

Mobility Implementation Plan Update

Pedestrian Level of Traffic Stress

Transportation Commission
February, 13 2025



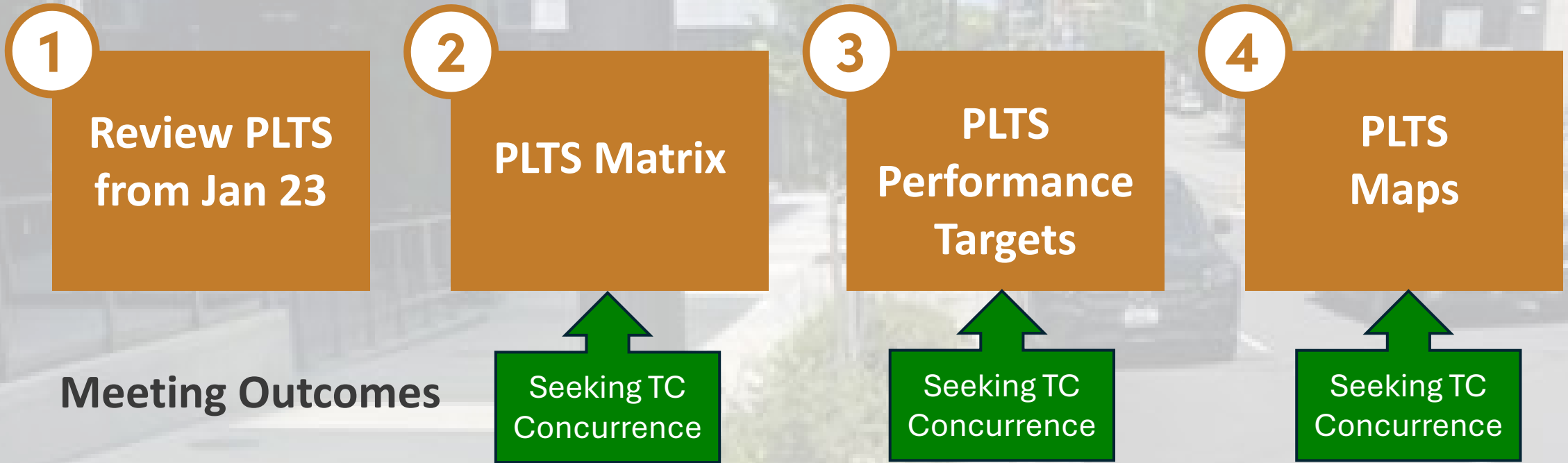
Kevin McDonald

Chris Breiland

FEHR & PEERS



Agenda



TC Study Session 1/23/25

Primary metrics

- Actual travel speed
- Average daily traffic volume
- Width of sidewalk
- Width of buffer

Supplemental Components Type 1

Used for prioritization on arterials

- Performance Management Area
- Pedestrian Destinations: school, library, FTN stop, etc
- Accessibility Standards: ADA, PROWAG
- Safety Considerations
 - High Injury Network
 - Driveways: Commercial and Multifamily

Supplemental Components Type 2

Used for project concepts on arterials

- Driveways: spacing and volume of commercial and multifamily driveways
- Presence of fixed objects in buffer area
- Presence of curbside parking or bike lane
- Spacing of designated arterial crossings
- Adjacent/proximate land uses and environmental constraints

PLTS Primary Metrics: Schematic Matrix

- Prepare a specific PLTS matrix using the PLTS primary metrics to fill in the cells of the evaluation matrix ✓
- Apply PLTS matrix to document existing conditions along each side of arterials (✗ coming soon)

Schematic example from January 23

Pedestrian Level of Traffic Stress		Sidewalk Characteristics							
		Width of Sidewalk				Width of Buffer			
		<4'	4 - 6'	6' - 10'	>10'	<5'	≥5'	<5'	≥5'
Arterial Characteristics									
Arterial Actual Travel Speed	Arterial Daily Traffic Volume								
≤25	<3k	PLTS 1	PLTS 1	PLTS 1	PLTS 1	PLTS 1	PLTS 1	PLTS 1	PLTS 1
	3k-7k	PLTS 2	PLTS 2	PLTS 2	PLTS 2	PLTS 2	PLTS 2	PLTS 2	PLTS 2
	>7K	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3
26-30 mph	<10	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3	PLTS 3
	10 -25k	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4
	>25	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4
31-35 mph	<25	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4
	>25	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4
>35	Any	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4

Pedestrian Level of Traffic Stress (PLTS) Specific Matrix

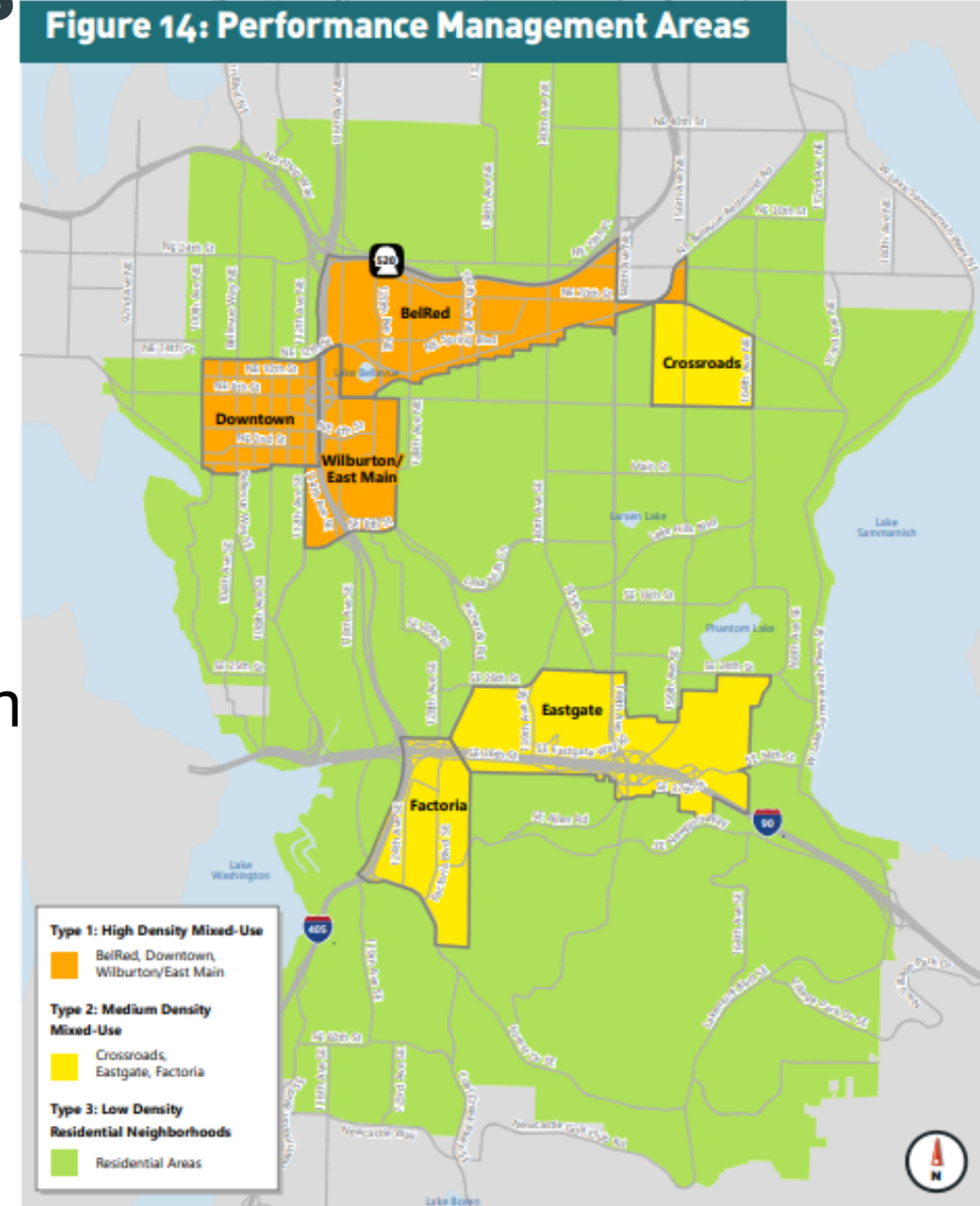
Pedestrian Level of Traffic Stress		PLTS 1		PLTS 2		PLTS 3		PLTS 4		
		Sidewalk Characteristics								
		Width of Sidewalk								
Arterial Characteristics		only shoulder	<4 feet		≥4 feet - <6 feet		6 feet - <10 feet		≥10feet	
		Width of Buffer								
		0 feet	<5 feet	≥5 feet	<5 feet	≥5 feet	<5 feet	≥5 feet	<5 feet	≥5 feet
Arterial Actual Travel Speed	Arterial Daily Traffic Volume									
≤25	≤3k	1								
	>3k-7k		2							
	>7k									
>25-30 mph	≤10k			3						
	>10 -25k									
	>25k									
>30-35 mph	≤25k									
	>25k									
>35	Any				4					

Pedestrian Level of Traffic Stress (PLTS) Performance Targets on Arterials

General PLTS assignment for arterials:

- **PLTS 1 in PMA 1**
(Downtown, BelRed, Wilburton).
- **PLTS 2 in PMA 2**
(Crossroads, Factoria, Eastgate)
Except **PLTS 1** along commercial segments of Factoria Boulevard and 156th Avenue NE.
- **PLTS 3 or PLTS 2 in PMA 3**
Depending on arterial classification and pedestrian destinations.

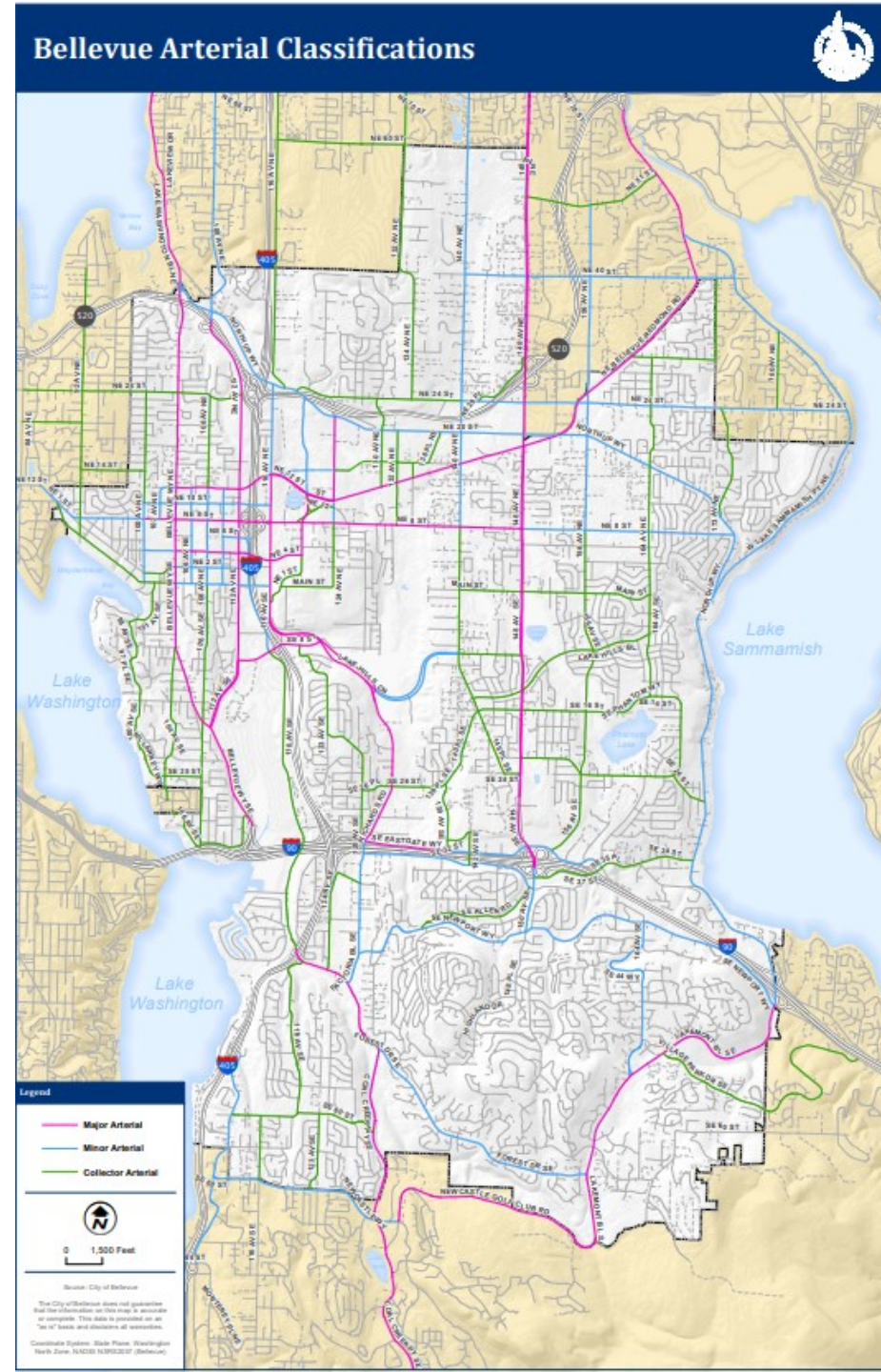
Figure 14: Performance Management Areas



PLTS Performance Targets on Arterials in PMA 3

Arterial Classifications

- Major Arterial: **PLTS 3** except **PLTS 2** near pedestrian destinations such as schools, libraries, FTN Stations, neighborhood shopping centers, etc.
- Minor Arterial: **PLTS 2**
- Collector Arterial: **PLTS 2**



PLTS Target MAP

PLTS 1



Little to no stress or concerns for safety in a comfortable pedestrian environment.

PLTS 2

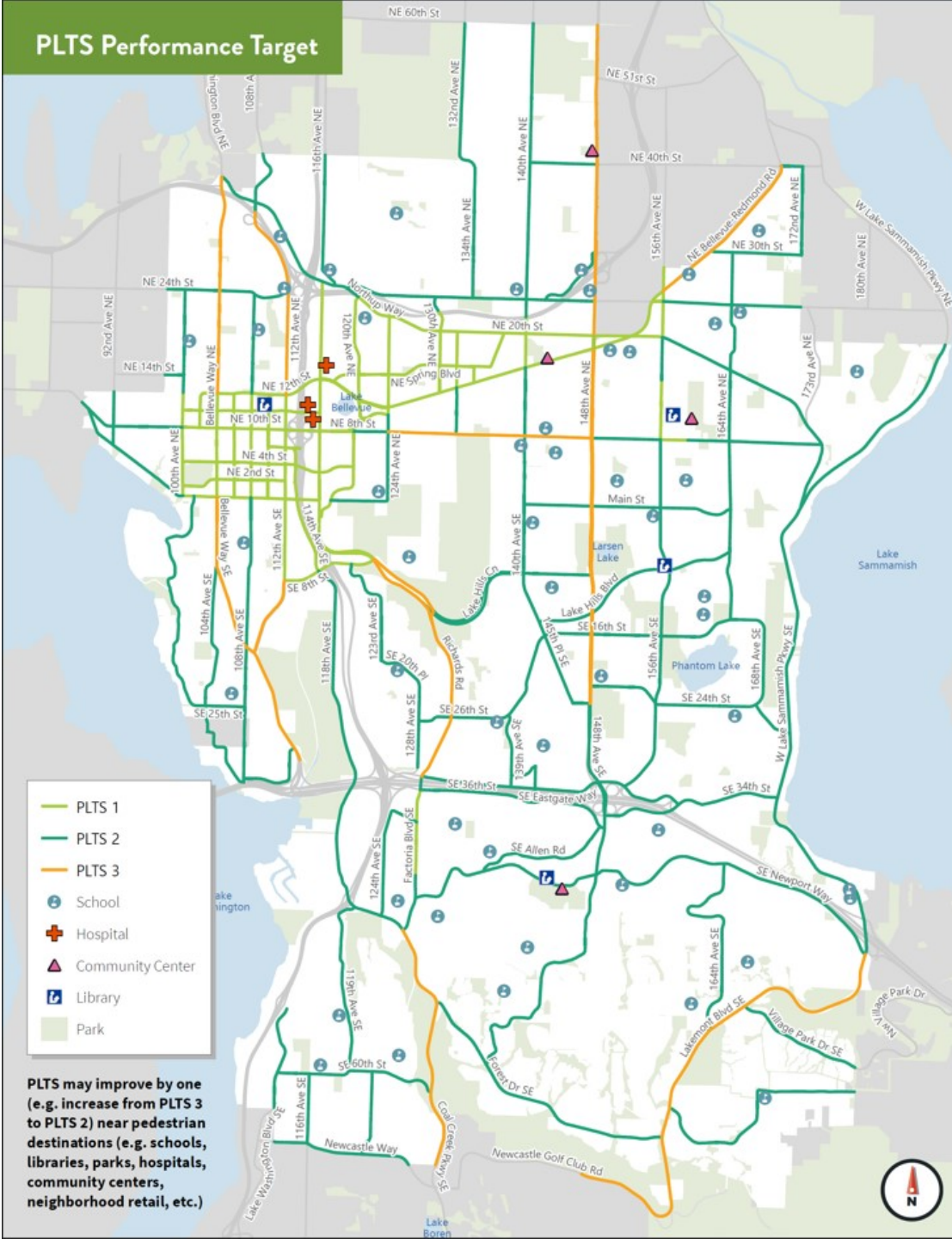


Low stress. Generally, a comfortable environment for people walking.

PLTS 3



Moderate Stress Generally comfortable walking along busier streets.



PLTS Performance Targets on Arterials

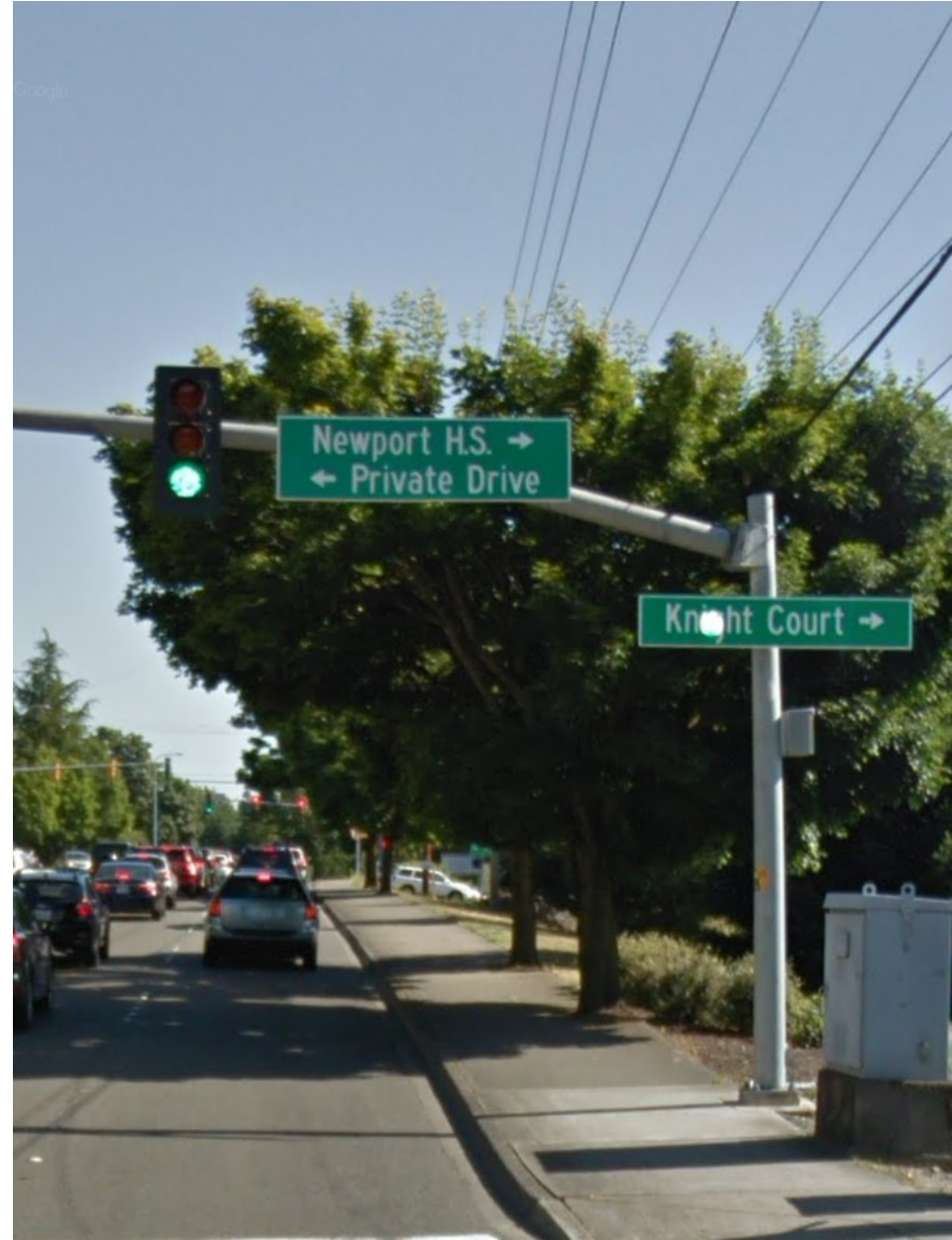
Additional Conditions Near Schools

PLTS near schools can be improved with school-zone speed limits, wider sidewalks and/or wider buffers.

Sidewalks may be wider than the standard in the Transportation Design Manual to safely and comfortably accommodate groups of students walking along arterials.

Table 3-9: Minimum Sidewalk Width per Street Type

Street Type	Minimum Sidewalk Width (feet)	Landscape Planter (feet)
Major Arterial	8	5
Minor Arterial	8	5
Collector Arterial	8	5



MIP Public Engagement

Join with Transportation Facilities Plan Update Open Houses

- February 25 @ Crossroads 11:00 – 1:00
- February 26 @ City Hall Concourse 4:30-7:00

Engaging Bellevue

- Feedback on existing **local street network** connections for peds and bikes as originally defined in the Pedestrian and Bicycle Transportation Plan (2009)
 - Confirm
 - Add
 - Delete

Discussion/Direction

1

Questions and
clarification

2

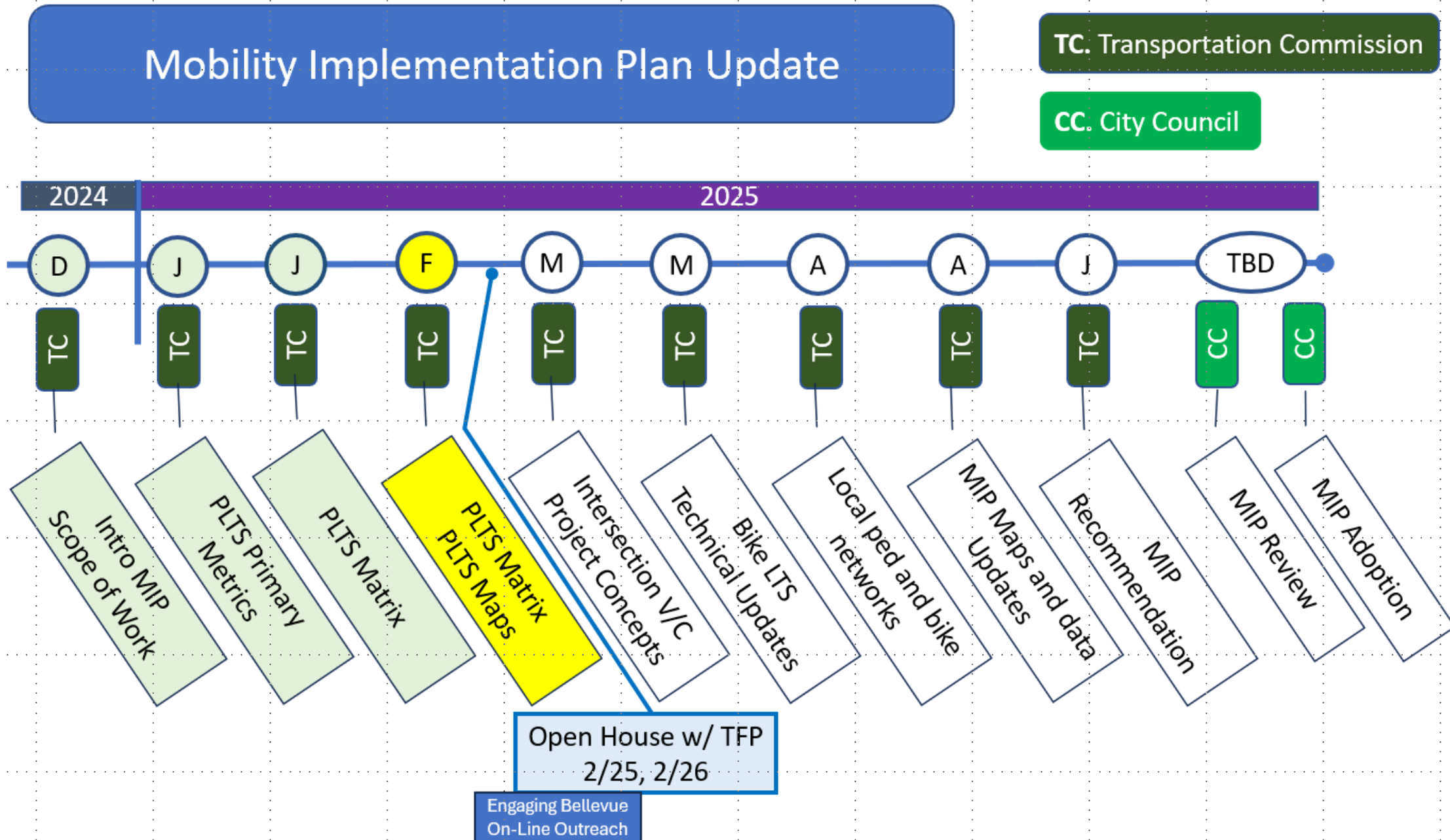
Concurrence with
PLTS Specific Matrix
PLTS Performance Targets
PLTS Map

3

TC welcome to join in
TFP/MIP Open Houses



MIP Update Timeline



Thank You

Kevin McDonald

kmcdonald@bellevuewa.gov

Chris Breiland

c.breiland@fehrrandpeers.com

