Washington State Department of Transportation

Memorandum

June 27, 2022

TO: WSDOT Project Development Engineers

FROM: Mark Gaines, Development Division Director, State Design Engineer

SUBJECT: Project Delivery Memo #22-03 – Complete Streets Implementation

Purpose

The purpose of this Project Delivery Memo is to provide policy and instruction for WSDOT staff who plan and design WSDOT projects. New Washington State legislation in RCW 47.24 directs the Department to incorporate "Complete Streets" features for certain specified projects.

Background

Complete Streets is an approach to planning, designing, building, operating, and maintaining streets that enables access along and across the street for all people, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets prioritizes more comfortable and equitable, context sensitive network connectivity for all roadway users through close coordination with our local partners and stakeholders. This is aligned with WSDOT's policy and commitment to develop and maintain an interconnected and integrated multimodal transportation system that provides all Washington travelers with safe, sustainable, and equitable access.

Under ESSB 5974 (2022), the legislature directed the Department to incorporate the principles of Complete Streets with facilities that provide street access with all users in mind, including pedestrians, bicyclists, and public transportation users, on all projects to be constructed on state highways routed over city streets with an estimated cost of $500,000 or more, where the design phase of the project begins on or after July 1, 2022. ESSB 5974 expressed an intent to improve the safety, mobility, and accessibility of state highways.

The Department's existing statutory authority, including RCW 47.01.260, RCW 47.30.030, and RCW 47.01.078, also allows the Department to incorporate the principles of Complete Streets in the design and construction of projects on state limited access highways, on city streets that are not designated as state highway that pass through a state limited access facility, and on state routes within counties.

Based on the foregoing, it is the stated policy of the Department to incorporate the principles of Complete Streets with facilities that provide street access with all users in mind, including pedestrians, bicyclists, and public transportation users, on projects to be constructed on state highways consistent with ESSB 5974 and with existing statutory authority.

All projects over $500,000 beginning design on or after July 1, 2022, will be analyzed with a Complete Street mindset. Projects in incorporated cities, in areas where active transportation gaps have been identified in WSDOT or local plans, or in overburdened communities shall be designed to complete active transportation networks for people walking and bicycling unless a compelling reason not to implement those improvements in that project can be justified to Regional Administrators. Allowable Complete Streets solutions may include reallocating space within the existing area occupied by transportation facilities, including reduction in the size and number of vehicle lanes and reduction in vehicle speeds.

Highways are assessed with respect to the performance of biking, walking and other pedestrian modes using Level of Traffic Stress (LTS) and route directness. LTS is a metric that is used during planning and design to provide an indication of the relative stress experienced by bicycle riders and pedestrians. LTS is a numeric rating from 1 to 4, where a lower number indicates lower stress for a bicyclist (expressed as BLTS) or for a pedestrian traveler (expressed as PLTS). At a minimum, the numeric LTS rating is based on Average Annual Daily Traffic (more commonly known as AADT), posted speed and the number of travel lanes of the highway segment. Other roadway characteristics can be used to refine an LTS designation. LTS can be used to summarize a highway's essential characteristics, including design elements, features, dimensions, and configuration. Route directness refers to the amount of out of direction travel pedestrians and bicyclists must engage in to travel between destinations. It is measured in terms of a Route Directness Index (RDI). See '*Design Bulletin #2022-01: Designing for Level of Traffic Stress'* (attached) for more information.

The cost and complexity of Complete Streets design features generally increases with higher posted speeds. This reflects the need to implement more costly design strategies (e.g., installation of concrete barrier, separated paths, etc.) to facilitate safer bicyclist and pedestrian connectivity.

The 2021 Legislature passed the Healthy Environment for All (HEAL) Act, which requires WSDOT to identify and address environmental health disparities in overburdened communities and vulnerable populations. As defined in RCW 70A.02.010, an overburdened community is a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts. The aforesaid RCW further defines vulnerable populations as being groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms and includes but is not limited to: (i) racial or ethnic minorities; (ii) low-income populations; (iii) populations disproportionately impacted by environmental harms; and (iv) populations of workers experiencing environmental harms. WSDOT will evaluate the needs of vulnerable populations living in overburdened communities through early community-centered engagement when assessing the possible implementation of Complete Streets to result in community-centered outcomes.

WSDOT projects that implement Complete Streets principles are expected to meet minimum threshold criteria (as described in the following section) with respect to public engagement, overburdened communities, network gaps, level of traffic stress, visibility, route directness, and operating speeds. In addition, they are expected to use a documented process (such as Basis of Design) for establishing and selecting the most advantageous and practical design(s).

Direction

Apply Complete Streets principles on all projects starting design[1] on or after July 1, 2022, that have a cumulative budget for all phases (PE, RW and CN) of $500,000 or more
that are in incorporated cities, or in areas where active transportation network gaps have been identified in WSDOT (or local) plans, or overburdened communities exist, unless there is a compelling reason to not implement, and as approved by the Region Administrator. A '*Model Process for Complete Streets*' will be made available to assist in incorporating the intent of Complete Streets in scoping, pre-design and design. Use these resources as deemed appropriate in coordination with subject matter experts and local stakeholders to advance Complete Street projects.

Projects implementing Complete Streets:

- Are developed in cooperation with the affected community through active public engagement.
- Address unique concerns, related to Complete Streets, of overburdened communities.
- Address active transportation network gaps that have been identified through a WSDOT or local plan and/or through public engagement.
- Eliminate bicycle and pedestrian network gaps within the project limits.
- Provide bicycle and pedestrian facilities that offer LTS 1 or 2 in alignment with *'Design Bulletin #2022-01: Designing for Level of Traffic Stress'*. *
- Provide a separation from vehicular traffic when it is determined that a posted speed must be maintained at greater than 30 mph. See '*Design Bulletin #2022-01: Designing for Level of Traffic Stress'* for more information. *

*A Design Analysis is required for projects that are determined to be subject to the Complete Streets requirement and do not meet these criteria.

Use WSDOT Design Manual (DM) guidance when developing Complete Streets designs, in accordance with the WSDOT Practical Solutions approach (see DM Division 11). This approach includes developing and assessing design alternatives, design element selection, dimensioning, and target speed based on local agency coordination, and community outreach and context. When selecting a design alternative per DM 1104,

[1] Design starts at the approval of the Project Summary Documents (i.e., Project Profile, Basis of Design, and Environmental Review Summary) or as directed by CPDM. Contact the CPDM Priority Programming Manager to determine if a project in pre-design prior to July 1, 2022, is exempt.

reference the extent to which alternatives address the principles of Complete Streets outlined in this document's '*Background*' section above.

Determine the appropriate design for the project that promotes continuity and function, while utilizing the DM guidance as a baseline. This is accomplished through interagency coordination and may identify the need to implement design dimensions and/or elements on WSDOT projects that are not otherwise included in the DM. Consult with your ASDE to document the decision to select dimensions that are outside of the guidance provided in the DM for a design element with a Design Analysis.

Include a design option in the Basis of Design alternatives analysis that limits the expansion of the roadway footprint (road diet). Potential modifications to the highway's layout (e.g., narrowing of lanes, road diet or elimination of lanes) may reduce the highway's vehicular Level of Service (LOS), but provide for the introduction of Complete Streets design features at lower cost. Options that reduce vehicle LOS are acceptable on a case-by-case basis in cooperation with the local agency. Consult with your ASDE to assess the potential for mode shift as part of this analysis.

If a project will not be required to provide a Complete Street, then apply existing guidance supporting project decisions with respect to the need for a multimodal design, in particular DM Chapter 1102, and Sections 1103.03(1), 1103.03(2), and 1103.03(3).

Complete Street Resources

There are numerous external references available that describe the function and various design options that apply to Complete Streets, and project staff are encouraged to consult these when considering the various needs associated with a project. Some of these resources are provided in the '*Design Bulletin #2022-01: Designing for Level of Traffic Stress'*, while others are available from FHWA, other state or local agencies, and associated organizations. When a design criteria or concept departs from the comparable WSDOT standard, use a Design Analysis process to document the decision. Contact your ASDE for more information.

Questions

For questions or information on how to implement this Project Delivery Memo, contact your Assistant State Design Engineer.

MG:km:jd
Attachments: Design Bulletin #2022-01: Designing for Level of Traffic Stress
Complete Streets Glossary of Terms

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Background

Projects that are subject to this bulletin are directed to provide for facilities that contribute to network connectivity and safety through the design and construction of sidewalks, shared-use paths, bicyclist facilities, and crossings that serve to integrate the state route into the local network, in accordance with aspects of the provisions within the WSDOT Active Transportation Plan (ATP) as outlined below.

The WSDOT Active Transportation Plan sets out agency goals and performance metrics that apply to how facilities for bicyclists and pedestrians on state highways are designed in population centers. One purpose of the plan is to identify gaps in the pedestrian and bicycle network, where a gap is defined as either a physical barrier, or a highway segment that provides for a pedestrian or bicycle Level of Traffic Stress (LTS) 3 or 4 and/or a Route Directness Index greater than 2. The plan calls for an increase in the total linear length (miles) of WSDOT-owned infrastructure (or other connections identified as a parallel local facility), that provide for a bicyclist and pedestrian LTS rating of 1 or 2.

Connected to the ATP, WSDOT studied route directness and reported the findings in the ATP as well as a separate report titled Multimodal Permeability Pilot.

For purposes of design, a decision is first made about the type of facility that will be provided to bring the highway segment represented by the project into compliance with the direction to provide a complete street. As part of that process, when it has been determined that a shared use path will be provided as all or part of the project solution to fulfill this requirement, refer to WSDOT Design Manual Chapter 1515 for guidance on configuration and dimensions and other design criteria associated with that facility.

For other types of active transportation facilities that are adjacent to vehicle traffic, LTS will be one of the metrics that WSDOT uses and applies during the planning and design process. LTS can be used to determine essential design characteristics of those facilities, including design elements, target speed, features, dimensions, and configuration of highway facilities. Bicycle Level of Traffic Stress (BLTS) provides an indication of the performance and relative comfort with respect to bicycle riders, while Pedestrian Level of Traffic Stress (PLTS) applies to people who are neither on a bicycle nor in a motor vehicle. LTS can be analyzed for either an existing or proposed condition and applies whether or not a bicycle lane or sidewalk is present.

At a minimum, LTS for highway segments is calculated based on the posted speed of a facility, the vehicle traffic level, and the cross-section characteristics. For purposes of design and this bulletin, this is called Basic LTS. It's expressed as an integer from 1 to 4, where a lower number indicates a greater willingness for active travelers to use the facility. The roadway characteristics serve as a proxy for stress, which is not measured directly. Basic LTS is determined by referring

to tables that are developed for that purpose. For purposes of design, LTS tables provide a useful starting point for determining the type of facility that will achieve LTS 2 or better. Once the Basic LTS is determined, a refined LTS is accomplished following the more detailed consideration of additional factors not considered in the tables used to determine Basic LTS. Local conditions used to refine LTS include major driveways, turn lanes, truck traffic, constraints imposed by culverts, debris intrusion from outside the roadway (gravel roads), etc.

Although the guidance that follows can be used in a general sense, it is specifically applied by WSDOT to state highways that are identified for complete streets treatment according to '*Project Delivery Memo #22-03*'.

Basic LTS

When selecting the cross-section layout and dimensions for a complete street, first determine the level of traffic stress in both the existing and design (final) condition. The design goal is to provide for a level of traffic stress value for both bicycles (BLTS) and pedestrians (PLTS) of 1 or 2.

In addition, always provide a separation from vehicle traffic for bicycle and pedestrian facilities where the posted speed is (or if different in the design year is anticipated to be) greater than 30 mph. Separation can be provided by adding a physical barrier (such as curb, traffic barrier, flexible delineators), or providing a separate bicycle and/or pedestrian facility (*e.g.,* shared use path). Whether or not the posted speed is greater than 30 mph, use the following tables to determine the existing BLTS and PLTS for the project vicinity, and to determine the type and dimension of bicycle and pedestrian facilities and buffers or separations required for the design to achieve BLTS and PLTS 1 or 2. Note that speed referred to in the tables is posted speed.

BLTS and PLTS for <u>mixed traffic</u> (no marked bicycle lane, with or without shoulder)

Recommended General LTS table (not accounting for bike lanes or sidewalk) used to develop tables below

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

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

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

Vertically Delineated Bicycle Lane (Buffered bike lane with flexible delineator/candlestick)								
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	3	3	4
	751-1500	1	1	2	3	3	3	4
	1501-3000	1	1	2	3	3	3	4
	3000+	2	2	2	3	3	4	4
2 thru lanes per direction	0-7000	2	2	2	3	3	4	4
	>7000	2	2	3	3	3	4	4
3+ thru lanes per direction	Any ADT	2	2	3	3	3	4	4

BLTS Criteria for Bike Lane with Separation from Traffic (buffer 2 feet wide or greater)

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

Vertically Delineated Bicycle Lane (Buffered bike lane with flexible delineator/candlestick)								
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	2	3	3	4
	751-1500	1	1	2	2	3	3	4
	1501-3000	1	1	2	2	3	3	4
	3000+	2	2	2	3	3	4	4
2 thru lanes per direction	0-7000	2	2	2	3	3	4	4
	>7000	2	2	3	3	3	4	4
3+ thru lanes per direction	Any ADT	2	2	3	3	3	4	4

PLTS based on Sidewalk Width

Greater than Minimum Sidewalks Present (6' 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	1	2	2	3	4	4
	751-1500	1	1	2	2	3	4	4
	1501-3000	1	1	2	2	3	4	4
	3000+	2	2	2	2	3	4	4
2 thru lanes per direction	0-7000	2	2	2	2	3	4	4
	>7000	2	2	2	2	3	4	4
3+ thru lanes per direction	Any ADT	2	2	2	3	3	4	4

Minimum Sidewalk Facility Present (5')								
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	4	4	4	4
	751-1500	1	1	2	4	4	4	4
	1501-3000	1	1	2	4	4	4	4
	3000+	2	2	2	4	4	4	4
2 thru lanes per direction	0-7000	2	2	2	4	4	4	4
	>7000	2	2	3	4	4	4	4
3+ thru lanes per direction	Any ADT	2	2	3	4	4	4	4

PLTS based on Buffer Type

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

Wide sidewalk or sidewalk with buffer								
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	2	3	3	4
	751-1500	1	1	2	2	3	3	4
	1501-3000	1	1	2	2	3	3	4
	3000+	2	2	2	2	3	3	4
2 thru lanes per direction	0-7000	2	2	2	2	3	3	4
	>7000	2	2	2	2	3	3	4
3+ thru lanes per direction	Any ADT	2	2	2	2	3	3	4

"Robust physical barrier" refers to any one of the available separated bicycle lane treatments (see definitions) in the case of bicycles (except flexible delineators), and in the case of pedestrians either 1) a separated bicycle lane, 2) planting strip and/or street trees, or 3) vehicle parking located between the rightmost vehicle lane and the pedestrian facility. Utilize DM 1239.08 when designing outer separation treatments.

Refined LTS

Once the Basic LTS for a project is determined per the tables above, and a design is selected that meets the required LTS 1 or 2, examine the additional issues in the list below to consider the need to provide design treatments in addition to those described in the Basic LTS solutions. Most of the issues in the list do not provide a quantitative basis for examining the existing or proposed (design) condition. Therefore, work with SMEs to consider each category listed, and determine options for addressing each issue in order to reduce travel stress in the design for bicycles and pedestrians.

The refined LTS is considered complete when a design approach to addressing the travel stress issues listed below have been determined and documented through a collaborative process (normally during pre-design), with the intention that those approaches will be incorporated into the design. The designer can then document that the Basic LTS has now been upgraded to the Refined (and final) LTS for the project.

- Route directness
- Crosswalks
- Driveways
- Turn lanes
- Large (*e.g.,* freight) vehicle traffic
- Minor pinch points (culverts, drain grates, offroad gravel intrusion, etc.)

Note that major pinch points (such as bridges) also introduce travel stress but are defined as those narrow locations where the introduction of complete streets elements can't be implemented without significant additional investments. Although these are anticipated to occur at times, since they are associated with not meeting the complete streets requirement at a particular location where that is required, they need to be documented according to provisions of *Project Delivery Memo #22-03*'.

One exception to the qualitative nature of the additional issues list above is route directness. Route directness is measured in terms of a Route Directness Index (RDI). Major roadways present crossing barriers for active travelers that can impose significant out of direction travel burdens. An RDI of one means direct travel is possible. An RDI of 2 means the traveler must go twice the line-of-sight distance to reach a destination because of a lack of crossing opportunities (or because an available crossing is high LTS and/or imposes undo delay). Research shows that

pedestrians in particular are unwilling to travel far out of direction to reach a destination. RDI's greater than 2 strongly reduce the utility of active trips by increasing the travel time, physical effort, and weather exposure for traveler experiences. A minimum RDI threshold value of 2 for state routes is proposed in the WSDOT Active Transportation Plan.

While this threshold for RDI has been established in the Active Transportation Plan, the process for evaluating it is still in development. In the meantime, consult SMEs on the best approach to incorporating RDI concepts into the project design.

More information about refining LTS and applying RDI is in development and will become available through subsequent updates to this bulletin.

Complete Street Resources

The following is a non-exhaustive list of references:

- Washington State Active Transportation Plan - 2020 and Beyond
- FHWA Complete Streets
- FHWA Separated Bike Lane Planning and Design Guide
- FHWA Bikeway Selection Guide
- Small Town and Rural Multimodal Networks (dot.gov)
- Achieving multimodal networks 2016 (FHWA)
- Interim Approvals Issued by FHWA - FHWA MUTCD (dot.gov)
- AASHTO Bicycle Design Guide
- AASHTO Pedestrian Design Guide
- NACTO Urban Bikeway Guide
- NACTO Don't Give Up at the Intersection
- Florida DOT Complete Streets
- New Jersey DOT Complete & Green Streets.
- Ohio DOT Multimodal Design Guide
- Massachusetts DOT Separated Bike Lane Planning and Design Guide
- Smart Growth America

Complete Streets for State Highways in Washington

Glossary of Terms

Active Transportation: Forms of pedestrian mobility including walking or running, the use of a mobility assistive device such as a wheelchair, bicycling and cycling irrespective of the number of wheels, and the use of small personal devices such as foot scooters or skateboards. Active transportation includes both traditional and electric assist bicycles and other devices. Planning for active transportation must consider and address accommodation pursuant to the Americans with Disabilities Act and the distinct needs of each form of active transportation.

All ages and abilities facility ("AAA facility"): "A bicycle, pedestrian facility, or shared use path that allows users of all ages and abilities to safely and comfortably use the facility independently or, for children, with the same level of adult supervision as would be typical for a neighborhood sidewalk. Examples of AAA facilities include off-street trails and shared use paths, protected or separated bike lanes, and neighborhood greenways. Conventional bike lanes, buffered bike lanes, and shared lanes typically do not meet AAA facility expectations.

Bicycle boulevard: Streets with low motorized traffic volumes and speeds, designated and designed to give bicycle travel priority through the use of signs, pavement markings, and speed and volume management measures to discourage through trips by motor vehicles and through the creation of safe, convenient bicycle crossings of busy arterial streets.

Related terms: neighborhood greenways, bikeways

Bicycle facility: A facility intended for bicycle[1] travel which designates space for bicyclists distinct from motor vehicle traffic. A bicycle facility does not include shared lanes (including shared lanes with shared lane markings), sidewalks, or signed routes, but does include bicycle boulevards, trails, and shared-use paths.[2] As with pedestrian facilities, cycling facilities need to be designed for ADA compliance. Such facilities may also be used by people on micromobility devices.

Bike lane: A portion of a highway or street identified by signs and pavement markings as reserved for bicycle use.

Buffered bicycle lane: A bike lane with pavement markings delineating a buffer space between the bike lane and adjacent motor vehicle lane or parking lane. A buffered bike

[1] Washington State law defines bicycles as two-wheeled or three-wheeled devices (RCW 46.04.071). The term "bicycle facility" is not intended to restrict the definition of cycling based on the number of wheels on the device.
[2] Adapted from FHWA Bikeway Selection Guide

lane does not include designed vertical elements in the buffer—refer to Separated Bicycle Lane.

Complete streets: An approach to planning, designing, building, operating, and maintaining streets that enables safe access along and across the street for all people, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.

Context sensitive solutions: A collaborative, interdisciplinary approach that involves all stakeholders in providing a transportation facility that fits its setting. This approach leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, accessibility, and infrastructure conditions.[3]

Practical solutions: Performance-based approach to transportation and organizational decision making. This data-driven approach uses tools, data analytics, performance measures, and stakeholder input to (1) seek lower-cost approaches and efficiencies in expanding and operating the multimodal transportation system to reduce travel demand and the need for building costly new infrastructure, (2) identify, evaluate, analyze, and manage risk to WSDOT's strategic objectives, and (3) identify and implement agency efficiencies. WSDOT Executive Order E 1090.01.

Separated bicycle lanes (SBL): Bicycle facilities physically separated from motor vehicle traffic and distinct from the sidewalk. SBLs may be one-way or two-way, and may be at street level, sidewalk level, or at a level between street and sidewalk level. The physical separation includes a designed vertical element between the motor vehicle traffic and the bikeway; these vertical elements may include curb (including the curb of a raised PBL), concrete buffers, flexible delineators, planter boxes, etc. Physical separation identified only with pavement markings does not constitute a separated bike lane—refer to buffered bicycle lane.

Shared lane or roadway: A roadway that is open to both bicycle and motor vehicle travel. This may be a new or existing roadway/highway, a street with wide curb lanes, or a road with paved shoulders. In the State of Washington, as with most states, all vehicular lanes are shared lanes by definition unless bicycling is explicitly prohibited. The use of the term "shared lane" should not be confused with "shared lane marking" (see below).

Shared lane marking or sharrow: A clearly visible lane marking placed within shared lanes or bicycle boulevards to assist people on bicycles in determining the most appropriate lateral position to ride in a shared lane and to alert motor vehicle drivers and other bicyclists to the position that bicyclists are most likely to occupy within the traveled way.

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[3] Source: AASHTO Center for Environmental Excellence, https://environment.transportation.org/education/practical-applications/context-sensitive-solutions/context-sensitive-solutions-overview/

Shared use path (SUP): A facility physically separated from motorized vehicular traffic within the highway right-of-way or on an exclusive right of way with minimal crossflow by motor vehicles. Shared-use paths are primarily used by bicyclists and pedestrians, including joggers, skaters, and pedestrians with disabilities, including those who use nonmotorized or motorized wheeled mobility devices. With appropriate design considerations, equestrians may also be accommodated by a shared-use path facility. In certain locations with very high pedestrian and bicycle traffic, a shared use path may include modal separation between bicycle and pedestrian traffic.

Traffic calming: Design techniques that have been shown to reduce traffic speeds and unsafe maneuvers. These techniques can be stand-alone or used in combination. Examples include vertical deflection (e.g., speed humps, speed tables, raised crossings), horizontal shifts (e.g., chicanes, lateral lane tapers), and design elements that encourage a driver's perception of a lower speed facility (often referred to as "visual friction", these features include lane narrowing, curb extensions, median islands, specific pavement markings, etc.). This list of example traffic calming features is not exhaustive.

Vulnerable user: Under RCW 46.61, and as applied in this text, a "vulnerable user" of a public right-of-way means:

- A pedestrian, which includes people on foot or using wheelchairs;
- A person operating or riding any of the following on a public way:
    - A bicycle;
    - An electric-assisted bicycle;
    - An electric personal assistive mobility device;
    - A moped;
    - A motor-driven cycle;
    - A motorized foot scooter.

Note that the RCW identifies additional vulnerable users of the public right-of-way that are not included in the context of this text, including people riding animals, farm equipment, or motorcycles.

GLOSSARY RESOURCES

- WSDOT Glossary: https://wsdot.wa.gov/about/library-research-reports/wsdot-glossary-and-abbreviations-acronyms-list
- Terms in development for Active Transportation: Active Transportation Glossary
- Final Draft Glossary Guide: GlossaryGuideFinal9-30-2021 (1).pdf
- Active Transportation Plan 2021