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,

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\(^1\) 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

cc:
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Allison Camden, Deputy Assistant Secretary, Multimodal Development & Delivery
To WSDOT PDEs
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Kevin Dayton, Assistant Secretary for Regions, Chief Engineer
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Mike Gribner, Regional Administrator for Eastern Region
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Steve Roark, Regional Administrator for Olympic Region
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