Princeton Bikeway will be improved, creating an even better North-South cross town connection.

Cheers,

Patrick Walker



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

February 24, 2013

Comment: Earl Tilly

I find the map very hard to understand. May I come to your office and obtain a real copy?

Response:

Telephone conversation.

February 15, 2013

Comment: Sarah Leyrer

The master plan looks great! This will make such a big difference for this area, both in terms of making it better for locals (and easier for inexperienced people to start commuting) and for tourists. Thumbs up.

January 20, 2013

Comment: Michael Fadich

From looking at the map, I think I know what the Type 2 bike routes are; what exactly is Type 1?

Response:

Michael,

Thanks for your interest in the Network Plan. Type One Bikeways are meant to be the most attractive and comfortable bikeway type, for the greatest number of riders. This is a group that we are calling the “Interested but Concerned,” and it generally makes up about 30% of the total population. Generally these bikeways will be on slow neighborhood streets, off street paths, or in some cases on arterial or collector streets (only with significant buffer between vehicles and riders).

Follow the links below where you will find more information.

Bikeway Function

Bikeway Type

Please don't hesitate to contact me if you have any other questions.

Cheers,

Patrick Walker



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

September 27, 2012

Comment: Ron Ward

Just wonder if there has been any thought to not allowing any parking on both sides of the street on 1st between North Miller and North Adams in Wenatchee. This is the main bike access street over the pedestrian bridge to the loop trail from the center of town. There seems to be a lot more car and bike traffic on this street. Since 1st is quite narrow and with parked car on the north side of the street, it has become very unsafe for bikes.

Thank you, Ron Ward

September 12, 2012

Comment: Larry Tobiska

Patrick

Thanks for thinking about my response.

Yes, I would love to see a safe biking lane on Chelan and Mission if this is feasible.

As I understand the map you sent out I don't see any N/S routes West of the downtown area. Princeton is one such now route now but I don't know of others West of there. Is this correct?

LT

Response:

Larry,

Thank you for your feedback. Could you please be more clear about the lack of North South routes, are you speaking primarily of downtown? As proposed on the map there is a North to South bikeway roughly every ¼ mile. Wenatchee Ave is designated for a Type 1 bikeway from Miller to 2nd street, Type 2 through downtown, and a Type 1 bikeway on Columbia paralleling this. The city has intentions to take truck traffic off of Wenatchee Ave and put it onto the couplet (Chelan/Mission), because of this we avoided trying to include bikes in that mix.

It seems from your comment that you feel Chelan and Mission should have some kind of accommodation as well, is this correct?

Please let me know.

Patrick Walker



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

September 13, 2012

Comment: A few thoughts on cycling plans:

Intersections are at least as problematic as roadways themselves. Clear signage could help, along with designated lane space for cycling traffic at busy, complicated intersections (e.g., Easy Street / 97, Hwy 2 / Miller / Chelan / Wenatchee).

The local driver culture is a bigger problem than the lack of bike infrastructure, in my experience. However, better bike infrastructure seems like the best way to change that culture, because it communicates authoritatively that cyclists are an important consideration. Setting clear expectations using ample signage, road markings and designated lanes really helps.

We are blessed with a loop trail that makes north-south traffic as safe as you'd like (until you want to go North of the confluence interchange). But the trail is often slow and at times dangerous when mixed with pedestrian traffic. I would like to see a wider trail striped for fast and slow traffic, like greenlake, as well as a bypass around WWPP. With both of these solutions, the trail goes from a slow/safe option to a favored cycling corridor.

Switching from type one to type two part way, before reaching the destination zone, makes the type one segment much less useful. I'm thinking in particular of 5th street. Whenever you can create end-to-end consistent expectations, that will really help.

I would like to see a much higher priority placed on non-car traffic. Especially on low car traffic intersections near major walking-cycling zones like 5th and Wenatchee, it makes sense to put cars last in the priority order. As a frequent walker, the car centrism of that intersection baffles me. And I have a lot of time to feel baffled as I stand and wait for a walk signal. :) Half the time, it seems like that spot could be a blinking red. Clearly, you guys have the stats, not me; this is just my anecdotal thinking.

Thanks so much for what you are doing!

Cheers,

Ben Field

September 13, 2012

Comment: David McCoy

I am on a handcycle and am limited to where I can ride. I do the loop at the park and I ride from three lakes to work at the Wenatchee World on 9th street. I hope there will be more places I can ride safely.

September 12, 2012

Comment: Molly Boyter

Street Sweeping. Would it be possible to include more thorough street sweeping in the plan. Many bike lanes in town are filled with sharp debris that the street sweepers don't quite get pushed to the curb.



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

September 11, 2012

Comment: Larry Tobiska

The map reveals a dearth of routes running north and south for bicycles. This is a significant problem. It results in usage of Mission and Chelan Streets which, without bicycle lanes, are dangerous for us, although I use them rather regularly.

August 12, 2012

Comment: Cora Sturzl

Hi!

This is regarding the single lane bridge over the Wenatchee R. between Monitor and Cashmere. First, I think the new crossing controls are great! The sensors even detect my carbon fiber bike! This morning, however I encountered a situation that got me thinking I should contact you.

I was travelling from Monitor toward Anjou Bakery on my bike, and had gotten the green light to proceed. Imagine my surprise and uneasiness to find a car travelling in the opposite direction! I can only assume the lady driving had stopped on the bridge long enough for "her" green light to time out... Maybe a do not stop on bridge sign? I know the signage is already pretty busy and the approach rather short, but I am pretty sure that is more feasible than another sensor for exiting traffic. There was plenty of room for a vehicle and a bike, but my concern is more vehicle vs. vehicle.

Just FYI,

Thanks for your time

Cora S.



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

January 13, 2012

Comment: Charlie Hickenbottom

Hi Patrick,

I like the part of the draft that shows different types of road treatments that are being considered. I like the descriptive part about different types of riders and that the needs are different. This helps justify having a bike lane on a major arterial and a quieter somewhat parallel route nearby that makes similar connections.

One possible concept for a Master Plan is to provide justification for its existence. One way to do this is to provide some connections between what's in already adopted city/regional plans with what's in the biking master plan. The link below shows the locations of adopted city of Wenatchee plans. Of course, all of this is only for the City of Wenatchee, of which I am most familiar. The link below includes the adopted Foothills Plan, which was a result of the "Foothills Design Charette."

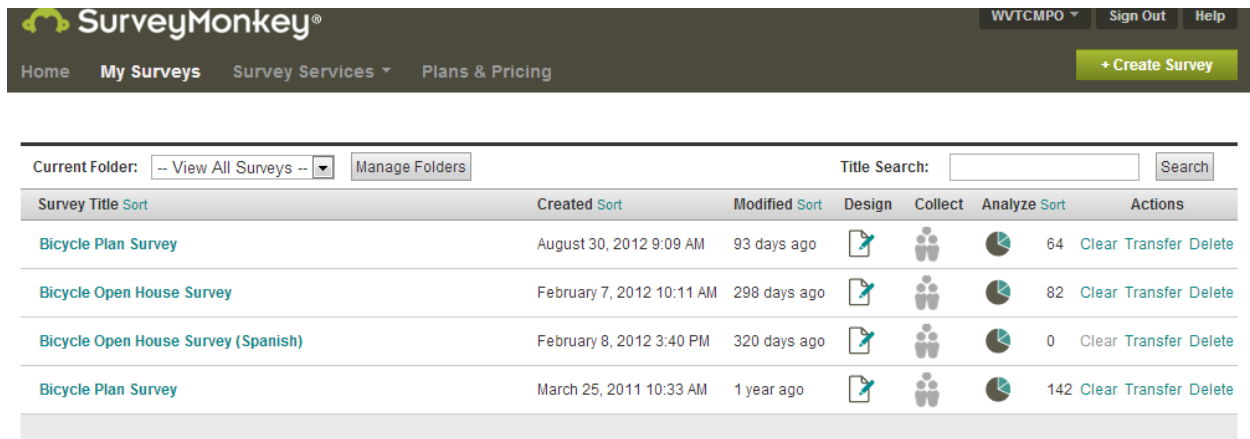
<<http://www.wenatcheewa.gov/Index.aspx?page=207>>

I have made a partial attempt to do this in the past. You are welcome to review my older documents to perhaps provide some direction/ideas.



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

SURVEYS



The screenshot shows the SurveyMonkey interface. At the top, there is a navigation bar with the SurveyMonkey logo, user information (WVTCMPO), and links for Sign Out and Help. Below the navigation bar, there are tabs for Home, My Surveys, Survey Services, and Plans & Pricing, along with a + Create Survey button. The main content area displays a list of surveys with columns for Survey Title, Created, Modified, Design, Collect, Analyze, and Actions. The surveys listed are:

Survey Title Sort	Created Sort	Modified Sort	Design	Collect	Analyze Sort	Actions
Bicycle Plan Survey	August 30, 2012 9:09 AM	93 days ago			64	Clear Transfer Delete
Bicycle Open House Survey	February 7, 2012 10:11 AM	298 days ago			82	Clear Transfer Delete
Bicycle Open House Survey (Spanish)	February 8, 2012 3:40 PM	320 days ago			0	Clear Transfer Delete
Bicycle Plan Survey	March 25, 2011 10:33 AM	1 year ago			142	Clear Transfer Delete

FIGURE 14-SURVEY HISTORY

Feedback for the plan development was received through traditional methods (Open House, focus group, advisory board) as well as via email and social network channels. Surveys were designed to elicit specific information regarding the type of rider considering the information, their riding habits, preferences, and concerns. Participants were also asked a variety of questions regarding specific challenges to riding a bicycle in the community and the willingness to change.

Survey results and open house feedback were used to guide the development of the bicycle network as well as the goals and objectives of the plan.



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

SURVEY ONE

The first survey was developed to identify primary concerns, willingness to ride, rider type, and riding habits.

Bicycle Plan Survey

Design Survey

Collect Responses

Below is a list of the collectors you are currently using to collect responses. To view the details or change the properties of an existing collector, just click the name. To collect more responses for this survey from a different group of people, click "Add New Collector".

Collector Name (Method)	Status	Responses	Date Modified
email link (Web Link)	● CLOSED	88 responses	May 31, 2011 10:40 AM
Web page News Link (Web Link: /s/bicycleplansurvey2)	● CLOSED	26 responses	May 31, 2011 10:40 AM
QR Code Link (Web Link: /s/Bicycleplansurvey1)	● CLOSED	1 response	May 31, 2011 10:40 AM
New Facebook Post (Facebook)	● CLOSED	20 responses	May 31, 2011 10:40 AM
4/01/11 Start Bike Survey (Website Survey)	● CLOSED	7 responses	May 31, 2011 10:40 AM

Bicycle Plan Survey March 2012

1. How often do you ride a bicycle?

Answer Options	Response Percent	Response Count
Daily	24.1%	34
Weekly	44.0%	62
Monthly	8.5%	12
Rarely	23.4%	33
<i>answered question</i>		141
<i>skipped question</i>		1

2. How are your bike trips split between recreation and transportation. Your total should = 100% (do not include the % symbol)

Answer Options	Response Average	Response Total	Response Count
Recreation	71.68	9,605	134
Transportation	36.75	3,895	106
<i>answered question</i>			135
<i>skipped question</i>			7

3. Where do you tend to ride your bicycle? Please indicate in percentages which type of roads you ride. (do not include the % symbol)

Answer Options	Response Average	Response Total	Response Count
Neighborhood streets	27.08	2,762	102
City Streets	22.72	2,476	109
County Roads	31.47	2,738	87
Local Highways	15.95	1,053	66



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

The Loop Trail	39.74	4,371	110
<i>answered question</i>			134
<i>skipped question</i>			8
4. How many of the following do you have in your household?			
Answer Options	Response Average	Response Total	Response Count
Cars	2.36	318	135
Bicycles	4.33	585	135
<i>answered question</i>			135
<i>skipped question</i>			7

5. What is your employment status right now?		
Answer Options	Response Percent	Response Count
Full Time	89.1%	123
Part Time	6.5%	9
Not employed at this time.	2.9%	4
N/A	1.4%	2
<i>answered question</i>		138
<i>skipped question</i>		4

6. Are you a student at Wenatchee Valley College?		
Answer Options	Response Percent	Response Count
No	98.5%	134
Full Time	0.7%	1
Part Time	0.0%	0
N/A	0.7%	1
<i>answered question</i>		136
<i>skipped question</i>		6

7. How far is your work/school from home?		
Answer Options	Response Percent	Response Count
0-3 miles	28.8%	40
3-6 miles	26.6%	37
6-10 miles	19.4%	27
more than 10 miles	19.4%	27
N/A	5.8%	8
<i>answered question</i>		139
<i>skipped question</i>		3



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

8. Do you ride your bicycle to work/school?

Answer Options	Response Percent	Response Count
Never	32.4%	45
Sometimes	33.8%	47
Often	22.3%	31
Always	7.2%	10
N/A	4.3%	6
<i>answered question</i>		139
<i>skipped question</i>		3

9. Do you ride your bicycle to run errands or visit friends?

Answer Options	Response Percent	Response Count
Never	27.5%	38
Sometimes	52.2%	72
Often	18.1%	25
Always	0.7%	1
N/A	1.4%	2
<i>answered question</i>		138
<i>skipped question</i>		4

10. What prevents you from riding your bike around town?

Answer Options	Response Count
	118
<i>answered question</i>	118
<i>skipped question</i>	24

1. The weather, cargo, distance.
2. crazy drivers and traffic
3. No bicycle lanes
4. TOO DANGEROUS! Not enough bike lanes. I would ride my bike to work more if it were safe to ride it on North Wenatchee Ave. But it is certainly not!
5. Safety
6. my lazy ass
7. Poor viability because there are vehicles parked on the side of the road.
8. 2 kids, ages 5 & 7 make it difficult to navigate safely on streets. lack of safe routes and little separation between motorist and bike/pedestrians.
9. Season, lack of safe riding conditions; lost sight distance from vehicles parked on the street, and the need to walk.
10. Traffic
11. I work in Olds Station and wouldn't consider riding into W-town due to how not bike safe the roads are. This is my primary concern about our communities as they are not orientated towards pedestrians, LINK nor bikes.
12. traffic and safe routes



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

13. safety
14. traffic with my kids riding with me
15. Laziness. Weather.
16. interaction with cars they don't/won't see you
17. Lack of good bike only facilities (bike lanes with physical barriers between lane and car lane)
18. too far and hills
19. Really bad weather; otherwise, go!
20. Weather--don't ride at all in winter
21. Weather and time
22. some streets i avoid do to safety issues
23. Inconsiderate drivers, lack of bike lanes,
24. steep hill
25. few places to park and lock up bikes. Plus, I generally ride for exercise not to do errands.
26. weather, time, safety
27. worry of traffic
28. traffic (crazy drivers) and lack of bike lanes
29. Poor routes thry town, or streets with heavey traffic
30. nothing
31. Weather, safety in busy areas
32. The lack of bike lanes makes it difficult to navigate through traffic. Plus, drivers the valley tend to not pay very close attention to bycyclists. I would rather ride my bike on the sidewalk.
33. small errands to run
34. Nothing
35. I can't pick up kids or purchases from the store on my bike
36. Honestly, I'm afraid of being hit by an inattentive driver. Scares the hell out of me
37. No bike lanes.
38. Lack of designated streets, traffic signals won't change for bikes, poor street condition.
39. Lack of bike lanes, bike friendly routes
40. Traffic signals not bike actuated, making access through/along arterials difficult. Need "green zones." Also, East Wenatchee really isn't in to bike friendly streets. Really behind the times.
41. crazy drivers on cel phones
42. past and present traffic conditions and accidents in wenatchee area.
43. I ride around town often.
44. Concern for auto conflicts, time.
45. North Wenatchee Ave is a formidable barrier for bicycles.
46. My home location
47. safety issues
48. Lack of safe bike lanes in town... especially when my smaller kids are riding with me. The Wenatchee drivers generally don't like bicyclists compared to other cities of the same size.
49. I don't live in town
50. Time, perspiration, sketchy streets with kids in trailer,
51. traffic and no place to park bikes
52. Traffic, fear of getting hit.
53. narrow shoulders, motorists that wont give an inch or cant be delayed 2 sec
54. Lack of designated bike lanes
55. WEATHER



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

56. Needing to get children to school
57. Time
58. No bike lanes, busy intersections, busy streets with many side streets, no bike racks at destination.
59. Too dangerous
60. Traffic; lack of safe bike paths; drivers are rude . . .they will not yield to bikers.
61. too much traffic, lack of safe places to park bike
62. It is too dangerous. The bikes are not dangerous, but the children & the automobile drivers reaching for their cup of coffee or other distraction.
63. 2 car-bike accidents last year, 1 with injuries
64. conflicts with automobile traffic
65. Most roads are not configured to have bikes along vehicles.
66. Time
67. lazy
68. don't own a bike
69. Time, busy with work and family.
70. physical energy
71. Don't live in town
72. Laziness
73. Kids, I have 6 and 2 year olds and generally have them with me.
74. weather
75. Nervous about traffic-a large percentage of drivers seem to see cyclists as irritants
76. Winter Season
77. I do, sometimes, but traffic concerns prevent me from doing so more often.
78. traffic and intersection locations
79. distance to work
80. not enough bike lanes or shoulders wide enough for bikes.
81. distance & 3mi hill
82. traffic, not big enough bicycle presence to get motorists accustomed to looking for bicyclists, general animosity toward bicyclists from motorists because bicyclists do not follow rules of road.
83. Concerns about riding with vehicle traffic.
84. convenience, not wanting to be sweating when arriving.
85. Time/weather/working overtime and do not want to be later/spend the energy to get home after a long day.
86. I don't have one.
87. I don't live in town, so I'd have to haul it in my car to get here, or else ride the 35 miles to get here.
88. Safety
89. Nothing, Shoulders of streets not plowed in winter months.
90. Not sure what route to take & Time
91. 100
92. Traffic and hills
93. Nothing
94. trying to share the road with drivers who don't respect bicyclists.
95. Old Habits, clearly designated and contiguous bike routes and drivers.
96. Lack of bike lanes and racks
97. nothing
98. Traffic



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

- 99. I ride around town
- 100.not much
- 101.lack of wide shoulder on some roads or weather
- 102.snow
- 103.Having to shuttle kids around
- 104.Traffic lights don't change for me and most streets don't have bike lanes.
- 105.I don't live "in town"
- 106.I live too far from town. Would like to have a park & ride south of town.
- 107.If by town, you mean Wenatchee, lack of bike lanes and traffic.
- 108.weather; traffic; no bike lanes; aggressive driving; traffic lights
- 109.Hills and lack of safe routes
- 110.Schedule demands (self-imposed excuse); weather; crazy SUV drivers.
- 111.Well I ride my bike around town often but if anything prevents me it is just that Wenatchee doesn't seem as bike/pedestrian friendly as the town I lived in before coming here (Bellingham, WA)
- 112.Cars and the people who drive them and hate cyclists
- 113.Darkness & the fear of cars and safety.
- 114.I can not for work as I do home health and carry supplies to pts homes all day
- 115.Nothing really, but bicycle parking is a limiting factor. I don't like just 'lcoking' to an open rail where it is easy for obnoxious people to mess with my bicycle.
- 116.Traffic and lack of bike lanes.
- 117.Bad weather and lack of time to go riding.
- 118.Unfriendly drivers and poor bicycle routes,no bike lanes, narrow roads, signal lights dont "see" bicycles

11. Does LINK Transit Run near your home, work or school?

Answer Options	Response Percent	Response Count
Yes	76.1%	105
No	18.8%	26
I don't know?	5.1%	7
<i>answered question</i>		138
<i>skipped question</i>		4

12. Have you ridden LINK Transit with your bicycle?

Answer Options	Response Percent	Response Count
Yes	24.5%	34
No	75.5%	105
<i>answered question</i>		139
<i>skipped question</i>		3



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

13. Have you ever not been able to get on the bus with your bicycle because the racks were full?

Answer Options	Response Percent	Response Count
Yes	10.5%	12
No	89.5%	102
If yes how many times?		11
<i>answered question</i>		114
<i>skipped question</i>		28

14. Do you have children over the age of seven enrolled in the Wenatchee or East Wenatchee School districts?

Answer Options	Response Percent	Response Count
Yes	21.2%	29
No	78.8%	108
If yes how many?		20
<i>answered question</i>		137
<i>skipped question</i>		5

15. How far is your children's school from home?

Answer Options	Response Percent	Response Count
0-3 blocks	7.0%	9
3-6 blocks	3.1%	4
6-10 blocks	6.3%	8
more than 1 mile	22.7%	29
N/A	60.9%	78
<i>answered question</i>		128
<i>skipped question</i>		14

16. Do your children ride their bicycles to school?

Answer Options	Response Percent	Response Count
Never	28.7%	37
Sometimes	5.4%	7
Often	2.3%	3
Always	1.6%	2
N/A	62.0%	80
If never, why?		25
<i>answered question</i>		129
<i>skipped question</i>		13



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

17. What is your biggest safety concern with children riding their bicycles to school?

Answer Options	Response Count
	78
<i>answered question</i>	78
<i>skipped question</i>	64

Response Text

1. N/A
2. traffic no bike lanes
3. getting hit
1. N. Wenatchee Ave. (to get to Foothills) 2. Crossing highway 2/97 at Lower Sunnyslope Rd. to get to Sunnyslope Elementary
4. Space to ride
5. traffic
6. Children are under-experienced riders competing with vehicles operated by cell phone users.
7. Them not following the rules of the road!
8. Crossing Sunset Highway. lack of designated bike routes clearly letting motorist know they need to share the road. lack of street lighting
9. Kids are not competent enough riders to compete with vehicles driven by cell phone users.
10. The congestion/vehicle situation at WHS & Pioneer is terrible & dangerous. Miller St is terrible as are many of the neighbourhood streets. Schools encourage vehicle use (drivers ed, paved parking, etc) which discourages cycling, walking & public transportation.
11. cars not watching
12. distance
13. Lack of separated bicycle facilities
14. cars
15. Inattentive drivers
16. to many cars dropping off kids that should be walking or biking to school
17. Inconsiderate drivers, lack of biccle lanes
18. crossings, drivers who are oblivious to people on bicycles
19. distracted drivers rushing somewhere in a gigantic vehicle
20. traffic and young kids awareness
21. drivers not paying attention
22. Cars not paying attention and hitting her. She is seven and still becoming adept at bicking so she could make a mistake to cause injury. Safety from predators is also a concern, not major, but in the back of a parents mind with a young daughter.
23. Vehicles!
24. sidewalks have to many obstacles to maneuver around making kids go into the street
25. traffic and kids not paying enough attention. I have had close calls because after a while you can take things for granted. when biking you are completely exposed.
26. No bike lanes
27. Too many cars around schools. Does anyone still bike to school? Does anyone walk?
28. crazy drivers on there cel phones
29. Intersections



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

30. Have you seen all the cars around schools? All those parents that drive their students to school pose potential conflicts.
31. Aggressive and inattentive drivers.
32. Seattle and California drivers
33. no bike lane
34. Other drivers and having my kids ride on the shoulder.
35. having bike paths and sufficient shoulders to allow for safe riding
36. sketchy traffic/streets,
37. Traffic on Western in mornings and after school is just too hectic.
38. Distance of ride on highway
39. Lack of designated bicycle lanes
40. Big hills
41. SAFETY!
42. Traffic and kids not knowing bike safety rules or how to ride on the streets with cars. no helmets
43. They run into old people on bikes. It is too busy on Western or Maple for bicycles.
44. everyone too bust dropping their kids off, drinking a latte, and talking on a cellphone
45. conflict with automobile traffic
46. motorist
47. No sidewalks
48. Follow the laws of the road
49. 1 - hit by car, 2 - contacted by strangers
50. Children not being aware of the vehicle traffic and only having to get to school on their mind.
51. darkness
52. My kids are grown and don't use bikes much now. When my children did ride bikes, I was most worried about hurried negligent drivers on busy streets.
53. sidewalk width and traffic conjection
54. people not paying attention while driving.
55. hit by car.
56. getting run over
57. Children/drivers not paying attention to what they are doing.
58. Drivers
59. Morons in cars.
60. Traffic
61. Hit by car
62. poor intersection design on likely bicycle commuting routes.
63. idots driving into them
64. no helmets
65. Crossing the highway
66. Well marked/protected routes for kids that they can easily understand.
67. cars & stolen bikes
68. Cars not seeing the kids, no bike lanes
69. Drivers
70. Mine would be all the parents that drive their kids to school. Its a zoo around schools with all of the traffic.
71. Unobservant drivers and the natural inattentiveness of children :)
72. Cars, drivers and lack of safe shoulder



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- 73. safety
- 74. no bike lane
- 75. If he rode to school (he is home schooled) he would be going up Kentucky in E Wenatchee (to Grant Elementary) which has no bike lane, no sidewalk in most places, and in many cases not even a significant shoulder.
- 76. Inattentive and hostile drivers
- 77. speeding cars and distracted drivers

18. Are you aware of the existing bicycle route network, outside of the Loop Trail, in the Wenatchee/East Wenatchee area?

Answer Options	Response Percent	Response Count
Yes	58.0%	76
No	42.0%	55
If yes how did you find it?		52
<i>answered question</i>		131
<i>skipped question</i>		11

If yes how did you find it?

1. luck
2. I ride on it for a short distance to get to work. But very little of my bike route is on a bike lane.
3. From riding around town.
4. Saw sign's
5. signs
6. work at WSDOT, seen map
7. Signs
8. signs
9. local riders
10. riding my bike
11. signs
12. riding,duh
13. Media, websites
14. I have seen signs indicating bike route and there are a few bike lanes through out the valley.
15. live in area
16. I just see signs here and there
17. Signs, maps.
18. Mapped and signed.
19. phone book
20. signage
21. Initially saw the signs. Some of the routes naturally coincide with routes a biker would normally use due to lower auto use.
22. I just know
23. Bicycle symbols on Cherry St.
24. stumbled upon it. Saw the signs and followed them.



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25. Noticed it, road parts of it
26. Signs around town
27. Bicycling
28. I read about it and saw some signs.
29. signage
30. sometimes ride it
31. What is this bicycle network? You do not explain what it is and I can not find it on the internet for wenatchee area.
32. seen maps
33. I work for the Government and plus I research anything and everything that has to do with outdoor personnal and family activities.
34. newspaper
35. signs
36. There are signs posted on the bike routes.
37. Signs, I saw a map online.
38. on my bike
39. In the neighborhood and have rode it
40. Signs
41. CD land trust
42. on bike board
43. Pavement markings
44. Signs on the streets
45. I saw signs
46. Have seen signs
47. Its signed and stripped.
48. by riding around town
49. Signs
50. Just riding around town
51. Useable. Going across from West to East at G.S. Bridge is a scare though.
52. Signs



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19. How well does the existing bicycle network serve your needs to travel by bicycle?

Answer Options	Response Percent	Response Count
Very Well	5.6%	6
Fairly Well	47.7%	51
Not Well	46.7%	50
If Not Well, why?	46	
<i>answered question</i>	107	
<i>skipped question</i>	35	

If Not Well, why?

1. poorly marked
2. I live on Lower Sunnyslope Road. I commute to Okanogan Ave. The only bike lane that works for me is a 4 block stretch of Okanogan Avenue.
3. Some of the crossings clearly belong to automotive activities.
4. No idea it existed.
5. separation from traffic
6. the areas i like to ride I find to be the least safe with little or no shoulder etc
7. I live in Olympia.
8. Don't much ride there
9. I generally stay out of the downtown areas - just too much stop and go traffic and too many cars.

10. Don't know there was a network
11. I stay to the side streets to limit exposure to traffic
12. Disconnected. Not in my part of town.
13. My home location
14. It is great on Cherry St. but then seems to disappear.
15. does not reach to my neighborhood
16. It would be nice to have a bicycle route city map, so I could plan trips better.
17. don't know
18. Western has sections where it is extremely narrow
19. Don't know about it even though I bike
20. Difficult to get around in East Wenatchee. The bridge at 9th street dumps you onto a busy road (9th street) with no clear direction to go after that.
21. Primary streets it uses are VERY busy with traffic and even w/bike Lanes..I don't feel safe riding. Hard to make turns and access.
22. It is not safe, especially trying to cross Wenatchee Ave at Maple & back or at McKittrick & Wenatchee Avenue. Biking on Wenatchee Ave & turning left into my employment would be dangerous.
23. What is this bicycle network? You do not explain what it is and I can not find it on the internet for wenatchee area.
24. Don't use it.
25. Haven't ridden for transportation purposes, I also live on a hill outside of town
26. Distance to get to the trail.
27. don't live there
28. Don't even know where it is.



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29. It's not signed well. Shouldn't every roadway be considered a "transportation network"?
30. not connected anywhere within 3 miles
31. There are way too many stop signs on Princeton.
32. I know nothing about it
33. Not aware of it.
34. I don't live in Wenatchee, and I don't know anything about the bicycle network.
35. Not applicable to my situation
36. It doesn't go where I need to go
37. don't use it much
38. mostly not along a route I need to go. I do use the bike network along the Hwy 2 corridor though.
39. see above
40. The routes seem to be the longest most round-about way to get somewhere.....like they tried to find the quietest streets and but the bikes there.
41. I ride on a street labeled "Bike Route" and it is clogged with parked cars.
42. it does not go where i go
43. The signs don't really clearly mark the roads very well, and even where it does the roads aren't any different than any of the other roads so there isn't really any distinction between bicycle route vs a road.
44. Many of the places I go are off of the route. Also there have been loose dogs on the route.
45. Don't pay attention to it; I ride where I need to get regardless
46. it's seems to be primarily on the perimeter of west wenatchee - it's out of my way to use it.

20. If there were safe well marked routes in the area how far would you be willing to ride your bike for transportation purposes (shopping, visiting friends, commuting)?

Answer Options	Response Average	Response Total	Response Count
Miles R/T	14.88	1,682	113
Minutes one way	34.77	3,547	102
<i>answered question</i>	117		
<i>skipped question</i>	25		



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21. Please indicate the level of comfort you have riding on each of the following bikeways

Answer Options	not comfortable	somewhat comfortable	comfortable
Neighborhood Shared Roadway (slow speeds, parked cars)	5	37	51
City Shared Roadway (higher speeds, higher traffic)	51	50	23
Shoulder Bikeway (2-4 foot striped shoulder, moderate to heavy traffic)	27	57	32
On Road Separated Bikeway (5'-6' designated bike lane)	7	20	61
Multi-Use Path (12' or greater detached from roadway)	2	10	23

22. Which local roads would you like to see improved for bicycles?

Answer Options	Response Count
	99
<i>answered question</i>	99
<i>skipped question</i>	43

Response Text

1. I'm not to bicycling and have no idea at this point.
2. Miller, Fifth and Nine streets, Orondo
3. 5th street by miller
4. ?
5. All of Wenatchee Avenue. For me, I use North Wenatchee Avenue. This is Very Dangerous. Even riding on the sidewalks is dangerous (if it is legal) bc. there are so many driveways, and cars are not used to yeilding for bikes or pedestrians in this area. They just pull out into the sidewalk without looking first.
6. western although ditch is good alternate
7. Arterials at the very least
8. Give up on the free parking. so almost all of them.
9. none
10. East Wenatchee Streets -Cascade Avenue, Baker Street, Sunset Highway (including crossings on sunset for side streets)
11. Miller, 5th, Washington,
12. Wenatchee Ave., Miller Street, Western, and the many thoroughfares. I see more riders now due to gas prices (?) and jobs... but i do not feel that they are safe on our streets. One hopes that if a person rides or walks, they may be a more conscientious driver...
13. Highway 2 into town, 5th street, Wenatchee Avenue



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14. i think the areas that cyclists use most in the area include Baterman, Monitor Loop, Joe Miller, Malaga Hwy and Squilchuck to Mission, Entiat and Orondo Highway to and from Lake Chelan all of which need help - Leavenworth has back roads for the most part so it seems less critical
15. Miller
16. us 2/97 and 97
17. All arterials and collectors need separated bike facilities (and not just striping for a bike lane, we need physical barriers between bike lanes and car lanes)
18. No opinion
19. Wenatchee Avenue, Grant Road, Valley Mall Pkwy
20. Hwy 2 - Leavenworth to Big Y
21. East Leavenworth Rd
22. Chumstick Hwy to Plain
23. Squilchuck Rd - Wenatchee to Squilchuck Park
24. grant rd orondo st sleepy hollow rd hwy 2
25. Western Ave.
26. Wenatchee Avenue
27. east wenatchee detour to hydro! (vly mall pkwy)
28. anything in Douglas county.
29. build the trail to Rocky Reach!!!
30. Highway 2 from Wenatchee to Leavenworth - detached multi-use path. Wenatchee to Rock Island - extend Hydro Park trail to Rock Island. Overpass from School Street, over Hwy 2 to Lower Sunnyslope. Wenatchee to Lincoln Rock.
31. 5 th street and western, miller street, cherry orondo
32. Rock Island old road, Cascade Ave north to Orondo
33. Miller, Western, 1st, 5th, 9th, Washington
34. bike lanes for all
35. Eastmont between 9th St NE and Grant Road. Very needed and would be a huge improvement.
36. Miller and Mission in Wenatchee. And Valley Mall Pkwy, Rock Island Rd. and if possible Grant Rd.

37. I ride US 2 from Cashmere to Wenatchee
38. North Wenatchee Ave
39. all of Wenatchee. Just came back from 3 months in Tucson and they have done a great job accomidating cyclists on the streets and highways.
40. Eastmont
41. Horselake, Walnut, McKittrick, Valley Mall Parkway, Cascade, Eastmont, 4th SE. Also, fix some of the signals to accomodate bikes.
42. Cascade Ave
43. east Wenatchee is pitiful. Are they exempt from providing bike routes? Valley Mall Parkway is parallel to the highway, should be designated a route. Cascade parallels the trail and should be designated, Baker, too and more east-west routes to connect neighborhoods with the trail. 15th, 19th, Grant, 27th. Also, we need traffic signals to be more friendly. Bikes don't actuate signals and green zones should be created. 32nd NW is a public access to the trail but not well known. Get the word out, improve it for bike/ped access.
44. all of them!
45. all intersections on routes and the AVE need green bike boxes applied
46. Fifth Street, Western, Miller.



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47. North Wenatchee Avenue and the south access to the Pedestrian Bridge and George Sellar Bridge. Widening on Skyline Drive would benefit both pedestrians and bicycles.
48. None, cars belong on roads, not bikes.
49. mission and chelan
50. Western, Ave, Grant Rd. Number 2 Canyon Rd, 5th Street, Maiden Ln, Loop trail access Rds, Miller Ave.
51. North Road from Peshastin to Leavenworth and the section of highway 2 from the Peshastin Bridge to the new construction
52. A safe way to get around in East Wenatchee near Valley Mall Parkway. A safe route parallel to Mission/Chelan/ Miller Streets. The river trail is nice but too far from these areas to be effective for errands.
53. squilchuck, joe miller,
54. Western, and one going towards the loop trail from western.
55. N Wenatchee Ave
56. Eastmont (south of 9th st). 9th st.
57. CHELAN AVE
58. Wenatchee Ave
59. First Street, Wenatchee
60. Area from Confluence park to Sleepy Hollow to Monitor.
61. Fifth Street, Western Avenue, Miller Avenue, Crawford, Downtown. It is difficult/dangerous to bike downtown currently.
62. Washington Street
63. 5th Ave.
64. 9th Ave.
65. Wenatchee Ave.
66. Chelan
67. Mission
68. Fifth Street, 1st St (from Chelan east), Washington St., Orondo, North and S Wenatchee Ave
69. None of them. Bicycles should not be on city streets because bikes are underpowered & not easily visible. They need bigger head & tail lamps on all the time.
70. miller ave., eastmont ave., grant road
71. Wenatchee Avenue, Miller Avenue, Western Avenue. Eastmont Avenue, SR 28 Sunset Highway.
72. chelan & mission
73. Douglas County
74. Easy Street to the loop trail connection by the Apple Commission
75. Highways
76. In Wenatchee, Mission, Chelan, Wenatchee Avenue, Miller Street, Western Avenue, Crawford, Washington, 5th, and 9th. In East Wenatchee, Grant Road, Valley Mall Blvd, Eastmont, Baker, 3rd, 9th, and 10th.
77. all of them
78. Miller Street to Wenatchee Ave.
79. Pershing, 9th, Wenatchee Ave.
80. city streets
81. Western Avenue
82. Princeton, Miller from Mission to 5th.
83. City roads.



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84. n/a
85. Streets in Olds Station area - striped bike lanes.
86. Miller Street, 5th Street, Cherry Street, Madien street
87. N/A
88. Sleepy Hollow
89. Fifth Street, Wenatchee
90. Franklin, Princeton, Springwater, Methow, McKittrick, Red Apple, Crawford
91. Miller, Western, 1st, 5th, 9th
92. Squilchuck Road!
93. Entiat River Road and SR97A
94. 5th
95. Western
96. The sections of Highway 2 where there is no alternative. Also, I'd like some improvements at stoplights so they can be activated by bicycles.
97. Grant Rd, Ohme Garden Rd.
98. Mission, Chelan, 5th Street, Western
99. City & county roads....Squilchuck
100. Park N Ride and Dedicated bikeway on Malaga Alcoa Hwy
101. 5th street, 9th street, grant road, wenatchee ave
102. mission and chelan
103. 5th street, chelan ave., mission ave.
104. In Wenatchee: complete the bike lane designation on Western Avenue; Fifth Street; Walnut Street (connecting Western to the Loop Trail. In East Wenatchee: just about everywhere, pretty dismal, start with Cascade, 19th, baker, Eastmont, 4th SE or another corridor out to airport.
105. Wenatchee Ave.
106. Miller , Chelan, Mission
107. Orchard, Miller, Western, Springwater, Washington, Cherry, 5th (to & fro middle & high schools)
108. 5th street/ 9th street/ mission street/ washington street// first steet
109. Kentucky, Grant, 4th St SE, Rock Island Rd, Valley Mall Pkwy,
110. Miller and Western. Squilchuck
111. Downtown streets - no bike lane and illegal to ride on sidewalk.
112. sunset highway, conecting roads to loop trail, Wenatchee Ave



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

23. The following elements are all critical to creating a safer environment for bicycling in our community. Please rank them in the order you feel they should be addressed.

Answer Options	Least important	Kind of important	Very important	Rating Average	Response Count
Bicycle Education (riders and drivers)	29	42	40	2.10	111
Enforcement (riders and drivers)	49	47	21	1.76	117
Engineering (creating complete streets)	27	31	65	2.31	123
<i>answered question</i>	128				
<i>skipped question</i>	14				

24. Please indicate which of the following would encourage you to ride your bicycle to a local business:

Answer Options	Response Percent	Response Count
Good, convenient bicycle parking	58.1%	72
Bicycle route nearby	75.8%	94
Options for getting products home (i.e. home delivery)	23.4%	29
Incentives for arriving by bike	38.7%	48
<i>answered question</i>	124	
<i>skipped question</i>	18	

25. What would encourage you to choose to ride your bicycle more for short trips? Choose all that apply.

Answer Options	Response Percent	Response Count
Better Route Signs	25.2%	31
More Bike Lanes	74.0%	91
Better Bicycle Parking	50.4%	62
Better Enforcement of traffic laws	33.3%	41
Higher gas prices	30.1%	37
Safer routes	73.2%	90
<i>answered question</i>	123	
<i>skipped question</i>	19	





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SURVEY TWO

The second survey was to allow those that were unable to attend one of the two open houses the opportunity to see and provide feedback on the same information presented at the open house.

Bicycle Open House Survey

Community

Design Survey

Collect Responses

Below is a list of the collectors you are currently using to collect responses. To view the details or change the properties of an existing collector, just click the name. To collect more responses for this survey from a different group of people, click "Add New Collector".

Collector Name (Method)	Status	Responses	Date Modified
Web Page Link @ WVTC (Web Link: /s/BicycleOpenHouse)	● CLOSED	82 responses	March 15, 2012 11:04 AM

Collector Name (Method)	Status	Responses	Date Modified
Web Page Link @ WVTC spanish (Web Link: /s/BicycleOpenHouseSpanish)	● CLOSED	0 responses	March 15, 2012 11:18 AM

Bicycle Open House Survey February 2012

1. How did you hear about this survey

Answer Options	Response Percent	Response Count
Facebook/Social Media	25.0%	20
WVTC Web Page	1.3%	1
Radio	8.8%	7
Newspaper	2.5%	2
Email	42.5%	34
Word of mouth	16.3%	13
Public Meeting	3.8%	3
Other (please specify)		3
		<i>answered question</i> 80
		<i>skipped question</i> 2
Other (please specify)		
wvmc intranet		
work		
WVMC web page		

2. Where do you live?

Answer Options	Response Percent	Response Count
Wenatchee	61.3%	49
East Wenatchee	12.5%	10
Sunny Slope	7.5%	6
Rock Island	0.0%	0
Chelan Co.	15.0%	12
Douglas Co.	3.8%	3
Other (please specify)		3
		<i>answered question</i> 80
		<i>skipped question</i> 2
Other (please specify)		
Cashmere		
Stemilt Hill		



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Spokane - Work into Wenatchee on Railroad



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3. Do you ride by Choice or Need?		
Answer Options	Response Percent	Response Count
Choice---I have a car, but I choose to ride a bicycle	95.0%	76
Need--My bicycle is my only personal transportation	5.0%	4
<i>answered question</i>		80
<i>skipped question</i>		2

Participants were asked to indicate how closely they relate to the following rider type descriptions

4. Strong Rider					
Answer Options	Exactly	Kind of	Not at all	Rating Average	Response Count
You are comfortable riding when and where you need to regardless of distance, or whether or not there are bike lanes, wide shoulders or paths. You always "Take the Lane" when riding with traffic.	11	44	18	2.10	73
<i>answered question</i>					73
<i>skipped question</i>					9

5. Confident Rider					
Answer Options	Exactly	Kind of	Not at all	Rating Average	Response Count
You ride quite a bit, and are okay with riding for longer distances, but prefer to use it for short trips. You will use a bike lane, or wide shoulder, you choose the quiet neighborhood streets over the busier arterial roadways.	43	21	9	1.53	73
<i>answered question</i>					73
<i>skipped question</i>					9



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

6. Concerned Rider					
Answer Options	Exactly	Kind of	Not at all	Rating Average	Response Count
You are not extremely experienced, but have a desire to use your bicycle more. You are not comfortable riding in or around any significant traffic, in bike lanes or on wide shoulders. Your trips are primarily short distances.	7	21	45	2.52	73
<i>answered question</i>					73
<i>skipped question</i>					9

7. Non-Rider					
Answer Options	Exactly	Kind of	Not at all	Rating Average	Response Count
You do not ride a bicycle for transportation or pleasure. This may be by choice or due to other physical, financial, or personal circumstances that make riding a bicycle difficult or impossible for you. Regardless of the reason a bicycle is not a transportation option for you.	4	3	66	2.85	73
<i>answered question</i>					73
<i>skipped question</i>					9



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Participants were asked to indicate how often they make each type of trip

8. Commute Trips							
Answer Options	More than 15 times a month	5-15 times a month	Less than 5 times a month	Rarely	Never	Rating Average	Response Count
You regularly ride to a specific place such as: workplace, school, or transit center. Trip distance = 1-10 miles one way.	11	21	12	19	8	2.89	71
Comment							11
						<i>answered question</i>	71
						<i>skipped question</i>	11
Comment							

1. more in warmer months
2. depends on the weather
3. depends on snow/ice on road way
4. I am too scared to use the roads around Wenatchee to commute to work due to limited bike lanes and big trucks on the road that do not seem bike friendly
5. Only during warm months
6. I work in Leavenworth so commuting to work is impractical, though I have done it for Bike to Work Day
7. used to commute, now retired
8. I plan to start riding to work more this summer.
9. Commute M-F. Also ride a lot for fitness and recreation.
10. early spring to late fall only
11. this changes season to season



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

9. Miscellaneous Trips							
Answer Options	More than 15 times a month	5-15 times a month	Less than 5 times a month	Rarely	Never	Rating Average	Response Count
You ride your bicycle for general travel around town to places such as: shopping centers, restaurants, community or recreational events. Trip distance = .5-3 miles one way.	6	21	18	20	6	2.99	71
Comment							5
<i>answered question</i>							71
<i>skipped question</i>							11

- Comment**
1. more in warmer months
 2. Not enough bike racks/secure places to store your bicycle
 3. Depends on the weather
 4. I have a 3 wheel trike to haul stuff
 5. shopping mostly

10. Recreational Trips							
Answer Options	More than 15 times a month	5-15 times a month	Less than 5 times a month	Rarely	Never	Rating Average	Response Count
You ride your bicycle for fun and exercise, where "the ride" is more important than the destination. Trip distance = Any, depending on purpose of trip	15	32	16	6	2	2.27	71
Comment							4
<i>answered question</i>							71
<i>skipped question</i>							11

- Comment**
1. more often during warmer weather
 2. This is my primary reason for riding
 3. Majority of vacations are spent bicycle touring, but vacations are not frequent. When taken, average length is 200-300 miles
 4. road rides with my wife



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

11. Which type of riding would you like to do more often?

Answer Options	Commuter Trips	Misc. Trips	Recreational Trips	N/A	Rating Average	Response Count
I would like to be able to take more...	23	27	19	2	1.94	71
<i>answered question</i>						71
<i>skipped question</i>						11

12. When choosing to ride your bicycle, how do the following circumstances affect your decision to ride?

Answer Options	Prevents me from riding	Discourages me from riding	Doesn't affect my choice	N/A	Rating Average	Response Count
Riding out of my way (longer distances) to find a safe route	2	28	33	3	2.49	66
The lack of good bicycle parking at my destination	0	32	28	6	2.47	66
The lack of clearly marked, low traffic bicycle routes to follow	3	34	28	1	2.38	66
The lack of bicycle lanes to ride in	5	38	23	0	2.27	66
The lack of bicycle sensitive traffic signals	5	37	24	0	2.29	66
The distance from home to work/school	2	11	44	9	2.74	66
My comfort and ability to ride safely in/around traffic	4	31	30	1	2.40	66
The possibility of getting a flat tire	0	8	53	4	2.87	65
The possibility of needing a car for an emergency (ie: sick kid)	0	14	42	10	2.75	66
The lack of neighborhood connections to the loop trail	3	20	42	1	2.60	66
The cost and convenience of driving a car	1	7	50	7	2.84	65
The lack of safe routes for my child to ride his/her bike to school	7	10	16	30	2.27	63
<i>answered question</i>						66
<i>skipped question</i>						16
Other (please specify)						



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1. more safe to walk than ride even though its a matter of 4 or 5 blocks
2. I mostly ride around Cashmere, where there are no bike lanes at all, etc.
3. Weather...
4. I dont have a child but kids need safe places to ride. I rode my bike to school and still ride 25 years later.
5. I worry and dissuade my grandkids from riding to school because of the safety issues.
6. Large SUV's and Monster Trucks
7. Dressing for work discourages me from riding.
8. If we had dedicated bike boulevards like they do in Portland, that were car-free, or separated bicycle tracks like they do in Denmark, then I would bike much more often, and I think others would as well.



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

13. Please indicate the top 3 things that would allow you to ride a bicycle more often. I would ride more if...

Answer Options	Response Percent	Response Count
I had clearly marked, low traffic routes to follow	51.5%	34
I knew how to fix a flat tire	0.0%	0
I knew how to ride safely in/around traffic	6.1%	4
I lived closer to work/school	15.2%	10
Traffic signals would change for me	45.5%	30
I knew I could get home another way if I had to change plans	13.6%	9
I had bike lanes to ride in on more streets	77.3%	51
There were better connections to the loop trail	28.8%	19
I know there would be good bicycle parking at my destination	22.7%	15
I didn't have to ride out of my way, or a longer distance to feel safer	25.8%	17
My child could ride his/her bike to school	9.1%	6
Gas prices keep going up	27.3%	18
Other (please specify)		7
<i>answered question</i>		66
<i>skipped question</i>		16

Other (please specify)

1. There were other bicycle specific routes to follow (for example, a narrow, paved bike trail along the canal)
2. Signs for drivers to watch for commuter bicyclists
3. ease of changing clothes for work vs. biking
4. Some drivers were a little less rude
5. More bike paths like the loop trail! Wenatchee to Lincoln Rock, Wenatchee to Leavenworth, extension from Hydro Park to Rock Island so I don't have to ride the highway to do Batterman Hill Loop ride
6. Construction zones with unsafe bike passage, winter road conditions, too far to pick up my child after daycare
7. the bike detour around Fred Myers is a joke



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

This section asked questions specific to different types of bikeway facilities and how comfortable the rider would be using them.

14. While riding a bicycle in a Shared Turn Lane, I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	34.8%	23
Comfortable riding here	30.3%	20
Somewhat comfortable riding here	25.8%	17
Uncomfortable riding here	9.1%	6
Very uncomfortable riding here	0.0%	0
I would not ride here	0.0%	0
<i>answered question</i>		66
<i>skipped question</i>		16
Comment		7

1. blocks turning traffic when you have to stop at a red light
2. Large vehicles may crowd bikes on turn
3. Not as good as a separate facility, but better than nothing
4. I feel comfortable with being in this situation and I know what I am supposed to do. I just feel like there is such a lack of awareness from car drivers that I don't feel safe around them....biking and walking.
5. I just don't trust drivers anywhere, anytime. Too many people on bikes and on foot are injured by inattentive drivers. I would use lanes like this if I had to, but would rely on main town access via the loop trail
6. There isn't any lane markings on Vly Mall Pkwy
7. Wary of people in turning lane or left turning traffic

15. While riding a bicycle in a Bike Lane next to parallel parking, I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	10.8%	7
Comfortable riding here	36.9%	24
Somewhat comfortable riding here	40.0%	26
Uncomfortable riding here	10.8%	7
Very uncomfortable riding here	1.5%	1
I would not ride here	0.0%	0
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		8

1. I like what I've heard that it is safer to have this lane on the right side of parked cars
2. When I lived in Seattle, a driver opened his car door without looking & I rode in to it sustaining injuries to my hand. I have been nervous with this setup since then.
3. I don't like car doors opening
4. Garbage cans end up here on trash day
5. I always worry about someone opening their car door as I approach



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6. Watch out for opening doors
7. Parked cars add to risk
8. Better, but same issues with inattentive drivers

16. While riding a bicycle in a Bike Lane next to Angle Parking, I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	6.2%	4
Comfortable riding here	26.2%	17
Somewhat comfortable riding here	43.1%	28
Uncomfortable riding here	18.5%	12
Very uncomfortable riding here	4.6%	3
I would not ride here	1.5%	1
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		6

1. A reversing car will have backup lights on. Much safer than the previous scenario.
2. Some jackass would still back over this guy!
3. Drivers backing out or pulling in can be dangerous
4. Rider needs to wear a helmet
5. Poor visibility for vehicles backing
6. Parked cars add to risk

17. While riding a bicycle in a Protected Cycle Track, I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	61.5%	40
Comfortable riding here	29.2%	19
Somewhat comfortable riding here	7.7%	5
Uncomfortable riding here	0.0%	0
Very uncomfortable riding here	1.5%	1
I would not ride here	0.0%	0
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		2

1. Worry about pedestrians popping out from the right
2. The more obvious separation between bike and car lanes the better



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

18. While riding a bicycle on a road with Sharrows (marked shared lane), I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	13.8%	9
Comfortable riding here	24.6%	16
Somewhat comfortable riding here	30.8%	20
Uncomfortable riding here	21.5%	14
Very uncomfortable riding here	7.7%	5
I would not ride here	1.5%	1
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		3

1. Not to different than normal riding.
2. Bike path poorly marked
3. Good street markings with double yellow lines - drivers tend to notice

19. While riding a bicycle in an unmarked shared lane (without Sharrows), I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	6.2%	4
Comfortable riding here	15.4%	10
Somewhat comfortable riding here	26.2%	17
Uncomfortable riding here	32.3%	21
Very uncomfortable riding here	15.4%	10
I would not ride here	4.6%	3
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		3

1. Wenatchee drivers do not seem aware or courteous of bikers w/o a bike lane. I would not bike in Wenatchee w/o a bike lane.
2. Business as usual
3. No bike lane

20. While riding a bicycle on Quiet Neighborhood Streets, I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	40.0%	26
Comfortable riding here	41.5%	27
Somewhat comfortable riding here	15.4%	10
Uncomfortable riding here	1.5%	1
Very uncomfortable riding here	1.5%	1
I would not ride here	0.0%	0
<i>answered question</i>		65
<i>skipped question</i>		17



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Comment	1
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1. Worry about cars backing out of driveways

21. While riding a bicycle on a wide shoulder (four foot or greater), I would be...

Answer Options	Response Percent	Response Count
Very comfortable riding here	26.2%	17
Comfortable riding here	44.6%	29
Somewhat comfortable riding here	23.1%	15
Uncomfortable riding here	3.1%	2
Very uncomfortable riding here	1.5%	1
I would not ride here	1.5%	1
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		3

1. Depends on shoulder width and traffic type/speed
2. Shoulders are covered with debris and I still watch behind me
3. good shoulder--low traffic impact

This section asked participants how willing they were to allow/accept some change in the way roads are allocated for vehicle traffic, paid for, or prioritized in order to improve conditions for bicycle riding.

22. I am _____ of Removing some on street parking to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Very Supportive	53.8%	35
Supportive	23.1%	15
Somewhat Supportive	15.4%	10
Not supportive	6.2%	4
Very un-supportive	1.5%	1
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		7

1. I would support getting rid of almost ALL street parking - especially Miller
2. Another reason for drivers to resent cyclists?
3. Depends on how much parking was displaced.
4. On street parking is a hazard to motorists too. Visibility is greatly reduced
5. would cut back on congestion
6. Parking is at a premium in Wenatchee, this is unrealistic
7. would need to mitigate the impact on businesses



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23. I am _____ of *Installing Traffic Calming features within the roadway* to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Very Supportive	45.3%	29
Supportive	17.2%	11
Somewhat Supportive	28.1%	18
Not supportive	9.4%	6
Very un-supportive	0.0%	0
<i>answered question</i>		64
<i>skipped question</i>		18
Comment		5

1. looks rather greek to me, so I can't answer
2. very few neighborhood streets need traffic calming
3. I don't get it. I'm sorry.
4. Slow down speeds 10-15mph for cars and bikes
5. this is a bit confusing

24. I am _____ of *Changing downtown to "Back in Angle Parking"* to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Very Supportive	40.0%	26
Supportive	32.3%	21
Somewhat Supportive	20.0%	13
Not supportive	6.2%	4
Very un-supportive	1.5%	1
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		7

1. backend or angle parking is not safe
2. good luck making this happen.
3. I like it, but I feel this would be hard for many motorists to accept
4. safer for all
5. vehicle drivers will need to drive with more skill to back into spots
6. concern about impact on traffic flow
7. although I may not be 100% comfortable with riding here, I would definitely consider it a good option if needed. And, I would be very supportive of making ANY bicycle friendly changes for bicylists in general



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25. I am _____ of reducing neighborhood speeds to 20mph to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Very Supportive	40.0%	26
Supportive	32.3%	21
Somewhat Supportive	13.8%	9
Not supportive	13.8%	9
Very un-supportive	0.0%	0
<i>answered question</i>		65
<i>skipped question</i>		17
Comment		2

1. less - maybe 10mph in congested areas
2. There are always those who won't pay any attention to signs like this, and who will enforce it?

26. I am _____ of Implementing "Road Diets" on some streets to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Very Supportive	43.8%	28
Supportive	40.6%	26
Somewhat Supportive	12.5%	8
Not supportive	3.1%	2
Very un-supportive	0.0%	0
<i>answered question</i>		64
<i>skipped question</i>		18
Comment		7

1. I feel that bike specific lanes would make me the most comfortable.
2. Creates more congestion and would be tough to sell.
3. depends greatly on the road
4. I support it where it makes sense, I think some motorist would resent any cyclist present if thier progress in impeded
5. try adding physical barriers between bike lanes and vehicle lanes
6. depends on impact to traffic
7. diet means?



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This section asked more open ended questions regarding specific roads needing changes, and other barriers to riding.

27. What specific road or roads would you like to see improved for bicycle use.

Answer Options	Response Count
	40
<i>answered question</i>	40
<i>skipped question</i>	42

1. Miller, Chelan, Western, 5th, Mission, Washington
2. Chelan St, Mission St, Wenatchee Av, 9th st, 5th st and over George Sellar bridge, Sunset av, all roads around E. Wenatchee , better east west biking routes
3. Miller Street
4. Western, Miller, Orondo
5. Wenatchee avenue. Basically the main arterial roads of Wenatchee.
6. Mission, Chelan, Orondo
7. Okanogan Ave from Yakima st. and south
8. Wenatchee Alcoa Hwy (speeding,intimidating and inattentive drivers)
9. Eastmont between Grant Road & 9th.
10. Rock Island Road.
11. Grant Road, especially above Kentucky.
12. Sleepy Hollow Road.
13. Miller, Wenatchee ave,
14. Crawford Street, Malaga Alcoa Highway. The main road that runs by Wenatchee High School down to Safeway. The road from Safeway in Wenatchee to Rite Aide/Target Etc. 97A to Chelan. South Wenatchee Avenue to Wenatchee Avenue.
15. there are too many but if it starts with building connections with the existing bike routes - that would be good.
16. 5th Street
17. Western
18. Easy Street
19. North Wenatchee Avenue
20. It has always been a challenge to make it back and forth to work, living near the hospital in Wenatchee and working on Grant Rd in East Wenatchee. There is no bicycling access to the bridge, unless you want to mingle with traffic or walk through a filthy, unmaintained, urine smelling stairway. The cantilever sidewalk improved things slightly this winter but the approach to this was still covered with a disgusting ice/snow mix. The East Wenatchee trail off of the bridge is covered with goatheads. I manage to get one every day I ride on it so I now avoid it completely.
21. Wenatchee Ave , Miller
22. Miller St.,completely remove the opportunity to park, First St. limit on street parking to a single side, if at all
23. Wenatchee Ave ,



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24. George Sellar Bridge, the one ways, Wenatchee Ave., Squilchuck Rd.
25. Difficult to get from Loop Trail to East Wenatchee Mall without riding some high traffic areas, or from Loop up to Valley North. Basically east-west travel is more difficult than North-South
26. Wenatchee Ave- protected bike lanes near miller ave intersection / Bike lanes southeast of Miller on Wenatchee Ave towards downtown.
27. First street, Wenatchee, because it connects with loop trail
28. All of downtown East Wenatchee roads, Western, Ferry, 5th
29. Cascade Hwy w/ a bike lane. Grant Road w/bike lane.
30. Mission, Chelan, Wenatchee Ave, Miller
31. Valley Mall Parkway.....This was used as a detour....No bike lane or shoulder.
32. Mission and Chelan St.
33. N. Wenatchee Ave. is pretty much unusable as a bike route, South Hills Drive, Miller
34. Wenatchee Avenue, Western. Miller, Cascade (East Wenatchee), Baker (East Wenatchee), Eastmont (East Wenatchee)
35. Most of Easy Street is great for riding, but there are areas that have little shoulder that could be improved. Also making sure the bike lane is well marked on the pavement and with signage.
36. Hwy 2 bridge crossing between Cashmere and Peshastin, Construction zones with no allowance space for bicycles. bike lane on hwy 2 Vly Mal Pkwy if it is to be used for months as a detour.
37. All of Easy street
38. connection from George Sellar bridge to hospital route
39. Intersections commonly used by bikes, such as Easy Street and Hwy 97 - this light will seldom work for bikes. Wenatchee Ave. Chelan Ave.
40. Mission Street and Chelan Ave. are very scary, but north Wenatchee Ave makes it almost impossible to directly connect to Olds Station without the Loop



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

28. What specific barriers to bicycling would you like to see removed or improved?

Answer Options	Response Count
	34
<i>answered question</i>	34
<i>skipped question</i>	48

Number	Response Text	Categories
--------	---------------	------------

1. Inattentive and rude drivers!
2. no bike lanes on major roads like above mentioned
3. My largest concern is safety, and anything that does not minimize vehicle-bicycle collisions is my only barrier.
4. I like to shop at Fred Meyer. I really hope that the changes to the GS bridge and other construction will allow me to travel safely across the bridge, get to the shopping area, have a place for me to park, and then safely return. I think for all grocery stores and shopping areas, this should be the norm. It would allow people to build exercise into their daily routines and thus make those mundane tasks more of an important part of building fitness and viably reducing the amount of cars on our roadways.
5. Poor sidewalk maintenance.
6. Community attitudes towards bikers
7. More north-south bike lanes, and more roundabouts and bike boxes! Also bike sensitive traffic signals. Most importantly, EDUCATION! for riders and drivers, and ENFORCEMENT for riders and drivers.
8. Are there any?
9. A more simpathetic police force that enforces laws against the verbal as well as physical harassment of bicyclists. And a wider public acceptance of the right to ride bicycles on the street.
10. I would like drivers of motor vehicles to be educated about cyclists' rights on the road.
11. I would love to see more well marked bike lanes with ample room for bikes and many more signs in Wenatchee to make vehicles aware of bicyclists using the bike lanes, or to slow down for bikers etc. I feel this town could be more bike friendly and that the general population needs to be more accepting and aware of bicyclists using the roads to commute. We live in a great climate to bike to work, but I have been to leary of drivers to want to commute by bike and have not found a designated bike path to take to my work. I would appreciate your help!
12. I would like to see the conversion of the canal to bike and ped transit
13. Improved bike to school routes for kids.
14. Intersection of Easy Street and Hwy 2/97. Need a pedestrain overpass at this location.
15. Coming off of the footbridge into downtown Wenatchee is puzzling. You can't ride the wrong way on the one way 1st street and you're not supposed to be riding on the sidewalk, according to the signs. The ridiculous riding on the sidewalk restriction should be removed here. Also, can we possibly run a street sweeper on all of the bicycle trails every once in a while? Goatheads get pretty annoying.
16. Bike lane also Castlerock for kids riding to school
17. It would be very nice to be able to trip a traffic light without being in the middle of the lane



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18. More access to Apple Capital Loop Trail on the east side of the river, 32nd Place.
19. Bikers who are not experienced should be allowed to ride on the sidewalks, recognizing pedestrians have the right of way.
20. Always a need for awareness and tolerance of drivers to cyclists. "Share the Road" attitude goes a long way.
21. More bike lanes
22. Roads with no shoulder
23. Need connection to loop trail at the foot of bridge street
24. There needs to be easy access to Press the walk button for crossing at crosswalks. My bike can't trigger the light at first street - which accesses the park. Nor can it trigger the light at north end of town heading across highway on Easy St. Crossing highway at Monitor is a NIGHTMARE..overpass is too steep and narrow..and there is no way to trigger light.
25. The right turn lane with the bike lane in between that and regular traffic. Can be confusing and people get over to turn right without realizing they are crossing over a bike lane and do not look. Not sure how to get around this however.
26. Busy streets with no designated place for biking.
27. More education for the public/drivers. I feel like Wenatchee drivers are downright hostile towards bikers. I don't even know how many times I've been honked at or yelled at or swerved into while riding in the bike lanes. I DO NOT feel comfortable riding in the bike lanes on some roads let alone on the shoulder or road. Even though I shouldn't I often ride on the sidewalk, especially if I am pulling my kid in a trailer or have my kids with me. Since moving here I have very much changed the way I ride because of the attitude of the drivers in this city.
28. traffic lights that do not recognize bicycles
29. Need more bike sensitive traffic lights. Sometimes have to cross to other side of road to push sidewalk button. (northbound at First St. and Miller).
30. More bike parking facilities/racks.
31. I would like to be able to extend my recreational riding to Cashmere. It's easy enough to go down Easy Street, cross the pedestrian bridge to Monitor, ride back roads to Anjou - and then you have to cross the dreaded highway to ride down to the stop light by Apple Annes. Other than that, my barriers all include any place I have to be in a car lane. Bicyclists shouldn't have to compete with vehicles and uneducated and inattentive drivers
32. Traffic light sensors
33. Bicycle sensitive traffic lights installed. High traffic intersections improved to include bicycles. Shared roadway designation on Narrow roads (ie Wenatchee Ave.)
34. Traffic lights that don't sense bicycles. Stencil a bicycle mark on the sensor so we know where to stop. Improve public awareness of bikes - education in driver's ed classes that a bike is a vehicle and has all the rights as a car, and it has to follow the same laws as a car.



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29. Tell us what you think

Answer Options	Response Count
	24
<i>answered question</i>	24
<i>skipped question</i>	58

1. Response Text Categories
2. Wouldn't it be cool to have a district closed to traffic and open only to pedestrian for shopping, ets? Like say Boulder Co
3. Thank you so much for your work. I would be happy to get involved to help. Joe Morrison, 665-7774.
4. Riding in designated bike lanes or shoulders on busy roads can sometimes be dangerous if the shoulders/lanes aren't designed and maintained with bikes in mind. They often become places where a lot of sharp road junk builds up, which can cause crashes and flats. Also, when making any changes to the system, education of drivers is absolutely critical. They need to see reminders everywhere of how to act. Also, cyclists should be reminded of how they should act. With uniform expectations, there's a better chance of success and less feelings of animosity between drivers/cyclists.
5. Need more loop trail bridges like the one on first street for key areas.
6. See previous comment box.
7. I've bicycled throughout the U.S. and Europe. I've never been in such an anti bicyclist community as Wenatchee Valley. A seemingly large proportion of its inhabitants seem to feel that bicycles are not a valid users of the public roads. Evidence of this negative sentiment is seen in the City of Wenatchee's laws against riding bikes on the sidewalks downtown.
8. Thank you for supporting cycling!
9. Very happy to see you want the public's input. I am hopeful for some great changes to the Wenatchee bike lanes and hopefully some signs to make us a more bike friendly community.
10. Thanks for asking!
11. You hit all the points.
12. Please work on getting helmets for kids that can't afford them.
13. I think that the local churches and school, will be a good way to inform . The population of what is happening in the community
14. The biggest deterrent for me is no facilities to shower and change at work or keep clothes. Also, we are not supposed to bring our bikes into the office. I'm not going to leave a \$3,500 bike on the sidewalk!
15. I think you did a great job of covering most items which come to mind.
16. Thanks for caring about transportation other than personal automobiles!
17. Survey did well with addressing concerns of a timid biker or a person new to biking.
18. more bike markings/lanes on rural roads i.e. towards Leavenworth on old highway from Wenatchee to Monitor i.e. finish bike path proposals
19. Would like to see lower speed limits and more lighted ped/bike crossing areas with mid street island refuges. Pedestrian/bike only avenues downtown. Clean bike lanes regularly, enforce no parking in bike lanes. Create bike/foot patrols (volunteers?) acting as "eyes" for the police. Set up way to report



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infractions. Need bicycle sensitive signals at major intersections. Bicycle overpass in downtown area. Study model cities such as Copenhagen, Amsterdam, and Portland Or.

20. more to come
21. I know this is not in the scops of your area, but crossings on Highway 2between Wenatchee and Leavenworth can be dicey.
22. Great job putting this together!
23. I think the opportunity to fill out this survey worked great for me. I always have great intentions to attend meetings, but at the end of a work day I'm ready to ride my bike, walk the dogs, or work in my garden! Thanks for everything you are doing to promote safe biking. I will find ways to ride no matter what, but I look forward to seeing some changes.
24. When or if the loop trail extension to Rocky Reach is to be built? Connectivity is huge - being able to come from outlying areas and connect with the loop trail easily.





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SURVEY THREE

This survey was presented with a complete Bicycle Network 20 year plan map. This survey was presented to many service clubs throughout the plan area with an invitation to participate online and in social media posts.

WENATCHEE VALLEY TRANSPORTATION COUNCIL

HOME ABOUT WVTC MEETINGS FUTURE PLANS CONSTRUCTION NON-MOTORIZED REPORT A PROBLEM CONTACT US

Greater Wenatchee Bicycle Master Planning

The **Greater Wenatchee Bicycle Network Master Plan** map is in draft form and ready for public comment prior to adoption. When implemented this plan will guide local jurisdictions in their development and planning efforts for local roadways. This webpage is provided to ensure that all public input is collected and considered in the review process.

Please take a few minutes to study the map below via the link to a larger map (link will open a new page), as well as the additional information provided via links in the sidebar.

We would like to hear from you in one or more of the following ways:

Via Email: [Contact us directly](#)
Via our Survey: [Click here to take survey](#)
Via public Forum: [Click here to join or start a conversation](#)

The proposed Network Master Plan has been developed to make riding a bicycle a more attractive transportation option for our community.

The proposed bikeway development plan is intended to provide safe, comfortable and convenient routes for the widest variety of riders possible, ages 8-80 years. Some bikeway types are intended to attract new riders whereas others are intended to accommodate existing use.

This is currently a DRAFT Map and has not been adopted by the WVTC

Proposed Greater Wenatchee Bicycle Network Plan

WENATCHEE VALLEY TRANSPORTATION COUNCIL
This is currently a DRAFT and has not been adopted by the WVTC.

This map represents a 20-year vision for the development of a complete, connected, and convenient bicycle network. The goal of this general measure is to encourage bicycle use and improve roadway safety for all users.

- Implementation of the network will be integrated with transportation and construction programs.
- Funding of projects will come from local, regional, and state transportation programs.
- Joint Bikeway Action Plan requires development of shared elements such as parking, signage, and structural mobility.
- Road Bikeway facilities will fit into existing roadway right-of-way.

Click directly on a colored Bikeway line to access detailed information such as:

- Description of Bikeway Type
- Identification of Bikeway Type
- List of potential Bikeway Features (links to more info)
- Identification of implementation considerations

This network plan is currently open for comment.

Follow these links to get more information or to provide feedback:

[Bicycle Plan Survey](#)
[WVTC Bicycle Advisory Board Page](#)
[Click here to vote now](#)

Legend

- Imagined Green Routes
- Loop Trail
- Neighborhood Bikeways
 - Type 1 Bikeway
 - Type 2 Bikeway
- Distance Bikeway
- Separated Bikeway
 - Shared Bridge
 - Shared Use Path
- WVTC Miles

[View Larger Interactive Map](#)

FIGURE 15-WVTC BICYCLE PLANNING PAGE



APPENDIX—GREATER WENATCHEE BICYCLE MASTER PLAN

Bicycle Plan Survey

Community

Design Survey

Collect Responses

Below is a list of the collectors you are currently using to collect responses. To view the details or change the properties of an existing collector, just click the name. To collect more responses for this survey from a different group of people, click "Add New Collector".


Collector Name (Method)	Status	Responses	Date Modified
New Facebook Page Embed (Website Survey)	● CLOSED	0 responses	December 19, 2012 9:56 AM
WVC Link (Web Link: /s/WVC_survey)	● CLOSED	5 responses	December 19, 2012 9:56 AM
Bike Plan Page (Web Link: /s/discussion_page)	● CLOSED	38 responses	December 19, 2012 9:56 AM
Map Link (Web Link: /s/Wenatcheebikeplan_map)	● CLOSED	21 responses	December 19, 2012 9:56 AM

The image below shows the number of views for the online map.

Open Public Comment BMP Map





DRAFT Map open for public comment

 Web Mapping Application by patrick@wvtc.org

Last Modified: September 5, 2012

☆☆☆☆☆ (0 ratings, 721 views)

 Facebook  Twitter



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Bicycle Network Plan Survey

1. How did you hear about this survey

Answer Options	Response Percent	Response Count
Facebook/Social Media	57.8%	37
WVTC Web Page Link	7.8%	5
Radio	1.6%	1
Newspaper	3.1%	2
Email	23.4%	15
Word of mouth	3.1%	2
Public Meeting	3.1%	2
Other (please specify)		5
<i>answered question</i>		64
<i>skipped question</i>		0

Other (please specify)

1. WVC website
2. Wenatchee Business Journal online
3. Wenatchee Outdoors forum
4. Wenatchee Valley Velo
5. TAC meeting

2. Where do you live?

Answer Options	Response Percent	Response Count
Wenatchee	62.5%	40
East Wenatchee	15.6%	10
Sunny Slope	7.8%	5
Rock Island	0.0%	0
Chelan Co.	10.9%	7
Douglas Co.	3.1%	2
Other (please specify)	4	
<i>answered question</i>		64
<i>skipped question</i>		0

Other (please specify)

1. Wenatchee Heights
2. Cashmere
3. Quincy
4. Three Lakes, Malaga



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3. Please indicate which of the following best describes you as a bicycle rider. (please choose only one)

Answer Options	Response Percent	Response Count
I ride my bicycle more for recreational purposes than transportation	68.8%	44
I ride my bicycle more for transportation purposes than recreation	26.6%	17
I don't ride a bicycle	4.7%	3
<i>answered question</i>		64
<i>skipped question</i>		0

4. Please indicate below what at level your confidence and ability to ride on our local street network is.

Answer Options	Response Percent	Response Count
Strong Rider--bike lanes or not, I take the lane.	29.7%	19
Confident Rider--I like bike lanes, and slow streets to get where I want to go. I've been riding for awhile now.	57.8%	37
Concerned Rider--I'm best on the quiet streets, bike lanes still make me nervous. I'm still a little new at this.	4.7%	3
Non-rider--I don't ride on city streets at all.	7.8%	5
<i>answered question</i>		64
<i>skipped question</i>		0

5. Which trip type is most challenging to do within the current bicycle network? Rank in order from Hardest = 1 to Easiest = 3

Answer Options	1	2	3	N/A	Rating Average	Response Count
Commute Trips	20	21	11	6	1.83	58
Recreational Trips	13	10	33	2	2.36	58
Misc. round town trips	23	24	8	3	1.73	58
<i>answered question</i>						58
<i>skipped question</i>						6



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6. What is the biggest challenge for your number 1 choice?

Answer Options	Response Count
	58
<i>answered question</i>	58
<i>skipped question</i>	6

1. time
2. Highways with narrow shoulders and roads designed without cycling as a consideration.
3. Cars
4. Traffic
5. N/A
6. Uneven surfaces
7. Rec trips longer. Intersections difficult to cross. if you are the only vehicle in the intersection, the weight of the bicycle doesn't trigger the light to change.
8. I prefer to use my bike as transportation but refrain because of how often I get flats. The debris in the roads is the main culprit.
9. The north part of the wenatchee is difficult to travel.
10. ride length
11. Commute times are when the traffic is heavy as well and traffic often does not notice bikes, especially when it is busy. Most of the main roads lack bike lines. I frequently end up riding the side walk or the parking strip if on Chelan or Mission Ave. Wenatchee Ave is difficult to ride through town due to the angle parking-frequent pull ins and outs where drivers have a hard time seeing cyclists.
12. Safety while riding on the state Hwy, getting from Wenatchee to other towns.
13. Getting around and through downtown. Also Miller is super scary and once you get down to 5th and head north it's impossible.
14. I mountain bike alot so I like the harder trails in the area
15. workplace is more than 10 miles away
16. access to safe streets with bike lanes that take me from point a to point b on my desired route
17. I don't commute - but not able to put NA for some reason.
18. no connecting bike lanes
19. Roads with on-street parking but no bike lane, so bikes are shoved into the main traffic stream on busy roads when cars fill parking spots.
20. Getting across the major intersections safely, in town and where the highways intersect.
21. SAFETY
22. Chip sealed roads
23. Have to create my own route - lots of turns and intersections, narrow streets, parked cars on streets
24. n/a



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25. safe bike routes and being seen.
26. cars do not look for bikes, not enough room on streets
27. Lack of awareness with Wenatchee drivers. It seems like people aren't comfortable with cyclist on the road and either hang back for they speed around cyclist.
28. Roads and traffic
29. Bike-unfriendly intersections, limited signage/markings, out-of-the-way routes for cyclists, antagonistic drivers.
30. Visibility
31. Too much traffic that does not seem to see bicycles
32. Crossing the highway several times to go any distance
33. hills
34. Not enough bike lanes
35. It is very difficult to ride around town due to traffice that doesn't respect my right to the road
36. Trafgic
37. Being able to go directly to work place. right now I have to go to the loop from 5th street and then ride loop till I get to orondo and then I use bike lane up orondo. Instead being able to just take chelan street to orondo.
38. Lack of places to lock up bikes, lack of knowledge by drivers and other cyclists about the rule of the road. Education on how bikes and vehicles can share the road is lacking.
39. Distance, traffic, weather.
40. Getting in and out of busy driveways/intersections without signals, such as Safeway, Target, etc. Also, it's tough in a lot of the residential areas since people are NOT looking out for cyclists.
41. A safe and direct route.
42. Traffic and parked cars
43. No bike lanes between Malaga & Downtown.
44. Construction blocking roads without proper signage ahead of time. Like the south bridge during construction. Some signs are out but not enough with clear route alternatives.
45. Absence of bike racks, not allowing bikes in places where there aren't bike racks, drivers not watching for bikes/giving right-of-way
46. people who think bikes should follow the same rules as cars, when the cars themselves can't follow those same rules.
47. North/South routes that are not on busy roads.
48. Safety first, Connectivity second
49. No bike lanes
50. Getting to businesses on the main N-S arteries. Intersections are barbaric!
51. Traffic and lack of bike lanes
52. Lack of bike lanes on main roads
53. There's not enough bike trails or bike lanes.
54. Lights that don't recognize bikes; other problematic intersections.
55. Lack of bike lanes
56. I must travel 3-4 miles on two lane highway where police patrols are scarce and speeding cars cut corners onto shoulders of the road. There is no alternate route for me to take and I don't



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feel safe in low light hours, regardless of how many bike lights I wear. Need rumble strips, or some sort of separation from speeding cars.

57. Getting organized

58. Lack of safe north and south routes.

7. Which type of riding would you like to do more often?

Answer Options	Commute Trips	Misc. Trips	Recreational Trips	N/A	Rating Average	Response Count
I would like to be able to take more...	18	22	16	2	1.96	58
<i>answered question</i>						58
<i>skipped question</i>						6

8. When choosing to ride your bicycle, how do the following circumstances affect your decision to ride?

Answer Options	Doesn't affect my choice	Discourages me from riding	Rating Average	Response Count
Riding out of my way (longer distances) to find a safe route	30	23	1.43	53
The lack of good bicycle parking at my destination	29	24	1.45	53
The lack of clearly marked, low traffic bicycle routes to follow	21	32	1.60	53
The lack of bicycle lanes to ride in	17	36	1.68	53
The lack of bicycle sensitive traffic signals	19	34	1.64	53
The distance from home to work/school	41	11	1.21	52
My comfort and ability to ride safely in/around traffic	19	35	1.65	54
The possibility of getting a flat tire	43	11	1.20	54
The possibility of needing a car for an emergency (ie: sick kid)	35	19	1.35	54



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The lack of neighborhood connections to the loop trail	28	24	1.46	52
The cost and convenience of driving a car	42	11	1.21	53
The lack of safe routes for my child to ride his/her bike to school	21	30	1.59	51
Other (please specify)			4	
answered question				54
skipped question				10

Other (please specify)

1. a bike unfriendly culture
2. seasonal weather
3. 2 things that discourage me from riding: 1) gear (I need lights and a lightweight bike seat for 3yr-old), and 2) I mostly ride for recreation so- knowledge about another option besides loop trail for when I want a change or something closer to 15-20 miles.
4. Clearly marked bicycle/pedestrian intersections with devoted lanes i.e Dutch design type!

9. Please indicate the top 3 things that could allow you to ride a bicycle more often. I could ride more if...

Answer Options	Response Percent	Response Count
I had clearly marked, low traffic routes to follow	61.1%	33
Traffic signals would change for me	51.9%	28
I had bike lanes to ride in on more streets	88.9%	48
There were better connections to the loop trail	29.6%	16
I knew there would be good bicycle parking at my destination	33.3%	18
I didn't have to ride out of my way, or a longer distance to feel safer	33.3%	18
Gas prices keep going up	22.2%	12
answered question		54
skipped question		10



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10. I am _____ of *Removing Some On Street Parking* to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Supportive	81.1%	43
Somewhat Supportive	15.1%	8
Not supportive	3.8%	2
Comment		8
<i>answered question</i>		53
<i>skipped question</i>		11

Comment

1. The one ways are in desperate need of bike lanes and drivers need to be aware of cyclist.
2. Depends on the inpack on the area business.
3. This an inefficient parking space for cars and under-utilized by public.
4. could annoy already aggressive drivers
5. Need an example of what that would look like, hard to get rid of a lane that already exists
6. At this section of road, there are hardly ever any cars that are parked here.
7. The inconvenience of having to walk a block from where I've parked is still less than that of not having a bike lane on a busy road.
8. A lot of parking makes visibility difficult for drivers.

11. I am _____ of *Installing Traffic Calming on some roads* to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Supportive	77.4%	41
Somewhat Supportive	15.1%	8
Not supportive	7.5%	4
Comment		6
<i>answered question</i>		53
<i>skipped question</i>		11

Comment

1. Not a fan of traffic circles, diagonal diverters, cul-de-sacs or other options which also make it less direct for bikes and people walking to get through a neighborhood.
2. these are good, cyclists or not; can you do car-only stop signs?
3. Great idea, would love to see more kids riding their bikes to school
4. I think the most important things are bike lanes and traffic lights that are sensitive to bicycle riders as well as N/S routes.
5. Many time I have found that the calming obstacles force me to ride in front of cars and create frustration between bikes and autos
6. More RoundABOUTs! A bike only need worry about traffic from one direction!



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12. I am _____ of *Optimizing Roads for all users (road diets)* to make bicycling safer and a more attractive transportation choice.

Answer Options	Response Percent	Response Count
Supportive	75.0%	39
Somewhat Supportive	19.2%	10
Not supportive	5.8%	3
Comment		4
<i>answered question</i>		52
<i>skipped question</i>		12

Comment

1. Safety for all users is a concern.
2. very supportive. Especially with sidewalks too for peds
3. Appropriate for Western Ave. between Maple and Cherry.
4. Seems like the best compromise yet!

13. Tell us what you think

Answer Options	Response Count
	24
<i>answered question</i>	24
<i>skipped question</i>	40

Response Text

1. Bring back parking to 5th street, that is awful to take away parking around the college!
2. Nothing missed.
3. Wish there was a continuous non-highway path to go from Leavenworth to Wenatchee...without the struggle of a lot of steep hills (Deadman, Stine, Sleepy Hollow).
4. Dodging debris in the road and constantly having to overcompensate for drivers oblivious to bikers makes bike commuting in Wenatchee scary and dangerous. I am very excited to see the plans in place to make Wenatchee more biker friendly. It will help create a stronger sense of community and responsibility while promoting a healthier life style. A big thanks to everyone working on this project.
5. Bike lanes on western and 1st would be great. Extend the bike lane on cherry to western.
6. This is a very good start and plan. I ride around 100 miles a week, On Wenatchee streets, loop trail and state Hwys. I find that there is a small percentage of drivers who care about the safety of a bicyclist. There is a small percent of drivers who just do not like bicycles on the road. The rest of the percent of the drivers need more education about bicycle rules of the road. Educating the public is also important. I spoke to drivers about the 3 foot law and most of them never heard of it.
7. I like the bike lanes that are painted on the street and dedicated to bikes. Also, a public education campaign to improve attitudes toward bicyclist would be greatly helpful! Too many



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drivers are hostile and verge on assault toward bicyclist. That's the main reason I have mostly stopped riding for just errands around town. I mainly only ride to commute to work and back to home, as that route feels (mostly) safe for me.

8. I am excited about this idea as I think it supports the quality of life in our area.
9. Why were planters placed along the new road by the Town Toyota/ Lowes area instead of a bike lane? Crazy!
10. Don't feel safe most of the time. Traffic lights don't change for me. The worst ones are Wenatchee Ave by Sonic, Easy Street at Cashmere Valley Bank and at the highway 97 interchange, and highway 2/97 at Monitor by Tom, Dick & Harry's. The pedestrian/bike overpass is too steep and narrow.
11. LOOKS GREAT.
12. I think encouraging more bike traffic is a positive thing for our community, but bike commuting is affected by weather and riding in snow or ice is not realistically an option for many. I would be a bit hesitant about major street changes that impact vehicle traffic for bicycle use that is primarily seasonal.
13. NO, I think it is on target. Slowing things down some and creating lanes where it is fast. Places to safely secure bikes at the destination.
14. Thanks for putting in this effort! I think that Wenatchee is really progressing and supporting/encouraging cycling is only going to better improve our community and community members' lives.
15. I will call.
16. good luck
17. Nice to see someone thinking about this. We live in a Great place for bicycling and should be encouraging more people to do it!
18. Most cyclists don't WANT to be in the way of traffic, or slow drivers down. The infrastructure just makes it difficult to be out of the way in a lot of places. Also, I think drivers should have to learn and pass materials regarding co-existing safely on the road with bicycles as part of the driver's license test. And I think cyclists should have clear places to be on roadways so drivers can accurately and confidently predict where we'll be. One of the big issues is that drivers don't know what to expect from bikes on the road because we all ride a little differently. We need to find a uniform approach to unmarked intersections and/or the infrastructure needs to eliminate unmarked intersections. Awareness matters! Maybe if drivers could reliably predict what a given bike rider will do in the lane up ahead, and if drivers were to get tickets for bullying behavior behind the wheel, we can get all vehicles (both 2 wheel and 4) to share the road with mutual respect.
19. I am an avid cyclist. I KNOW there are cyclists who do not follow the rules of the road and THEY are the ones that cause many drivers to get angry. In the same way the drivers get ticketed for not following the rules of the road, cyclists should have to face the same penalty.
20. I lived in Portland for 14 years and was a bike commuter from my house to work (~4 miles each way) for several years. I'm currently an occasional cyclist as I now live and work from home in Malaga. I do enjoy cycling the loop trail, and would like to ride into town for errands or recreation. Wenatchee just isn't very friendly for cyclists. The lake of bike lanes, the hundreds of



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traffic lights, the back out parking along the avenue (much more likely to be hit by someone backing out of space). I'm still mainly a car user in this town, but would fully support any changes to make the town more user friendly and reduce traffic speeds and increase biker safety.

21. As a cyclist, i ride as though i am invisible to cars and am hypersensitive to where i am and what is around me. motorist (myself included when behind the wheel) simply do not see many cyclists. This means that i will cross an intersection against a light if the way is clear, but to travel with normal auto traffic an obey the rules that they choose not to follow is too dangerous.
22. If convenient North/Sourth routes are not provide, such as across the WVC campus, bikers will takes routes that are not safe because we don't like to ride a lot further to get where we are going.
23. Except along the Wen Valley Med Ctr Chelan St has few cars parking on the roadway. Bike lanes could be easily added.
24. The more provision is made for safe biking, the less bikers will take shortcuts and do illegal practices to get around.
25. Possible schematics of various intersection designs. Maybe I missed it?!
26. Bike ped crossing of Hwy 2/97 at Anjou Bakery and Big Y area to facilitate bike traffic from Leavenworth area to Wenatchee on low traffic roads.



MUTCD SECTION 3D.01

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CHAPTER 3D. MARKINGS FOR PREFERENTIAL LANES

Section 3D.01 Preferential Lane Word and Symbol Markings

Support:

- 01 Preferential lanes are established for one or more of a wide variety of special uses, including, but not limited to, high-occupancy vehicle (HOV) lanes, ETC lanes, high-occupancy toll (HOT) lanes, bicycle lanes, bus only lanes, taxi only lanes, and light rail transit only lanes.

Standard:

- 02 When a lane is assigned full or part time to a particular class or classes of vehicles, the preferential lane word and symbol markings described in this Section and the preferential lane longitudinal markings described in Section 3D.02 shall be used.

- 03 All longitudinal pavement markings, as well as word and symbol pavement markings, associated with a preferential lane shall end where the Preferential Lane Ends (R3-12a or R3-12c) sign (see Section 2G.07) designating the downstream end of the preferential only lane restriction is installed.

- 04 Static or changeable message regulatory signs (see Sections 2G.03 to 2G.07) shall be used with preferential lane word or symbol markings.

- 05 All preferential lane word and symbol markings shall be white and shall be positioned laterally in the center of the preferential lane.

- 06 Where a preferential lane use exists contiguous to a general-purpose lane or is separated from a general-purpose lane by a flush buffered space that can be traversed by motor vehicles, the preferential lane shall be marked with one or more of the following symbol or word markings for the preferential lane use specified:

- A. HOV lane—the preferential lane-use marking for high-occupancy vehicle lanes shall consist of white lines formed in a diamond shape symbol or the word message HOV. The diamond shall be at least 2.5 feet wide and 12 feet in length. The lines shall be at least 6 inches in width.
- B. HOT lane or ETC Account-Only lane—except as provided in Paragraph 8, the preferential lane-use marking for a HOT lane or an ETC Account-Only lane shall consist of a word marking using the name of the ETC payment system required for use of the lane, such as E-Z PASS ONLY.
- C. Bicycle lane—the preferential lane-use marking for a bicycle lane shall consist of a bicycle symbol or the word marking BIKE LANE (see Chapter 9C and Figures 9C-1 and 9C-3 through 9C-6).
- D. Bus only lane—the preferential lane-use marking for a bus only lane shall consist of the word marking BUS ONLY.
- E. Taxi only lane—the preferential lane-use marking for a taxi only lane shall consist of the word marking TAXI ONLY.
- F. Light rail transit lane—the preferential lane-use marking for a light rail transit lane shall consist of the word marking LRT ONLY.
- G. Other type of preferential lane—the preferential lane-use markings shall consist of a word marking appropriate to the restriction.

- 07 If two or more preferential lane uses are permitted in a single lane, the symbol or word marking for each preferential lane use shall be installed.

Option:

- 08 Preferential lane-use symbol or word markings may be omitted at toll plazas where physical conditions preclude the use of the markings (see Section 3E.01).

Guidance:

- 09 The spacing of the markings should be based on engineering judgment that considers the prevailing speed, block lengths, distance from intersections, and other factors that affect clear communication to the road user.

Support:

- 10 Markings spaced as close as 80 feet apart might be appropriate on city streets, while markings spaced as far as 1,000 feet apart might be appropriate for freeways.

Guidance:

- 11 In addition to a regular spacing interval, the preferential lane marking should be placed at strategic locations such as major decision points, direct exit ramp departures from the preferential lane, and along access openings to and from adjacent general-purpose lanes. At decision points, the preferential lane marking should be placed on all applicable lanes and should be visible to approaching traffic for all available departures. At direct exits from preferential lanes where extra emphasis is needed, the use of word markings (such as "EXIT" or "EXIT ONLY") in the deceleration lane for the direct exit and/or on the direct exit ramp itself just beyond the exit gore should be considered.



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FHWA GUIDANCE (UPDATED OCT. 22, 2008)

GENERAL FUNDING REQUIREMENTS

a) Flexibility.

Federal surface transportation law provides tremendous flexibility to States and MPOs to fund bicycle and pedestrian improvements from a wide variety of programs. Virtually all the major transportation funding programs can be used for bicycle and pedestrian-related projects. When considering ways to improve conditions for bicycling and walking, States and MPOs are specifically encouraged to:

- Include bicycle and pedestrian improvements as an incidental part of larger projects, as described above, and
- To review and use the most appropriate funding source for a particular project and not rely primarily on the [Transportation Enhancement](#) activities. Many bicycle and pedestrian projects are more suitable for funding under the [Congestion Mitigation and Air Quality Improvement Program](#), Surface Transportation Program, or one of the other programs listed in Appendix 2.

b) Transportation Purpose.

Section 217(i) of Title 23 requires that bicycle projects be "principally for transportation rather than recreation purposes", with the exception of the [Recreational Trails Program](#) under which projects should be for recreational use. FHWA has determined that to meet the "transportation purpose" requirement, a bicycle facility must be more than a closed loop trail within a park that can only be used for recreational purposes - users must be able to get somewhere other than back to their starting point. Beyond this, any bicycle facility providing access from one point to another can and will be used for transportation purposes and is therefore eligible for Federal-aid funding. Section 217(i) only applies to **bicycle projects**, not to projects to accommodate pedestrians and [other users](#).

c) Motorized Vehicle Use.

In general, motorized vehicles are not permitted on nonmotorized trails and pedestrian walkways funded under Title 23. Exceptions to this general rule exist for maintenance vehicles; motorized wheelchairs; when State or local regulations permit, snowmobiles; and electric bicycles (weighing under 100 pounds and a top speed of less than 20 miles per hour); "and such other circumstances as the Secretary deems appropriate" (except the [Recreational Trails Program](#) which specifically provides funds for motorized trails). In 2008, FHWA developed a [Framework for Considering Motorized Use on Nonmotorized Trails and Pedestrian Walkways](#) to implement the "other circumstances" provision.



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Fig. 1 Bicycle/Pedestrian Funding Opportunities (revised April 10, 2012)

This table indicates potential eligibility for pedestrian and bicycle projects under funding programs, but specific program requirements must be met, and eligibility must be determined on a case-by-case basis. For example, NHS funds must benefit NHS corridors, HSIP funds must benefit safety, CMAQ funds must benefit air quality, FLH funds must provide access to or within Federal lands, etc. See also more information about [Bikes and Transit](#) and [Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law](#)

TABLE 3-FHWA FUNDING MATRIX

Project Type	<u>NHS</u>	<u>STP</u>	<u>HSIP</u>	<u>SRTS</u>	<u>TEA</u>	<u>CMAQ</u>	<u>RTP</u>	<u>FTA</u>	<u>TE</u>	<u>BRI</u>	<u>402</u>	<u>PLA</u>	<u>TCSP</u>	<u>JOBS</u>	<u>FLH</u>	<u>BYW</u>
Bicycle and pedestrian plan		*						*				*	*			
Bicycle lanes on roadway	*	*	*	*	*	*		*	*	*			*		*	*
Paved Shoulders	*	*	*	*	*	*				*			*		*	*
Signed bike route	*	*		*	*	*		*					*		*	*
Shared use path/transportation trail	*	*	*	*	*	*	*	*		*			*		*	*
Recreational trail							*						*		*	
Spot improvement program		*	*	*	*	*		*					*			
Maps		*		*		*		*			*		*			
Bike racks on buses		*			*	*		*	*				*			
Bicycle parking facilities		*		*	*	*		*	*				*			*
Bicycle share (capital costs only, operations not eligible)	*	*			*	*		*	*				*	*	*	
Bicycle storage/service center		*		*	*	*		*	*				*	*		



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Project Type	<u>NHS</u>	<u>STP</u>	<u>HSIP</u>	<u>SRTS</u>	<u>TEA</u>	<u>CMAQ</u>	<u>RTP</u>	<u>FTA</u>	<u>TE</u>	<u>BRI</u>	<u>402</u>	<u>PLA</u>	<u>TCSP</u>	<u>JOBS</u>	<u>FLH</u>	<u>BYW</u>
Sidewalks, new or retrofit	*	*	*	*	*	*		*	*	*			*		*	*
Crosswalks, new or retrofit	*	*	*	*	*	*		*	*				*		*	*
Trail/highway intersection	*	*	*	*	*	*	*						*		*	*
Signal improvements	*	*	*	*	*	*		*					*			
Curb cuts and ramps	*	*	*	*	*	*		*					*			
Traffic calming		*	*	*				*					*			
Coordinator position		*		*		*										
Safety/education position		*		*							*					
Police Patrol				*							*					
Helmet Promotion		*		*	*						*					
Safety brochure/book		*		*	*	*	*				*					
Training		*		*	*	*	*				*					

Pasted from <http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/bp-guid.cfm#bp4>

KEY

- | | | | |
|------|--|------|--|
| NHS | National Highway System | BRI | Bridge |
| STP | Surface Transportation Program | 402 | State and Community Traffic Safety Program |
| HSIP | Highway Safety Improvement Program | PLA | State/Metropolitan Planning Funds |
| SRTS | Safe Routes to School Program | TCSP | Transportation and Community and System Preservation Pilot Program |

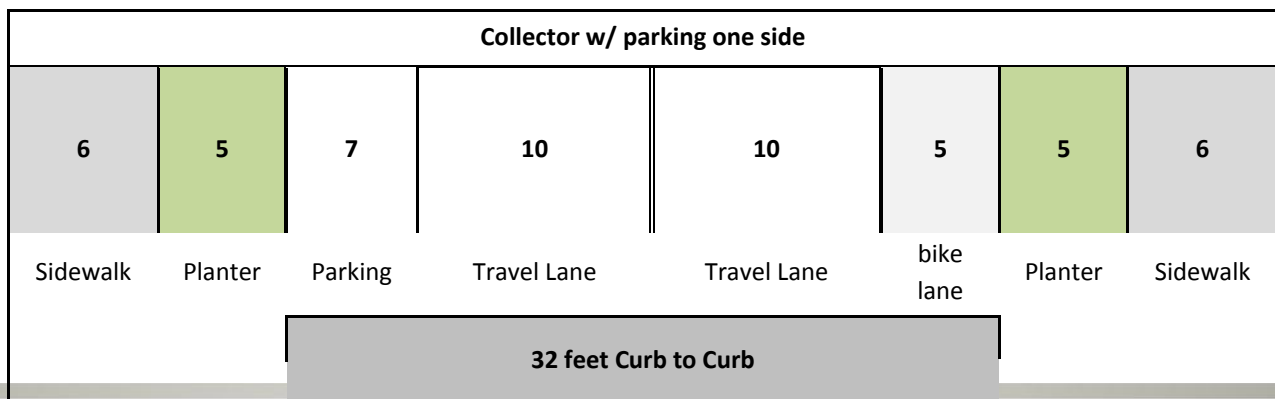
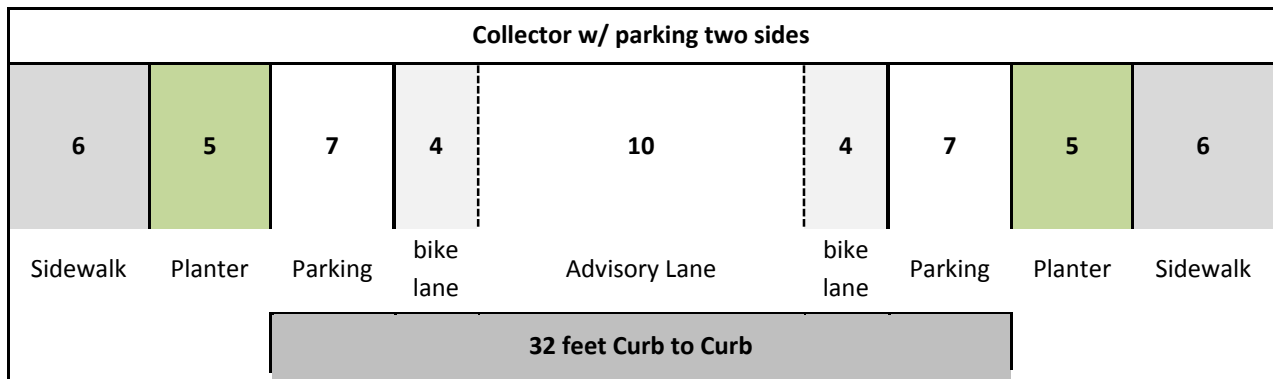
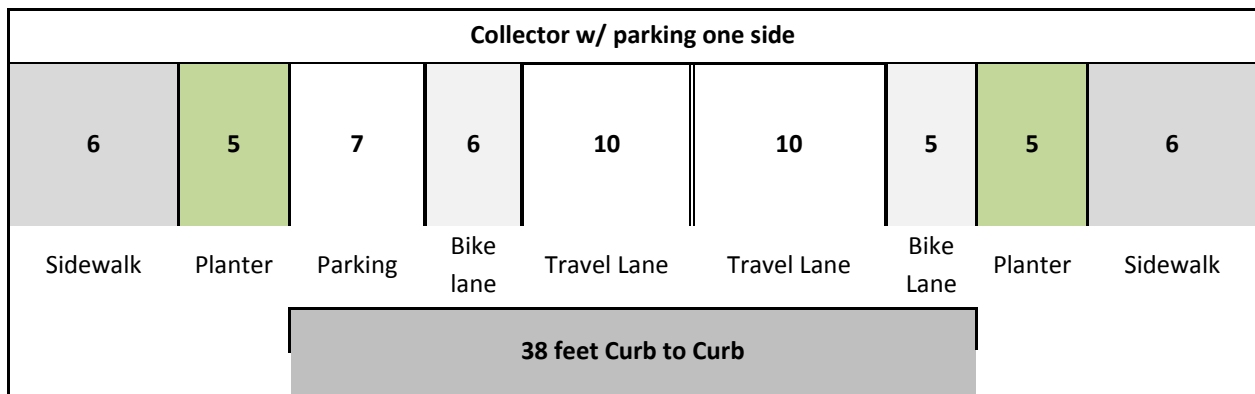
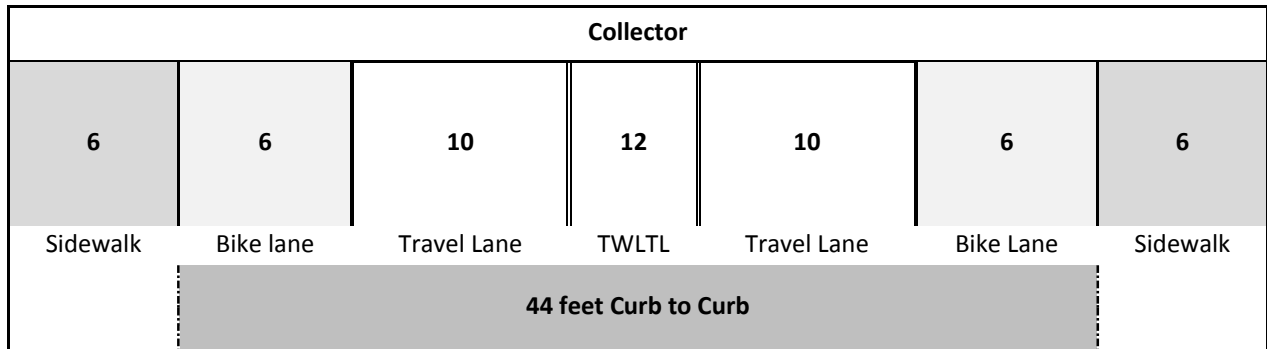


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TEA	Transportation Enhancement Activities	JOBS	Access to Jobs/Reverse Commute Program
CMAQ	Congestion Mitigation/Air Quality Program	RTP	Recreational Trails Program
FLH	Federal Lands Highway Program	FTA	Federal Transit Administration Capital Funds
BYW	Scenic Byways	TE	Transit Enhancements



BICYCLE FRIENDLY COLLECTOR DIMENSIONS



BICYCLE FRIENDLY ARTERIAL EXAMPLES

Primary Arterial							
10	8	10	10	10	10	8	10
Sidewalk	Buffered Bike lane	Travel Lane	Travel Lane	Travel Lane	Travel Lane	Buffered Bike lane	Sidewalk
56 feet Curb to Curb							
Minor Arterial							
4.5	8	10	12	10	8	4.5	
Sidewalk	Buffered Bike lane	Travel Lane	TWLTL	Travel Lane	Buffered Bike lane	Sidewalk	
48 feet Curb to Curb							
Minor Arterial/Collector (no parking)							
4.5	6	10	12	10	6	4.5	
Sidewalk	Bike lane	Travel Lane	TWLTL	Travel Lane	Bike Lane	Sidewalk	
44 feet Curb to Curb							



