

# Active Transportation Funding Programs and Project Development Support

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### **Agenda**

- WSDOT Active Transportation Funding Programs
- Examples of Past Successful Projects
- Project Development Support Opportunities
- Active Transportation Design Guide
  - Design Guide Structure
  - Ways to Use the Guide
- Schedule
- Questions and Answers



Are you familiar with WSDOT's Safe Routes to School and Pedestrian/Bicyclist Program?

# Safe Routes to School and Pedestrian/Bicyclist Programs

- Aim to improve safety for pedestrians and bicyclists
- All roads
- All public agencies & Tribal governments are eligible
- Projects must:
  - Comply with funding requirements
  - No match is required



Photo of bike lane, parking lane and sidewalk

### **Funding Programs Summary**

- Programs can fund:
  - Speed Management Treatments
  - Crossing and Intersection Treatments
  - Grade Separated Treatments
  - Lighting Improvements
  - ADA Improvements
  - Linear Treatments Designed for Pedestrians
  - Linear Treatments Designed for Bicyclists
  - Linear Treatments Designed for Pedestrians and Bicyclists



#### **Purpose**

- Eliminate pedestrian and bicyclist fatal and serious injury traffic crashes.
- Increase the availability of connected pedestrian and bicyclist facilities that provide low traffic stress and serve all ages and abilities.
- Increase the number of people that choose to walk and bike for transportation.



Photo bicyclist in bike lane

Two types of projects are eligible:

- 1) Construction projects
- Development/designonly projects



Photo of raised intersection, Olympia, WA



\$46.38 million expected in state funds for 2025-2027

Two types of projects are eligible:

- 1) Construction projects
- Development/design-only projects



Photo of sidewalk and separated bike lane.



#### **Purpose**

- Enable and encourage children, including those with disabilities, to walk, roll, and bicycle to school.
- Make bicycling and walking to school a safer and more appealing form of transportation, encouraging a healthy and active lifestyle from an early age.
- Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.



Three types of projects are eligible:

- 1) Construction projects within two miles of a school
- 2) Development/design-only projects
- 3) Education and encouragement only



- \$51.15 million expected in 2025-2027
- State and federal funds
- Nonprofit entities are eligible



Photo of a traffic garden and children learning to bicycle safety.



#### **Successful Project:**

Union Gap, Ahtanum Road Pedestrian Railroad Crossing, \$1.949 million. Median refuge island, new marked crosswalks, rectangular rapid flashing beacons (RRFB), ADA curb ramps, shared-use path/trail, pedestrian/bicyclist railroad crossings, sidewalk (5'+) with curb.



#### **Successful Project:**

Yakima, Fred Meyer Active Transportation Pathway: Connecting Fred Meyer Shopping Center to West Powerhouse Road Community and to Yakima Greenway, Naches, and William O. Douglas Trail Systems, \$1.63 million. Roundabout, new marked crosswalk, green pavement/bicycle intersection crossing markings, ADA curb ramps, audible pedestrian signal, bicycle wayfinding signs/markings, shared-use path/trail.



#### **Successful Project:**

Clark County, Truman Elementary School Safety Improvements, \$904,000. Curb extensions/bulb-outs, raised crosswalk, new marked crosswalk, rectangular rapid flashing beacon (RRFB), lane width reduction, ADA curb ramps, sidewalk with curb and buffer and sidewalk with curb.



#### **Successful Project:**

Clarkston, Grantham Elementary School Pedestrian Safety Improvements, \$1.9 million. Curb extensions/bulb-outs, new marked crosswalk, pedestrian scale crossing illumination, rectangular rapid flashing beacon (RRFB), speed feedback signs, school/playground 20 mph speed zone (flashing beacons/signage), ADA curb ramps, bicycle wayfinding signs/markings, bicycle boulevard conversion, sidewalk with curb and buffer and sidewalk at curb.



# Funding Programs Competitive Application Process

- Applications submitted
- Internal review to tier projects
- Review committee evaluation
- Electronic or on-site project reviews
- Prioritized list to Governor and Legislature
- Selection of projects by July 2025

### **Project Review Criteria**

- Project Quality
- Value
- Deliverability
- Safety
- Equity

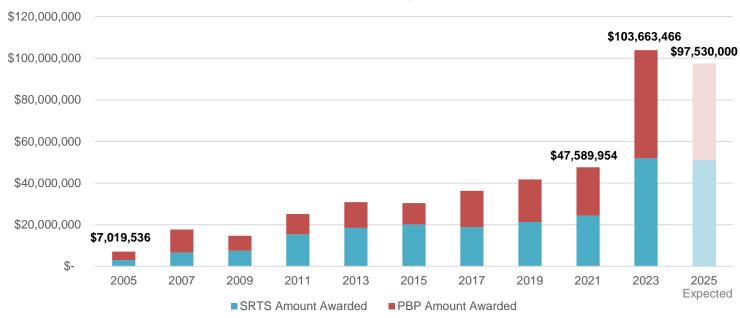


Photo of a school crossing with a median island.



#### **Program Funding Over Time**







### **Past Application Cycles**

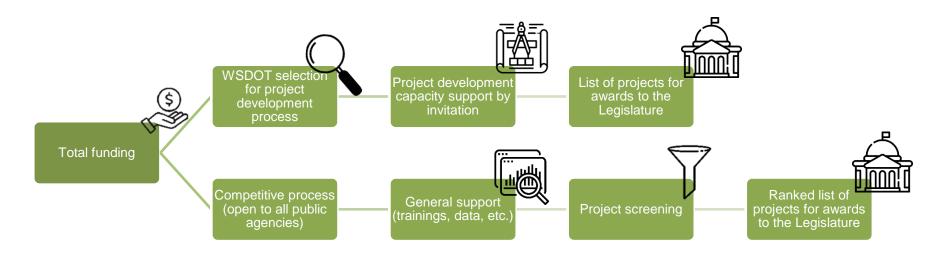
"This project will include the following number of Crossing Infrastructure/Geometric Treatments. Indicate the number or length of each type that will be included in the project and leave the other options blank."



Photo of an ADA curb ramp



## 2025-27 Project Selection Process





# Project Development Support Purpose & Goals

#### High-quality, focused technical assistance (TA) that results in:

- Short term support to develop projects ready for a construction award
- Increase the utilization of the programs by a greater diversity of jurisdictions
- Serve overburdened communities
- Long term support for active transportation plans and planning



### **Project Development**

- Focused Project Development
  - Support to local agencies catered to the specific needs
  - Menu of support options
- General Support
  - Resources, trainings, staff available for questions



Photo of pedestrian crossing and median island.



#### **Project Development**

Would the information below increase your local agency/government's ability to apply for funding?

- Cost estimates example
- Schedule estimates example
- Crash data analysis
- Design/treatment selection
- Speed management (design/treatment examples)



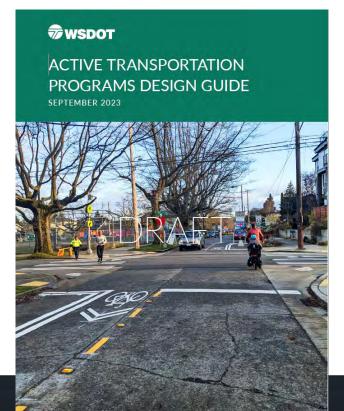
### **Project Development**

In what format would support or technical assistance best be provided to you?

- Training for our staff
- Consulting services managed by WSDOT
- Consulting services we manage directly
- Data/mapping services
- Guides/model information



### WSDOT Active Transportation Programs Design Guide





### Purpose of the Design Guide

- Establishes common definitions of the treatments for these funding programs
- Expands on the prior list of treatments with design guidance
- Simplifies project development and application for funding
- Emphasizes "how" to design treatments



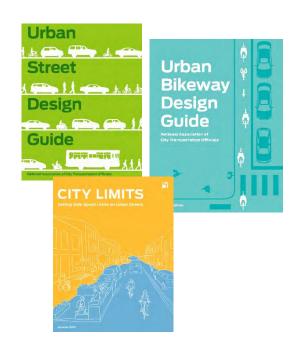


#### When Does the Guide Apply

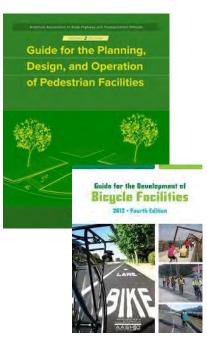
- All SRTS and PBP applications on local or county roads
- On state routes, comply with WSDOT Design Manual and related agency standards



### References Informing the Guide







**AASHTO** 



**FHWA** 

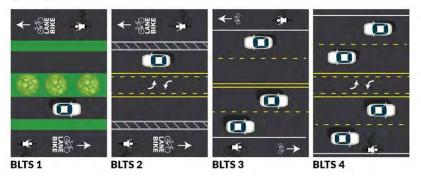
### **Funding Program Expectations**

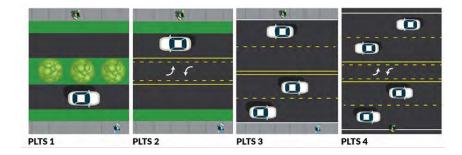
WSDOT will expect treatments to align with the design elements as stated in the guide. Any variations in treatment definitions should be explained in the application process.



### 2025-27 Project Applications

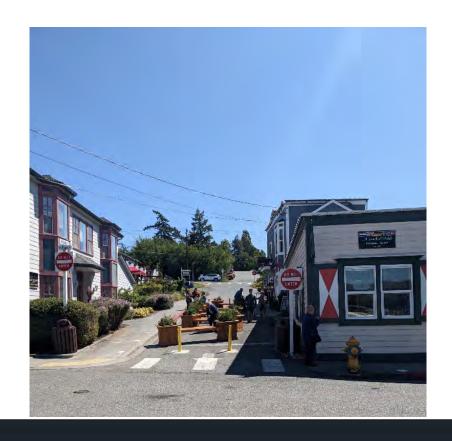
- Aim to meet <u>WSDOT's Level of</u> Traffic Stress 1 or 2
- Encourage Complete Streets for people walking, biking, and rolling







### **Design Guide Structure**





### **Outline Highlights**

- Part 1 Guide overview
  - How to use the guide
- Part 2 Treatment toolbox
- Appendix
  - Plan sheet details



#### 7. Chicanes

#### DESCRIPTION

Chicanes are a speed management strategy that use alternating curves or lane shifts to direct a driver back and forth along a road. This movement encourages slower speeds for drivers and can also discourage drivers from using roads prioritized for pedestrians and bicyclists. Bicycle boulevards can include chicanes to slow drivers and provide a safer place for bicyclists to ride



FIGURE 11. CHICANES IN SEATTLE, WA. SOURCE: DONGHO CHANG.

#### DESIGN GUIDANCE

Implement chicanes with the construction of physical barriers that extend from the curb on alternating sides along a road. Physical barriers may include curbed landscape areas or other similar treatments. Because of their shape and relationship to the through curb line, these treatments also make good candidates for green stormwater infrastructure locations. Alternatively, to create a chicaning effect, consider alternating highly used on-street parking (angled or parallel) between lane shifts if contextually appropriate, such as along a neighborhood street or commercial corridor.



If implemented along a two-way road with two full-width lanes, consider a median or hardened centerline treatment to prevent drivers from cutting a straight path across the centerline.44 This treatment is not necessary if chicanes are located on neighborhood yield streets.

Along roads with bike lanes, continue bike lanes straight between the chicane and the curb or edge of roadway. Provide a 5-foot minimum clearance from the edge of the gutter to the face of the chicane curb. When using this arrangement, paint chicane curbing white to ensure visibility by bicyclists and consider object markers to increase visibility. Provide curb radii or tapered entrances on the upstream side of the bike lane cut through at a minimum (don't design the curb with sharp corners at the entry side of the bike lane cut through). Consider drainage effects and snow or leaf removal with this design.

Provide sufficient width for emergency vehicle access and large vehicles at slow speed if along a route with high truck or bus volumes. For corner or midblock treatments intended to reduce pedestrian crossing distances refer to curb extension.

#### DESIGN APPLICABILITY

- Local streets or lower-volume roads.
- . One-lane, one-way, and two-lane, two-way roads.
- Roads with or without curb and gutter.
- Typically roads with 30 mph or less posted speeds.
- Compatible with transit routes if designed properly to accommodate buses.

#### \*\* FHWA. "3.5 Chicane." Traffic Calming e-Primer.

#### COMPLEMENTARY TREATMENTS

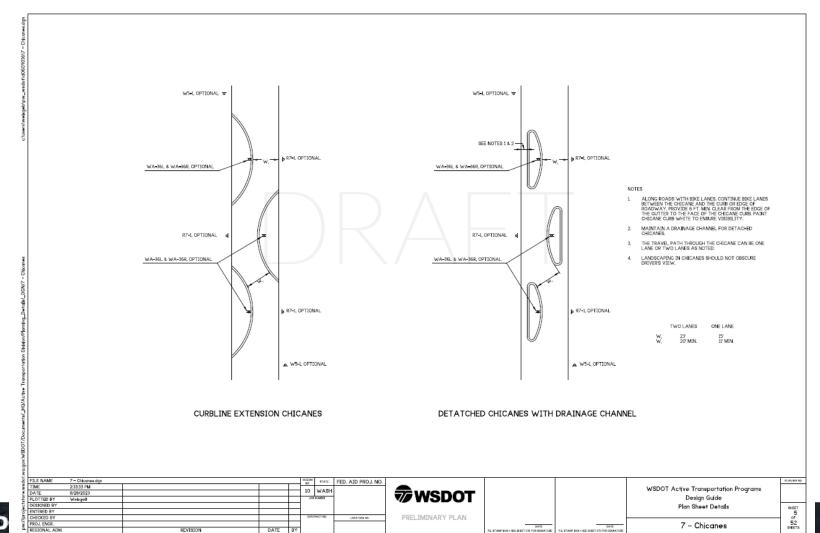
· Bicycle boulevard

#### MORE INFORMATION

FHWA Traffic Calming e-primer

#### PLAN SHEET DETAILS

· 7- Chicanes





#### 31. Rectangular rapid flashing beacon

#### DESCRIPTION

At some uncontrolled crossings, it can be difficult to achieve compliance with laws that require drivers to stop for pedestrians. One type of device proven to improve driver yielding compliance at crossings is the rectangular rapid flashing beacon (RRFB). RRFBs include a pedestrian crossing sign and an intense and rapid flashing beacon activated by a pedestrian detector or push button. These devices provide immediate service to pedestrians with little or no wait times.



FIGURE 38. RRFB IN EVERETT, WA. SOURCE: DONGHO CHANG.

#### DESIGN GUIDANCE

Place one RRFB on either side of the crosswalk and on the median or pedestrian refuge island as applicable. Install RRFBs with connection to a power source or as a standalone device with solar panels.

Design RRFBs in accordance with FHWA's Interim Approval (IA-21). WSDOT has received statewide interim approvals for use on all local jurisdiction-owned roadways and state highways.<sup>114</sup>

Consider the use of pedestrian pushbuttons with the RRFB. Pedestrian pushbuttons at RRFBs include a locator tone and "yellow lights are flashing" spoken message played twice. 

15 Note, the pushbutton shall not include vibrotactile or percussive indications and as such, may not provide sufficient communication for pedestrians who are blind or deaf and blind.

At intersections where a bicyclist may use the RRFB from an on-street bike facility, consider a curbside pushbutton for bicyclists.

At some locations, consider the following in place of the W11-2 within the assembly:

- W11-15 where the crossing will serve a pedestrian and bicyclist facility such as a shared-use path or sidewalk with adjacent bike lane.
- S1-1 near schools.

Consider <u>pedestrian-and-bicyclist-scale illumination</u> at crosswalk with RRFBs to improve visibility of pedestrians and bicyclists using the crosswalk.

#### DESIGN APPLICABILITY

- Intersections or midblock locations.
- Most effective at multilane crossings with posted speeds below 40 mph.<sup>116</sup>
- Usually at high-volume pedestrian crossings, but also consider for school crossings, priority bicycle route crossings, or locations where bike facilities/trails cross roads at mid-block locations.
- For more information on applicability of RRFBs, refer to FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations Table 1.

#### COMPLEMENTARY TREATMENTS

- · High-visibility crosswalk
- · Stop line at an uncontrolled crosswalk
- · Pedestrian refuge island

#### MORE INFORMATION

- FHWA Proven Safety Countermeasures Rectangular Rapid Flashing Beacons
- FHWA Interim Approval 21 Rectangular Rapid-Flashing Beacons at Crosswalks
- WSDOT Traffic Manual

#### PLAN SHEET DETAILS

· 31 - Rectangular Rapid Flashing Beacon

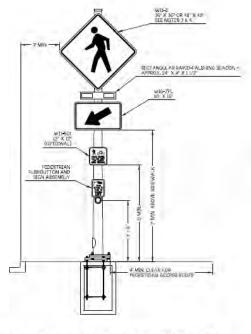


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<sup>134</sup> WSDOT. 2023. "Changes and experimentations for the Manual on Uniform Traffic Control Devices."

<sup>115</sup> FHWA Interim Approval IA-21.

<sup>518</sup> FHWA. 2018. Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.



RECTANGULAR RAPID FLASHING BEACON (RRFB)

#### NOTES

- REFER TO STOR CIVE AT LIVEON ROLLED CROSSIWALK FOR RECOMMENDED PLACEMENT OF RIFES AT CROSSIWALKS ALONG WITH STOR LINES VISIBILITY CROSSIWALKS, AND SUPPLEMENT AL CROSSING SICHAGE
  - REFER TO WISDOT PLAN SHEET DETAIL IS-22 FOR A POSSIBLE RRFB DETAIL.
- AT SHARED USE PATH CROSSINGS, USE A WILLS SIGN IN PLACE OF THE WILLS.
- 4 AT SCHOOL CROSSINGS, USE A SHI SIGN DI PLACE OF THE WILL USE FLUORESCENT YELLOW-GREEN WIS-7PR AS APPROXIMATE TO BE CONSISTENT WITH THE COLOR OF THE SHI.



W11-501 (12" x 12")

EDESTRIAN SYMBOL REICHT - 4" (IN) BICXCLE SYMBOL REICHT - T" (IN) LETTERS - F C LECEND - BLACK HACKGROUND - YELLOW







TWO INC.

### 20. Protected intersection for linear bicycle facilities

### DESCRIPTION

Protected intersections are geometric treatments that keep bicyclists physically separated from drivers up to the intersection, including the corners. The term "protected" in this context refers to the separation provided between vehicle lanes and pedestrians and bicyclists. This treatment continues linear bicycle facilities comfortably through an intersection by reducing conflicts between bicyclists and drivers. They can reduce driver turning speeds. improve driver yielding rates, and improve sightlines.78

### DESIGN GUIDANCE

Protected intersections include the following elements:

- · Corner island Design corner radii for passenger vehicles turning at speeds under 10 mph, likely a 10- to 15-foot curb radius. If needing to accommodate larger vehicles, include a mountable area
- Bike queue area Provide sufficient space for the expected volume of bicyclists waiting at the intersection. Minimum 6.5 feet deep, 10 feet or greater preferred.
- Bikeway setback and driver yield zone Provide a 14- to 20-foot setback to create sufficient space for the driver to wait between the travel lane and the bicycle crossing markings. This setback improves sightlines between turning drivers and crossing pedestrians and bicyclists.



- Pedestrian refuge island Construct 6- to 8-foot wide pedestrian refuge islands at all corners to accommodate pedestrians waiting between the bike lane and the travel lane.
- Pedestrian crossing of the bike lane Install a pedestrian crosswalk across the bike lane between the pedestrian refuge island and the curb ramp.
- Pedestrian curb ramp Construct directional pedestrian curb ramps for all corners of the intersection.
- Bicyclist crossing of travel lanes Mark bicycle crossing markings through the intersection.
- Pedestrian crossing of travel lanes Mark high visibility crosswalks for all pedestrian crossings.

On higher speed, higher volume roadways, construct the corner islands and pedestrian refuge islands with a 6-inch curb filled with concrete, asphalt, or low-level plantings. On lower speed, lower volume roadways, consider constructing protected intersection treatments with paint and posts, bollards, planters, or mountable vertical elements.

At intersections with buffered bike lanes on the approach, provide separated bike lanes for 25 feet leading up to and away from the intersection.



FIGURE 25. PROTECTED INTERSECTION CORNER IN BELLEVUE, WA. SOURCE: DONGHO CHANG.

If the protected intersection is signalized, include pedestrian countdown signals and consider bike-signal faces to provide separate phases for vehicle turning movements and bike movements.

#### DESIGN APPLICABILITY

- All-way stop controlled or signalized intersections.
- Any street with protected or buffered bike lanes.
- Most feasible where there is on-street parking.
- Desirable at intersections where bike facilities cross each other.

### COMPLEMENTARY TREATMENTS

- · Separated bike lanes
- · Buffered bike lanes
- Two-stage bicycle turn box
- Bicycle intersection crossing markings
- · Pedestrian refuge island
- · Bike-signal face

### MORE INFORMATION

· NACTO Don't Give up at the Intersection

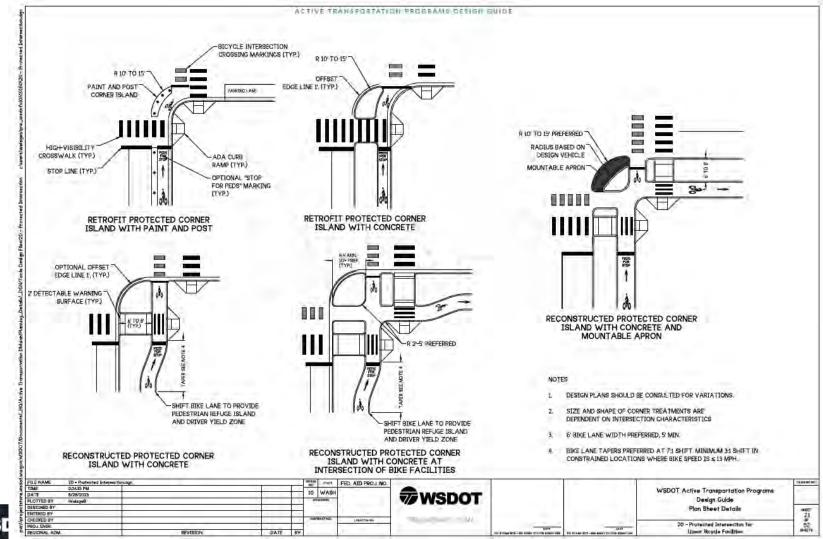
### PLAN SHEET DETAILS

20 - Protected Intersection for Linear Bicycle Facilities



NACTO, 2019. "Protected Intersections." Don't Give Up at the Intersection.

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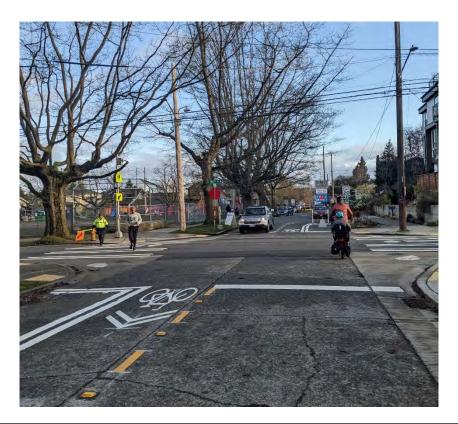
Do you plan to apply to these funding programs in the next application cycle (2025-2027)?

If yes, in what stage of planning or design is your project?

- Selected project location
- Completed project outreach and planning
- Project currently in design
- Completed project design



## Ways to Use the Guide





# If the Project is Already Prioritized Biket Network

Consider designing the project to align with the Design Guide for the treatments you may seek funding for



Source: Oak Harbor Draft Active Transportation Plan 2023



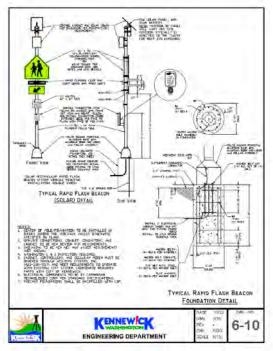
# If the Project is Already Designed...

Review the project for alignment with the design guide. For any design features that may vary from the guide, provide additional information in your application or consider adapting the design



## If You Have Existing Local Active Transportation Standards...

- Review the Guide and let WSDOT know if there is guidance that should change to better align with your local guidance
- Consider updates to your local standards that may better align with the Guide



Source: Kennewick Engineering Department



## If You are Creating or Updating Local Standards...

- Consider updating your active transportation design standards to align with the Guide
- Consider modifying the plan sheet details to fit your local context and use as standard drawings



# Climate Element Planning Guidance Overlap

- Growth Management Act comprehensive planning
- Greenhouse gas reduction sample measures include ways to promote active transportation planning and design in local standards and policies



## **Draft Review Through 11/10/2023**

If you would like to review a draft of the guide and don't believe you have received it, please give us your contact information after the presentation or contact Briana by email at

Briana.Weisgerber@wsdot.wa.gov



### Schedule

January – September 2023 WSDOT drafted design

guide

September -November 2023 Document out for review Fall 2023 WSDOT release final design guide

Winter 2024
Funding
programs call
for projects

Deadline for Comments is November 10



## **Questions?**



For more information about the funding programs:

<u>Safe Routes to School Program</u>

<u>Pedestrian & Bicycle Program</u>



### **PBP/SRTS Programs Contacts**

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## **WSDOT Level of Traffic Stress**

### BLTS Criteria for Bike Lane without Separation from Traffic (paint stripe or buffer < 2 feet wide)

Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way street)	0-750	1	1	2	3	4	4	- 0
	751-1500	1	1	2	3	4	4	
	1501-3000	1	1	2	3	4	4	
	3000+	2	2	2	3	4	4	
2 thru lanes per direction	0-7000	2	2	2	3	4	4	-
	>7000	2	2	3	3	4	4	
3+ thru lanes per direction	Any ADT	3	3	3	4	4	4	-

Bike Lanes are less than 7 feet (must be 5' or greater to be within standard)								
Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way stree	0-750	1	2	2	4	4	4	-
	751-1500	1	2	2	4	4	4	
	1501-3000	1	2	2	4	4	4	
	3000+	2	2	2	4	4	4	-
2 thru lanes per directio	0-7000	2	2	3	4	4	4	
	>7000	3	3	3	4	4	4	
3+ thru lanes per direction	Any ADT	3	3	4	4	4	4	



## **Design Guide LTS Table**

TABLE 8: Guidance for selecting bicycle facilities to achieve LTS 1 or 2.

	Roadway co					
Target driving speed	Target motor vehicle volume	Motor vehicle lanes	All ages & abilities bicycle facility			
	up to 7,000	2 or less each direction	Bicycle boulevard, conventional bike lane buffered bike lane, separated bike lane			
25 mph (or less)	>7,000	2 or more lanes each direction	Buffered bike lane, separated bike lane			
		3 or more lanes each direction	Separated bike lane			
30 mph up to 7,000	Any	Single lanes	Bicycle boulevard, conventional bike lane buffered bike lane, separated bike lane			
	up to 7,000	2 lanes each direction	Buffered bike lane, separated bike lane			
	> 7,000	2 or more lanes each direction	Separated bike lane			
> 30 mph	Any	Any	Separated bike lane			



## **High Level BLTS Analysis**

Bike Lane Present (5' or greater)								
Lanes	AADT	<=20	25	30	35	40	45	50+
1 thru lane per direction (or 1 lane one-way street)	0-750	1	2	2	4	4	4	1
	751-1500	1	2	2	4	4	4	2
	1501-3000	1	2	2	4	4	4	4
	3000+	2	2	2	4	4	4	
2 thru lanes per direction	0-7000	2	2	3	4	4	4	4
	>7000	3	3	3	4	4	4	4
3+ thru lanes per direction	Any ADT	3	3	4	4	4	4	



Bike lane present?
30 mph, 1 lane each direction, 6800 AADT
= BLTS 2. Also, sidewalk presence (different table) makes this PLTS 2



No bike lane? Use the general table: 25 mph, 1 lane each direction, 3900 AADT = BLTS 3 (sidewalks make it LTS 2 for pedestrians)

