City of Bellevue

Transportation Commission Study Session

DATE: September 4, 2025

TO: Chair Stash and Members of the Transportation Commission

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SUBJECT: **Mobility Implementation Plan Update**

DIRECTION REQUESTED

	Action (Commission recommendation October 9)
X	Discussion/Direction
X	Information

Staff will review the update of the Mobility Implementation Plan (MIP), with a focus on the new and amended sections of the MIP. All substantive updates have been previously reviewed and approved by the Transportation Commission during Q1 – Q3 2025. Further Commission action on the MIP is not needed on September 11. Staff will seek a recommendation for the MIP and approval of a transmittal letter to the City Council at the October 9 Commission meeting.

BACKGROUND AND INFORMATION

On December 12, 2024, staff introduced the scope of the update to the Mobility Implementation Plan. Transportation Element policy states the intent to update the MIP following each update of the Comprehensive Plan (October 22, 2024. Ordinance No. 6811), and/or as circumstances change.

> ***TR-28.*** *Engage the community to evaluate and modify the Mobility Implementation Plan as needed, in concert with each periodic update of the Comprehensive Plan, or as warranted by changed circumstances.*

At the December meeting, staff noted that both situations identified in policy have occurred and that an update is warranted at this time.

Specific MIP Update Topics

Most of the adopted Mobility Implementation Plan (Resolution No. 10085) remains unchanged. Several specific MIP update topics were covered during one or more Commission study sessions, with Commission recommendations provided on each topic before moving on to the

next. This memo, and the staff presentation to the Commission on September 11, will review the substantive changes.

Pedestrian Level of Traffic Stress (Chapter 3)

Pedestrian Level of Traffic Stress (PLTS) (Table 1, Figure 9) describes the comfort level and safety of people walking along an arterial. In January through March, 2025, the Commission discussed and approved the primary and supplemental metrics that inform the PLTS. The Commission also approved the assignment of a PLTS performance target to arterial corridors based on the Performance Management Area, the arterial classification and the presence of pedestrian destinations.

The PLTS describes four categories of pedestrian comfort and safety:

- PLTS 1: High Comfort. Little to no stress or concerns for safety in a comfortable pedestrian environment.
- PLTS 2: High Comfort. Low stress. Generally, a comfortable pedestrian environment.
- PLTS 3: Low Comfort. Moderate stress. May be somewhat uncomfortable.
- PLTS 4: Low Comfort. High stress. Uncomfortable.

PLTS Performance Targets (Figure 14)

General PLTS performance target assignments for arterials are recommended by the Commission as follows:

- PLTS 1 in Performance Management Area (PMA) 1 (Downtown, BelRed, Wilburton)
- PLTS 2 in PMA 2 (Crossroads, Factoria, Eastgate), except PLTS 1 along commercial mapped segments of Factoria Boulevard and 156th Avenue NE
- PLTS 3 in PMA 3, except PLTS 2 on Major Arterials near pedestrian destinations such as schools, libraries, FTN Stations, neighborhood shopping centers, etc, and on Minor Arterials and Collector Arterials.

Primary PLTS Metrics: Used to determine the existing PLTS

- Traffic speed (Speed limit factor): Calculated as speed limit x 1.20.
- Traffic Volume: Average daily traffic volume
- Width of buffer: Distance between moving vehicles and the sidewalk
- Width of sidewalk

Supplemental Component Type 1: Used for prioritization of PLTS performance target gaps

- Performance Management Area
- Pedestrian Destination: for example - school, library, park, FTN stop
- Accessibility standards: Americans with Disabilities Act
- Safety considerations: high injury network, driveways, actual traffic speed

Supplemental Component Type 2: Used for design of project concepts for high priorities

- Driveways: spacing and volume of commercial and multifamily driveways
- Fixed objects in buffer area: for example, street trees, barriers
- Curbside parking or bike lane
- Spacing of nearby designated pedestrian crossings
- Adjacent/proximate land uses and environmental constraints

Bicycle Level of Traffic Stress (Chapter 3)

Arterial Characteristics Metric

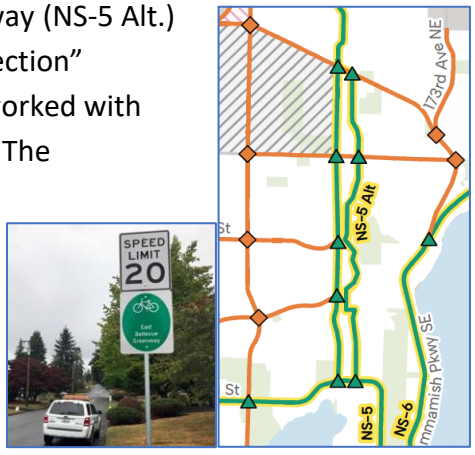
For consistency with the approved PLTS primary metric, the Commission recommended the speed limit factor (posted speed limit times 1.2) be used as the metric, together with the type of bicycle facility, to determine the Bicycle Level of Traffic Stress (BLTS), Table 4.

Add Bicycle Level of Traffic Stress for Intersections

At the April 24, 2025 study session, the Transportation Commission approved context-specific bicycle facility types intended to achieve the BLTS performance target for intersections on bicycle network corridors, and to add BLTS performance targets for intersections to the Bicycle Network BLTS Performance Target map (currently Figure 12 in the MIP, renumbered to Figure 15 in the 2025 MIP Update). Intersections are a critical element of the complete and connected bicycle network. Guidance and standards for implementing bicycle facilities at intersections is drawn from several resources: Bellevue Transportation Design Manual, Bellevue Bicycle Facility Design and Signal Operations Guide, National Association of City Transportation Officials (NACTO) and American Association of State Highway and Transportation Officials (AASHTO). Per the Commission request, Table 5 and illustrations on page 28 document the bicycle facility types and treatments at intersections that would maintain the corridor BLTS target.

Alternate Priority Bicycle Corridor (Figures 6, 15)

The Commission approved adding the East Bellevue Greenway (NS-5 Alt.) as an alternate to the "Spirit Ridge-Sammamish River Connection" Priority Bicycle Corridor (NS-5) on 164th Avenue. City staff worked with the neighborhood to establish the East Bellevue Greenway. The greenway is on local streets with a speed limit of 20 mph, which achieves BLTS 1. The NS-5 segment on 164th Avenue does not currently meet the BLTS 2 target (would need a striped bike lane). While bicyclists commonly use the Spirit Ridge-Sammamish River Connection, on 164th Avenue, the East Bellevue Greenway is a comfortable alternate north-south route for riders of all ages and abilities.



Project Identification and Prioritization (Chapter 6)

This chapter describes the process to refine the "inventory" of high-priority performance target gaps for each mode to provide referrals of project concepts for consideration in the update of the Transportation Facilities Plan. The process allows for the identification and consideration of site constraints in preparing project concepts. Revised narrative and graphics in Chapter 6 reflect the experience of undertaking this process with the Transportation Commission in Q2 and Q3 of 2024. That process led to referrals to the current update of the Transportation Facilities Plan.

Incorporating the 2009 Pedestrian and Bicycle Transportation Plan (Chapter 7)

During the May 8 Commission meeting, staff described the intent to incorporate the vision and content of the 2009 Pedestrian and Bicycle Transportation Plan into the Mobility Implementation Plan.

Originally adopted in May 1993, the Pedestrian and Bicycle Transportation Plan "…sets the framework for non-motorized transportation in and around the City of Bellevue for the present and future." "It focuses on completion of safe systems that target schools, parks, shopping, places of employment and other activity centers." Subsequent revisions of the Pedestrian and Bicycle Transportation Plan have modestly refined the vision for the active transportation network. Over 30 years later, the intent expressed in the 1993 Pedestrian and Bicycle Transportation Plan is intact, it is a work in progress, and its vision is embedded throughout the Mobility Implementation Plan.

Implementation of projects described and prescribed in the 2009 Pedestrian and Bicycle Transportation Plan has encountered outdated project descriptions, especially for the bicycle network. Evolving best practice, including the concept of Pedestrian Level of Traffic Stress (PLTS) and Bicycle Level of Traffic Stress (BLTS) is attributed to the migration away from the original, prescriptive project descriptions.

Therefore, this 2025 update of the Mobility Implementation Plan supersedes and replaces the 2009 Pedestrian and Bicycle Transportation Plan for the arterial network. The MIP retains the vision for complete and connected pedestrian and bicycle arterial networks and supports implementation with project concepts that will be designed with intent to achieve PLTS and BLTS performance targets.

For the planned off-street/trail active transportation network, Appendix A to the 2025 MIP Update contains all the maps and project descriptions from the 2009 Pedestrian and Bicycle Transportation Plan.

Update Maps/Tables and Figures

The 2025 update to the Mobility Implementation Plan refreshes the data that was adopted in the MIP in 2022. In some cases, that data is now over 5 years old. On May 8, staff reviewed with the Commission all the updated tables and figures.

Included in the 2025 MIP Update

References to existing numbering in the MIP that is changed in the 2025 MIP Update:

- Table 8 and Figure 15 (Now Figure 17): Existing pedestrian network performance. The table and figure are updated for the MIP to include current data and to apply the recommended PLTS performance metrics.
- Table 9 and Figure 17 (Now Figure 18): Existing bicycle network performance. The table and figure are updated to include current data and Commission-recommended refinements to the BLTS performance metrics.
- Figure 18 (Now Figure 19): Existing frequent transit network performance between Activity Centers. This figure is updated based on current data.
- Figures 20 and 21: Existing vehicle network performance. These figures are updated based on the 2023 data used in the 2044 Comprehensive Plan FEIS (Appendix K).
- Figure 22 and Table 10: Forecast Arterial Pedestrian Network performance based on the 2044 Comprehensive Plan FEIS.
- Table 11 and Figure 23: Forecast Arterial Bicycle Network performance based on the 2044 Comprehensive Plan FEIS.
- Figure 24: Forecast frequent transit network performance between Activity Centers. This figure is updated based on the 2044 Comprehensive Plan FEIS (Appendix K).
- Figures 25 and 26: Forecast of vehicle network performance. These figures are updated based on the analysis performed for the 2044 Comprehensive Plan FEIS (Appendix K).

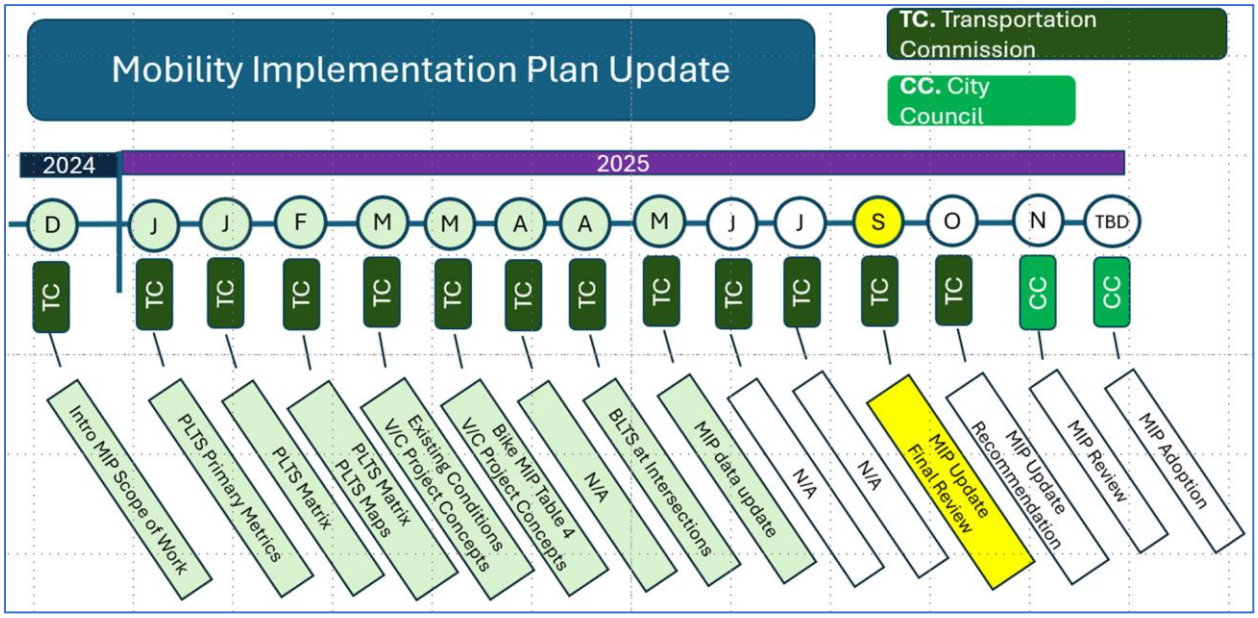
System Intersection Performance Target Gaps (Appendix H)

The transportation analysis for the Final Environmental Impact Statement for the 2044 Comprehensive Plan, Appendix K, identified system intersections that, given the assumptions of 2044 land use and transportation network, would not meet the Volume/Capacity (V/C) performance target defined in the Mobility Implementation Plan. Staff prepared preliminary project concepts and discussed their reasonableness and feasibility at the March 27 Commission meeting. These project concepts are for information only. Project concepts are documented in Appendix H.

Next Steps

On October 9, staff will seek a final recommendation from the Commission on the update of the Mobility Implementation Plan and approval of a transmittal letter to the City Council.

MIP Update Calendar



ATTACHMENT

1. Draft 2025 Update of the Mobility Implementation Plan