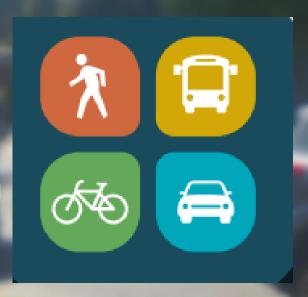
# Mobility Implementation Plan Update

Transportation Commission September 11, 2025



Kevin
McDonald
Chris
Breiland
FEHR PEERS

# September 11, 2025 MIP Update Discussion and Action Outline

MIP 101

Review Content of each Chapter of the draft Mobility
Implementation

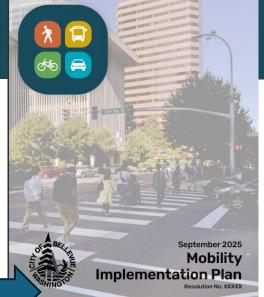
**Plan Update** 

Comments and

Mobility

Adopted April 18, 2022

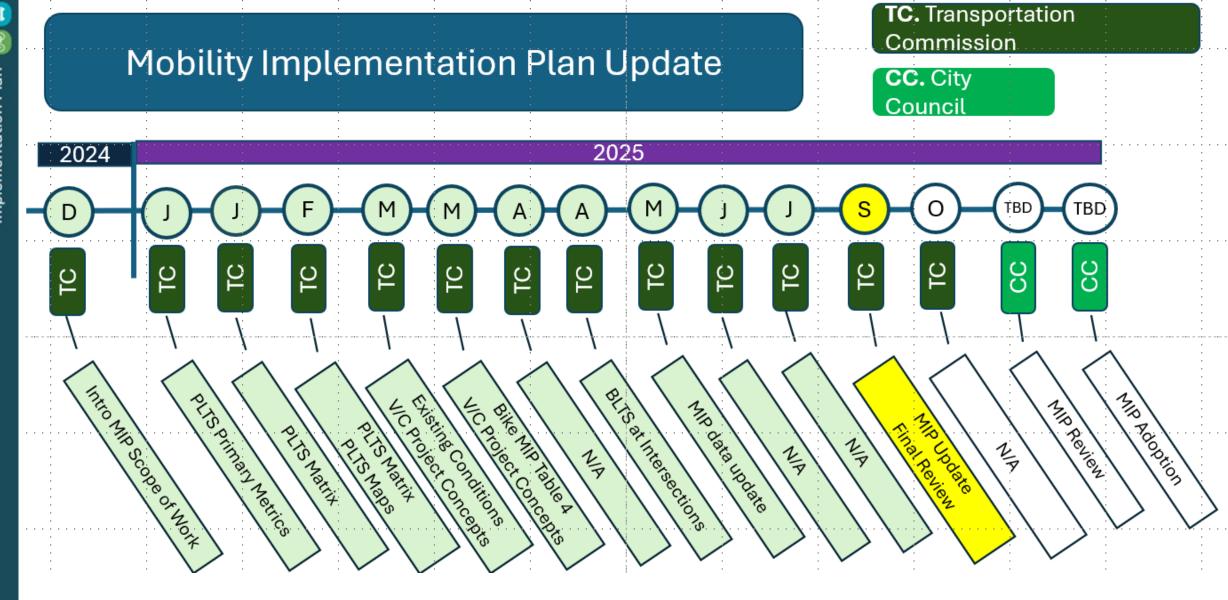
**Questions** 



3

### **Actions Tonight:**

- 1. Recommend MIP to Council
- 2. Approve Transmittal
- 3. Select MIP Cover





## **Transportation Commission Recommendation 2022**

- Mobility performance measurement, monitoring and prioritization
- Performance Metrics, Performance Targets
- Align transportation investments with land use vision (Performance Management Areas)
- Implement a complete, connected and accessible transportation network
- 4 Goals:









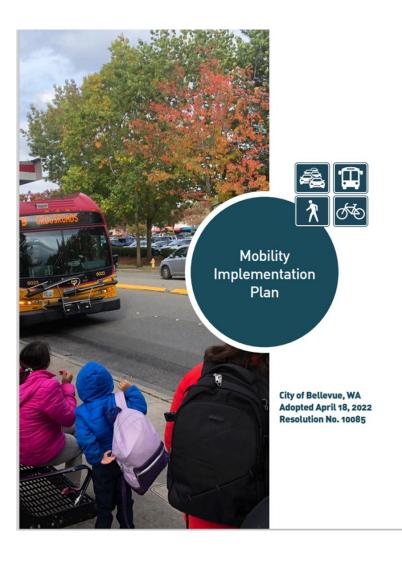
#### **Awards**

- Governor's Smart Communities Award
- Puget Sound Regional Council Vision 2050 Award

## 2025 Update

- Address changed circumstances
- Fill gaps in original MIP, ie) PLTS, BLTS at intersections
- Incorporate Pedestrian and Bicycle Transportation Plan

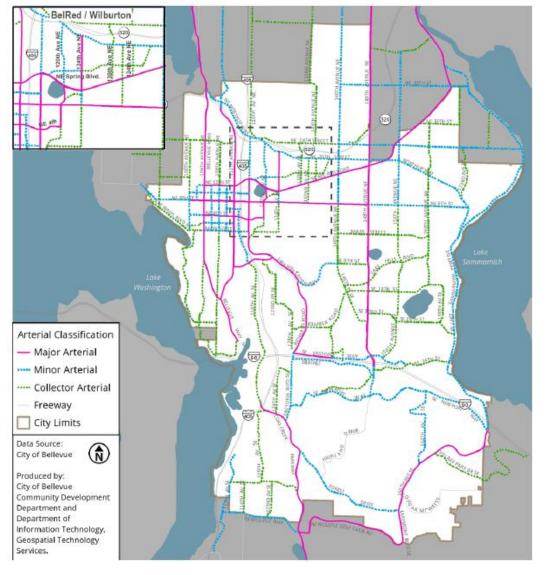
## **MIP 101**



#### **Bellevue Arterials and Classifications**

Map TR-2. Arterial Functional Classifications – Existing and Planned Arterials

This map shows the functional classifications of the arterial-street system in Bellevue. Refer to the Glossary for Functional Classification definitions.



## **MIP 101**

### **Arterial applications in the MIP:**

- All pedestrian network
- Bicycle network corridors
- Priority vehicle corridors
- Transit network corridors

### **Definitions in the Comprehensive Plan:**

- Major: vehicle and active transportation travel with connections to neighboring jurisdictions, freeway interchanges and commercial activities
- Minor: vehicle and active transportation connection between major arterials and residential and commercial activities
- Collector: collects (or distributes) traffic from (or to) local streets and provides connections to minor or major arterials

### Introduction

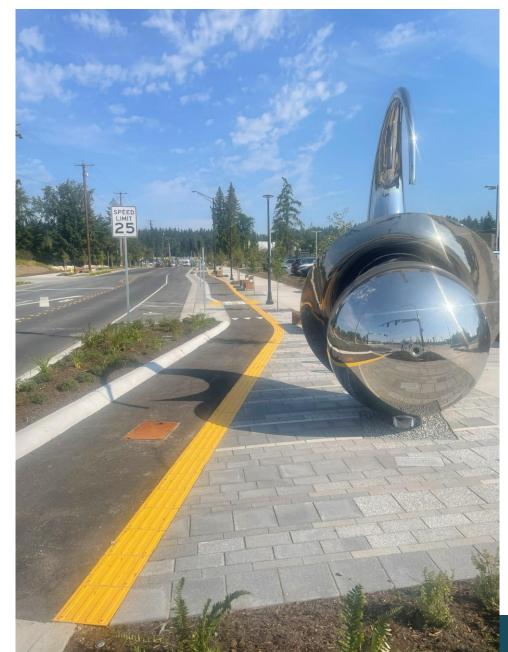
#### MIP Goals

**Accommodate Growth**: Multimodal transportation network investments support planned growth in population and employment.

**Improve Safety:** Safe streets are important for everyone, whether they are driving, walking, biking, or using transit.

**Consider Equity:** Transportation investments in Bellevue should be safe and accessible for all when viewed through a socioeconomic or demographic lens.

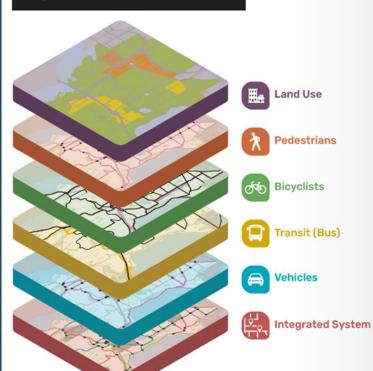
Improve Access and Mobility: Simultaneous consideration of access to support land use (a complete and connected transportation network) and mobility (the quality of the network for people using any mode)





## Bellevue's Layered Transporation Network

#### Figure 1: Layered Network









Bellevue Mobility Implementation Plan



## **Performance Metrics**

## Performance Metrics for Each Mode

Figure 14: Transit Travel Time Ratio Activity Center Pairs

#### Figure 9: Pedestrian Level of Traffic Stress (PLTS) Categories

#### PLTS 1

#### HIGH COMFORT



#### PLTS 2

HIGH/MEDIUM COMFORT Most pedestrians would feel comfortable on these facilities, but they may not be safe for children





#### PLTS 4 LOW COMFORT



#### Figure 10: Bicycle Level of Traffic Stress (BLTS) Categories

#### BLTS 1

BLTS I is a lavel that most children & their parents would find comfortable and safe for riding.



nterested But Concerned BLTS 2 bicycle riders are representative of a typical nainstream adult & can accep

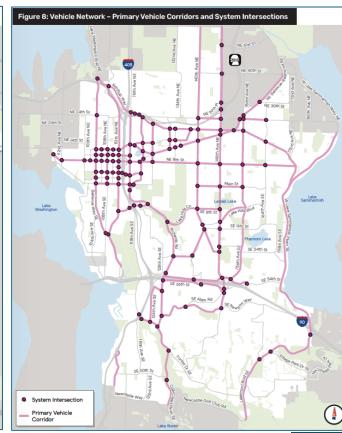




Strong & Fearless









### **Performance Metrics**

## Pedestrian Level of Traffic Stress



Pedestrian Level of Traffic Stress (PLTS) describes the comfort level and safety of a person walking along an arterial given various sets of arterial and sidewalk characteristics.

Table 1: Pe	Stress			-	.131	LIJZ	PEIGG	FEIST		
					Sid	lewalk Cha	aracterist	ics		
					W	idth of Si	dewalk (ft	:.)		
Arterial Characteristics		Paved Shoulder <sup>2</sup>			≥4 to <6		6 to <10		≥10	
Speed Limit Arterial					Width o	of Buffer (	ft.)			
Factor <sup>1</sup>	Daily Traffic Volume	0	<5	≥5	<5	≥5	<5	≥5	<5	≥5
	≤3k	1	1	1	1	1 ,	1	1	1	1
≤25	>3k-7k	3	2	1	1	1	1	1	1	1
	>7k	3	2	2	2	1	2	1	1	1
	≤10k	3	3	3	2	1	2	1	2	1
>25-30	>10 -25k	4	3	3	2	1	2	1	2	1
mph	>25k	4	4	3	3	2	2	1	2	1
>30-35	≤25k	4	4	3	3	2	2	1	2	1
mph	>25k	4	4	4	3	3	3	2	3	1
>35	Any	4	4	4	4	3	3	2	3	2

Supplemental components for prioritization and project concepts MIP p. 76.

PLTS 2 PLTS 3 PLTS 4

## Bicycle Level of Traffic Stress

Figure 10: Bicycle Level of Traffic Stress (BLTS) Categories









Bicycle Level of Traffic Stress (BLTS) describes the comfort level and safety of a person riding a bicycle on the arterial bicycle network given various sets of arterial characteristics and bicycle facility types.

## Bicycle Network Corridors

Table 4: E	Bicvcle Leve	l of Traffic St	ress		BLTS 1	BLTS 2 BLT	S 3 BLTS 4
	aracteristics		acility Componer	nts: Guideline to	o Achieve Intend	ded Level of Tra	ffic Stress
Speed Limit Factor¹	Traffic Volume	No Marking	Sharrow Lane Marking	Striped Bike Lane	Buffered Bike Lane (Horizontal)	Buffered Bike Lane (Vertical)	Shared Use Path or Physically Separated Bikeway
	≤3k	1	1	1	1	1	1
≤25	>3k-7k	3	3	2	1	1	1
	>7k	3	3	2	2	1	1
	≤10k	3	3	2	2	1	1
>25-30 mph	>10 -25k	4	4	3	3	2	1
p.:	>25k	4	4	3	3	3	1
>30-35	≤25k	4	4	3	3	3	1
mph	>25k	4	4	4	3	3	1
>35	Any	4	4	4	4	3	1

Bellevue Mobility Implementation Plan

#### **Performance Metrics**

Figure 10: Bicycle Level of Traffic Stress (BLTS) Categories









At an intersection along a bicycle network corridor, the design for bikes should incorporate facility types intended to achieve the target Bicycle Level of Traffic Stress (BLTS) along the corridor.

## Bicycle Level of Traffic Stress

## Bicycle Network Intersections

Bicycle Facility Type on Corridor	Bicycle Facility Type on Corridor Approach to Intersection	Bicycle Facility Type Across Intersection
Protected Bike	Protected Intersection	Bicycle signal
Shared Use Path		Green skip-striping acro intersection
<ul> <li>Physically Separated Bikeway</li> </ul>		Maintain horizontal separation (buffer) from parallel through traffic
Buffered Bike Lane	Bike Box	Bicycle signal
	Two-stage turn box	Green skip-striping acro
	Continuous buffered bike lane on	intersection
	near and far side of intersection	Maintain horizontal
	Bike lane remains right of vehicle right-turn lane.	separation (buffer) from parallel through traffic
Striped Bike Lane	Bike Box	Bicycle signal optional
	Two-stage turn box	Green skip-striping acro
	At vehicle right turn lane, bike lane is:	intersection
	» 1) Shifted between through traffic lane and turn lane, or	
	» 2) Extended into right turn lane with sharrows	
Shared Lane Marking (Sharrow)	Shared Lane Marking (Sharrow)	No specific treatment
No Marking	Loop Detector (at all	No Bike Facilities

signalized intersections)



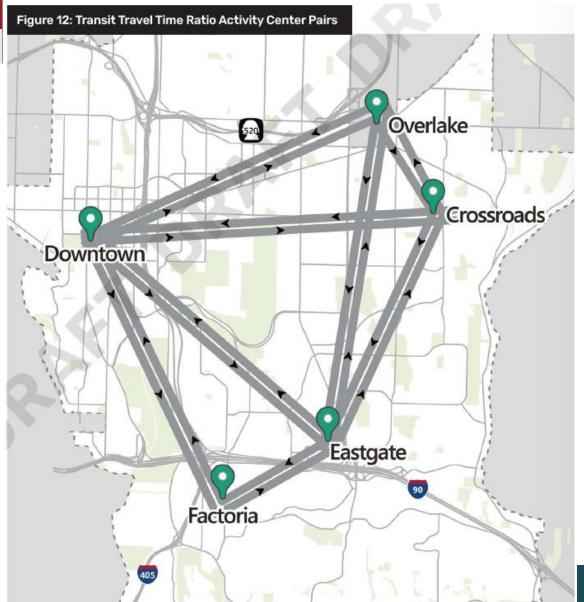
## **Performance Metrics**

## **Transit Travel Time**

The ratio of a person's travel time on transit versus in a private vehicle in the PM peak hour (Transit Travel Time Ratio) is the Performance Metric used to measure the operation of the frequent transit network (FTN).

The Transit Travel Time Ratio is measured between the five activity centers.

## **Transit**



### **Performance Metrics**

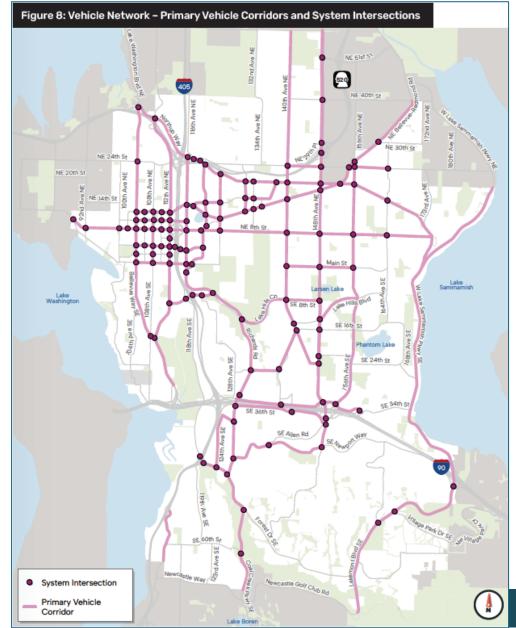
## Vehicle

The MIP defines two Performance Metrics for the vehicle network:

- Volume-to-capacity ratio (V/C) at System Intersections in the two-hour PM Peak period (4-6 PM).
- Vehicle travel speed along segments of a Primary Vehicle Corridor in the PM Peak hour (the single busiest hour of the day).
  - Arterial
  - 10K
  - >.5 miles

#### Intersection Volumeto-Capacity Ratio

#### **Corridor Travel Speed**







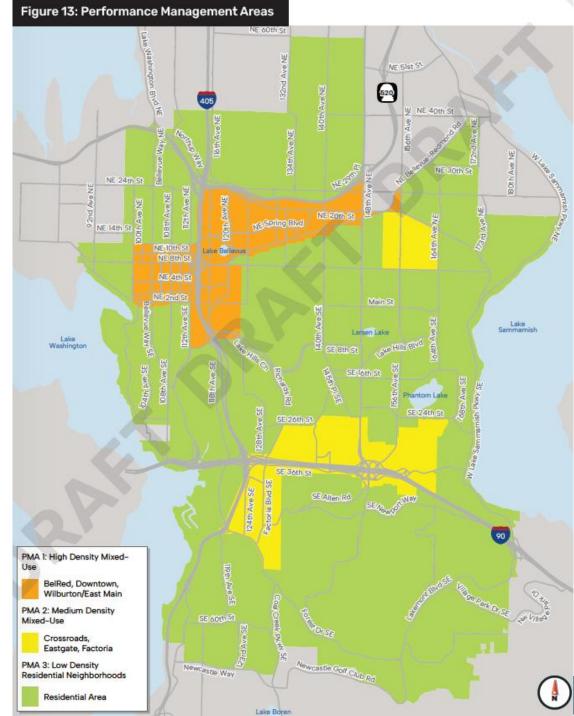
## Performance Mangagement Areas

- Performance Management Areas (PMA)
   acknowledge existing/planned land use
   characteristics and mobility options.
- PMAs are used to establish performance targets (vehicle/bike/ped) and to monitor performance for each mode





















#### Table 7: Performance Targets

		Torritation rary		
	Mode		Performance Target	Monitoring and Reporting
	Pedestrian	target PLTS will Arterial crossin major trip-gen	trian network facilities meet the nich varies by PMA - see <b>Figure 14</b> .  Ings at designated spacing near erating land uses; the spacing of ags varies by land use context	Percentage of arterial sidewalk network that meet PLTS Performance Target citywide and within each PMA
	Bicycle	and intersection	e network facilities (corridors ons) meet the target BLTS y PMA - see <b>Figure 15</b> .	Percentage of arterial bicycle network (corridors and intersections) that meet BLTS Performance Target citywide, within each PMA, and by Priority Bicycle Corridor
	Transit		ime ratio of 2.0 or less requent Transit Network er amenities	List and map of activity center pairs that meet the travel time ratio Performance Target
	Vehicle	PMA 1	1.0 V/C ratio at System Intersections  ≥0.5 Typical Urban Travel Speed for Primary Vehicle Corridors*  0.90 V/C ratio at System Intersections  ≥0.75 Typical Urban Travel Speed for Primary Vehicle Corridors  0.85 V/C ratio at System Intersections	List and map of Primary Vehicle Corridors and System Intersections that meet the PMA Performance Target
•		PMA 3	≥0.9 Typical Urban Travel Speed for Primary Vehicle Corridors	15





#### Table 1: Pedestrian Level of Traffic Stress

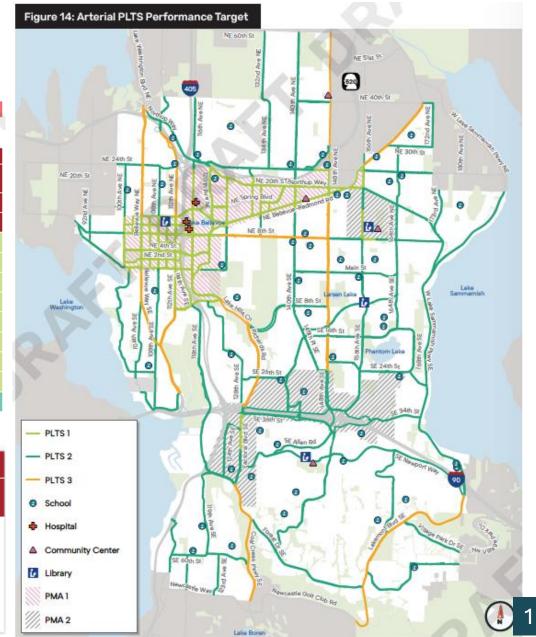
PLTS 2 PLTS 3 PLTS 4

					Sid	lewalk Ch	aracterist	ics		
					W	idth of Si	dewalk (ft	:.)		_
Arterial Characteristics		Paved Shoulder <sup>2</sup>	<	4	≥4 t	o <6	6 to	<10	5.	10
Speed Limit	Arterial		Width of Buffer (ft.)							
Factor <sup>1</sup>	Daily Traffic Volume	0	<5	≥5	<5	≥5	<5	≥5	<5	≥5
	≤3k	1	1	1	1	1	1	1	1	1
≤25	>3k-7k	3	2	1	1	1	1	1	1	1
	>7k	3	2	2	2	1	2	1	1	1
05.70	≤10k	3	3	3	2	1	2	1	2	1
>25-30 mph	>10 -25k	4	3	3	2	1	2	1	2	1
>30-35	>25k	4	4	3	3	2	2	1	2	1
	≤25k	4	4	3	3	2	2	1	2	1
mph	>25k	4	4	4	3	3	3	2	3	1
>35	Anv	4	4	4	4	3	3	2	3	2

#### Table 2: Spacing Between Arterial Pedestrian Crossings

Context				PMA 3	
Component	PMA 1	PMA 2	Neighborhood Shopping	Pedestrian Destination	Elsewhere in PMA 3
Spacing Between Arterial Pedestrian Crossings	300 ft.	≤ 800 ft.: Factoria ≤ 600 ft.: Elsewhere	600 ft. or less within shopping center area	Within 600 feet of primary light rail station entrance Within 300 ft. of bus stop pair on FTN	Applicable as needed

## Pedestrian Level of Traffic Stress







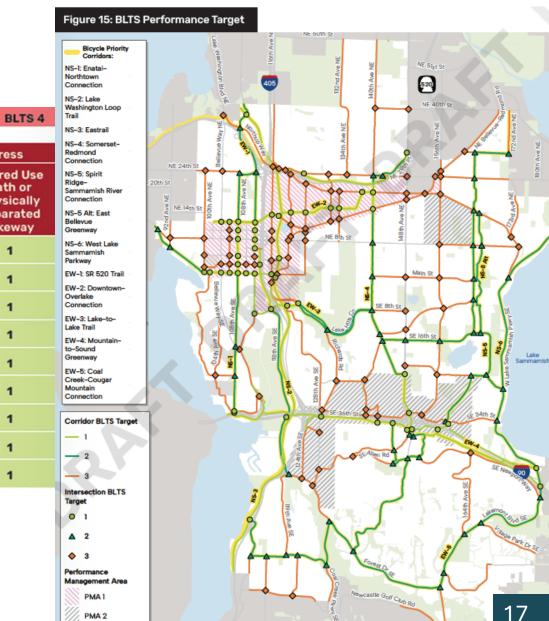
BLTS 2

BLTS 3

#### **Table 4: Bicycle Level of Traffic Stress**

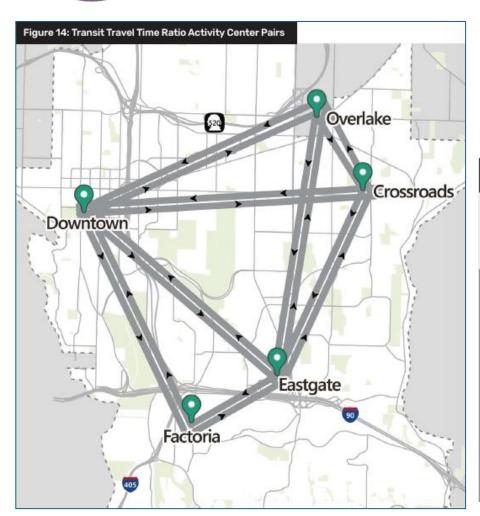
Arterial Cha	aracteristics	Bicycle Fa	acility Componer	nts: Guideline t	o Achieve Intend	ied Level of Tra	ffic Stress
Speed Limit Factor <sup>1</sup>	Traffic Volume	No Marking	Sharrow Lane Marking	Striped Bike Lane	Buffered Bike Lane (Horizontal)	Buffered Bike Lane (Vertical)	Shared Use Path or Physically Separated Bikeway
	≤3k	1	1	1	1	1	1
≤25	>3k-7k	3	3	2	1	1	1
	>7k	3	3	2	2	1	1
	≤10k	3	3	2	2	1	1
>25-30 mph	>10 -25k	4	4	3	3	2	1
p.i	>25k	4	4	3	3	3	1
>30-35	≤25k	4	4	3	3	3	1
mph	>25k	4	4	4	3	3	1
>35	Any	4	4	4	4	3	1

## Bicycle Level of Traffic Stress





## Transit Network Corridors and Amenities at Stops



Performance Target is a Transit Travel Time ratio of 2.0 or less (transit vs private vehicle) during the PM peak commute hour.

Transit stop amenities vary by Table 6: Transit Stop/Station Amenities

type of transit stop

	typo or traine	or or op	
Context	Local Transit Stop <sup>1</sup>	Frequent Transit Network Stop/RapidRide Stop <sup>2</sup>	
Weather Protection	Yes, Priority locations have 25+ daily boardings	Yes	
Seating	Yes, Priority near Pedestrian Destinations	Yes	
Paved Bus Door Passenger Zone	Yes, Zone length 25-30 ft.	Yes, Zone length 60 ft.	
Wayfinding	Optional	Yes	
Bicycle Parking	Optional	Yes	



## Primary Vehicle Corridors and System Intersections

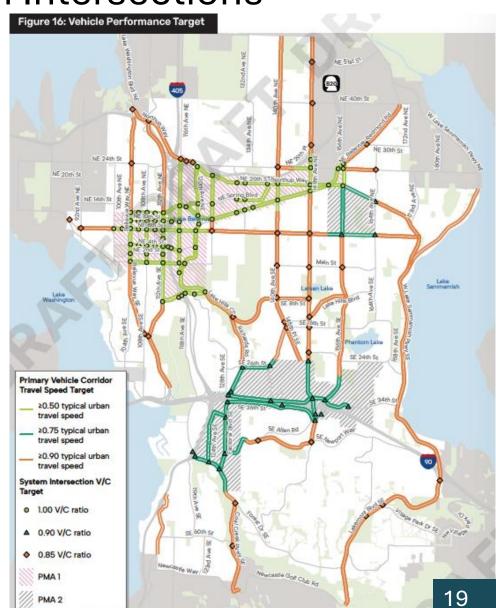
MIP sets two Performance Targets for the vehicle network:

Volume-to-capacity ratio (V/C) at a System Intersection.

- Varies by Performance Management Area (PMA):
  - 0.85 in PMA 3
  - 0.90 in PMA 2
  - 1.0 in PMA 1

Vehicle travel speed along a Primary Vehicle Corridor.

- Typical urban travel speed: 40% of the posted speed limit.
- Varies by Performance Management Area:
  - 0.9 in PMA 3
  - 0.75 in PMA 2
  - 0.5 in PMA 1

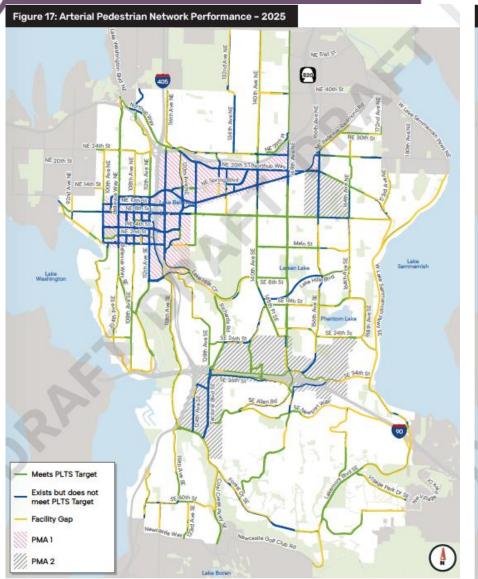


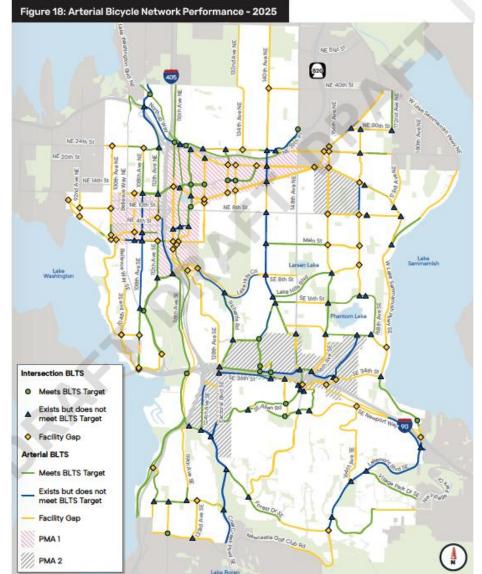




## **Existing Network Performance**

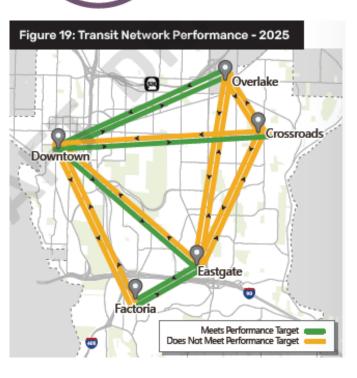
## **Performance Targets**



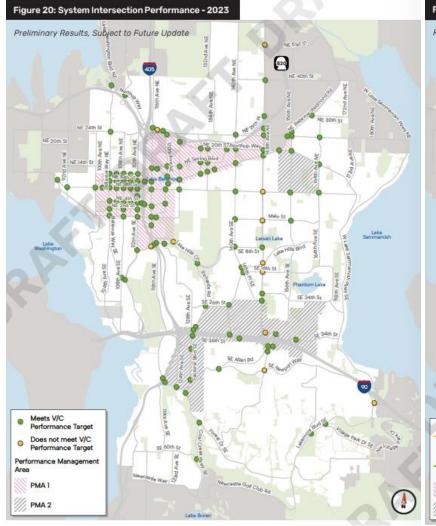




## **Existing Network Performance**



chapter







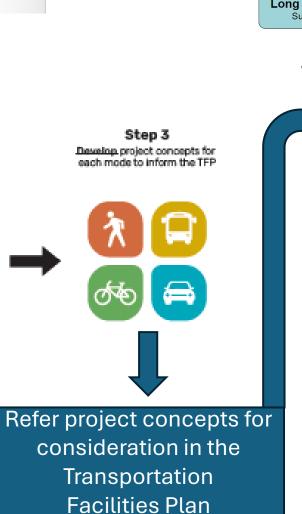


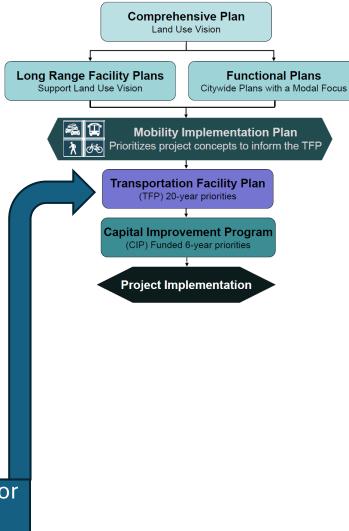


## **Project Identification** & Prioritization

#### Figure 27: Project Identification and Prioritization Framework

## Step 1 Step 2 <u>lidentify</u> performance Prioritize performance target gaps for each mode target gaps for each mode Align with MIP goals (Darker Squares Represent Where Transportation Investments Could Advance MIP Goals)

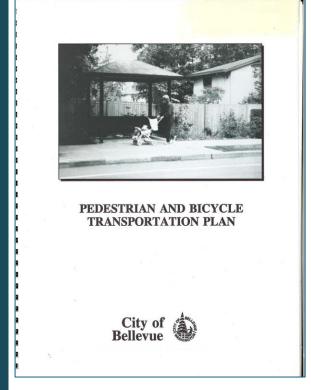


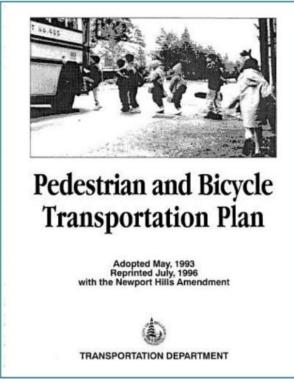


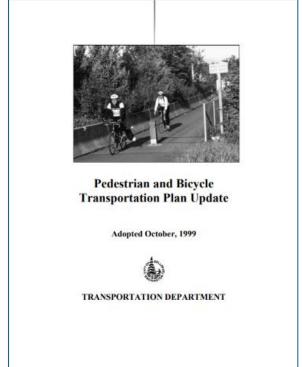


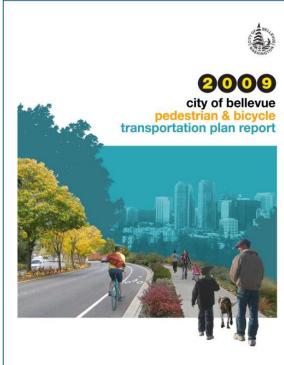
## Incorporating the 2009 Pedestrian & Bicycle Transportation Plan

The Pedestrian and Bicycle Transportation Plan was first adopted in 1993 as part of the first Bellevue Comprehensive Plan under the Growth Management Act. With subsequent updates and revisions in 1996, 1999 and in 2009, the plan has expressed the long-range non-motorized transportation vision for the city of Bellevue.







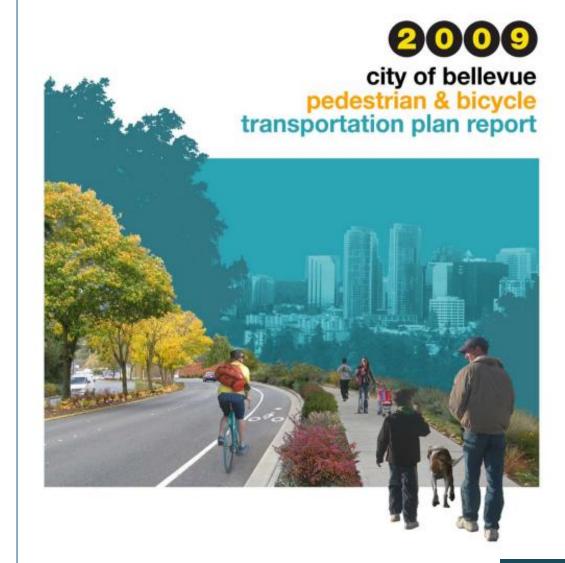


## Incorporating the 2009 Pedestrian & Bicycle Transportation Plan

### Repeal the Ped/Bike Plan

- MIP retains arterial corridor networks
- MIP defines the BLTS and PLTS performance targets
- Repeal specific project descriptions for Bicycle and Pedestrian categories of projects
- Projects designed to meet the MIP performance target, not legacy description
- MIP incorporates trail maps and project descriptions in Appendix A



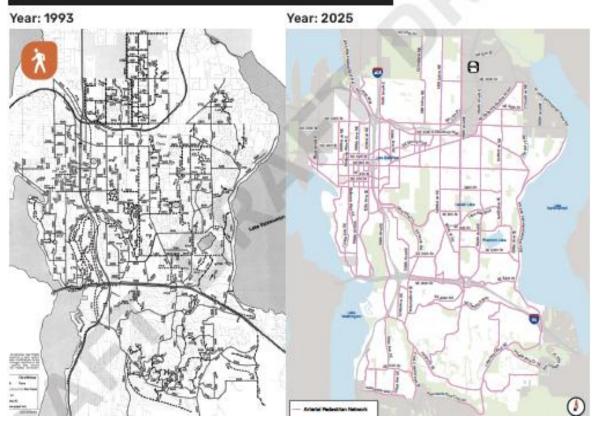


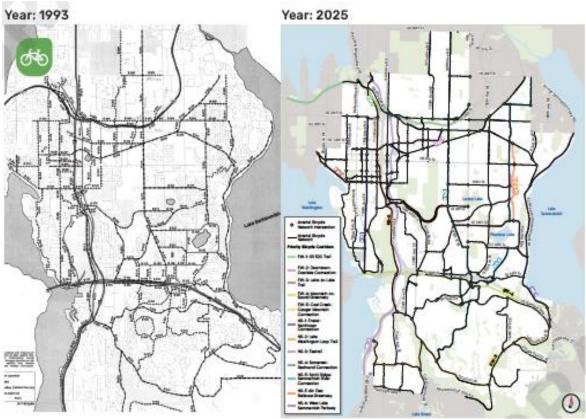


# chapter 07

# Incorporating the 2009 Pedestrian & Bicycle Transportation Plan

#### Figure 31: Evolution of Pedestrian and Bicycle Networks





## MIP vs Ped/Bike Plan Project Descriptions

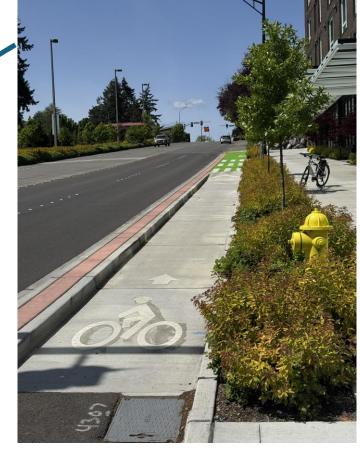
## Example Ped/Bike Plan Project

B-129-N Main St Bellevue Way NE to
116th Ave NE Street from Bellevue Way NE to 116th Avenue NE.
Component of priority bike corridor; EW-3: Lake to Lake Trail.

Add a 5 foot-wide bike lane on the north side of Main Street from Bellevue Way to 116<sup>th</sup> Ave.



MIP Implementation to achieve BLTS 1 Target (and PLTS 1 Target)

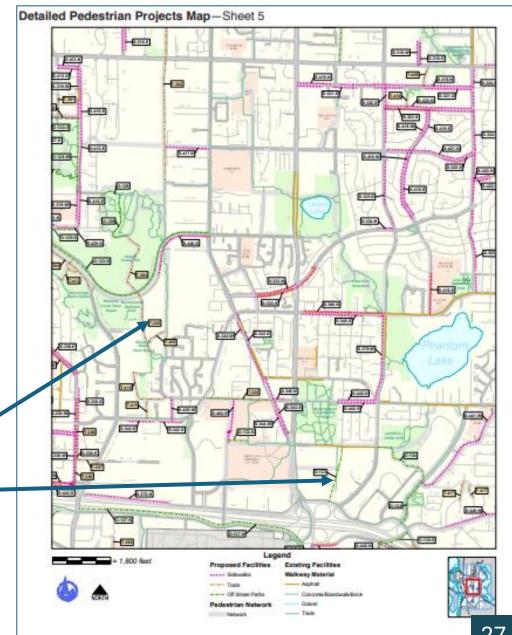


## **Appendix A:**

# Retain Ped/Bike Plan Trail (T) and Off-Street (O) Network Maps and Project Descriptions

Mapped Trail Network and Project Descriptions (T and O Projects) are retained in MIP Appendix A

	T-205	Richards Valley Nature Trail	Richards Valley open space to the Lake Hills Connector	Nature Trail co	Add a 6-10 foot wide boardwalk called Richards Valley Nature Trail connecting the Richards Valley open space to Lake Hills Connector.					e Trail connecting the Richards Valley open space			
	O-133	Robinswood SE 28th St to Add a 10-14 foot-wide off street path along the connection from Robinswood to Eastgate from SE 28th Street to SE Eastgate Way.											
_	1			Officer to OE E	asignic way.			_					
	Project lumber	Project name	Extent		Description		Priority						





## **Questions and Comments**

Bellevue Mobility Implementation Plan

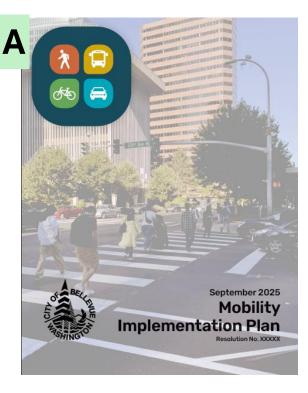
2025 Update

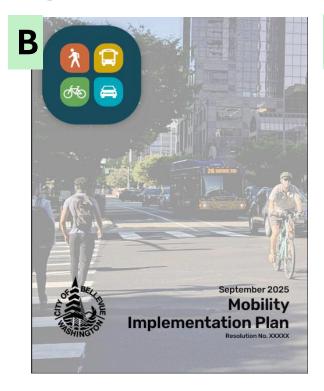




## **MIP Update: Actions Tonight**

**1.** Choose the MIP Cover







- 2. Recommend approval of the MIP to Council
- 3. Approve Transmittal Letter to Council
  - Council study session November 25
- 4. Confirm that Chair Stash will attend Council, or Select an alternate

