

Bellevue MIP: Performance Target Gaps, Project Concepts and Prioritization to Inform the TFP Update

FEHR PEERS



Transportation

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Agenda

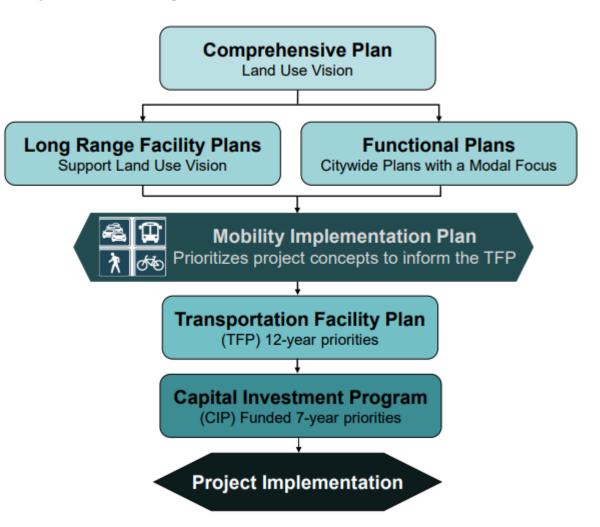
- 1. Review Mobility Implementation Plan
- 2. Four-Step Process to Prioritize Projects
- 3. Introduce Implementation Guide Scoring
- 4. Example Prioritization
 Application on V/C
 Performance for System
 Intersections
- 5. Next Steps



Mobility Implementation Plan

Transportation Planning Process

- Identify and prioritize project concepts to address existing Performance Target gaps
- Inform each update of the Transportation Facilities Plan
- TFP Update starts with Transportation Commission September 2024.



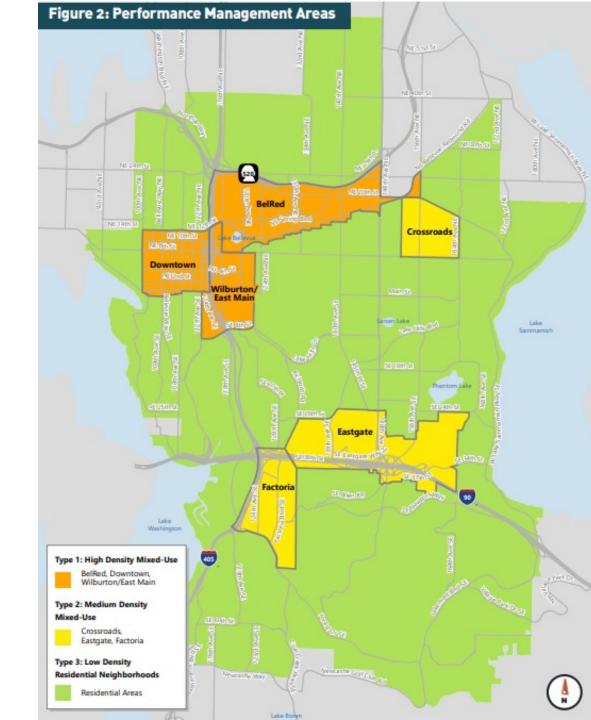
Mobility Implementation Plan

MIP Defines:

- Performance Metrics
- Performance Targets
- Performance Management Areas

MIP Developed:

Four Step Process to Deliver
Prioritized Project Concepts that
address existing Performance Target
Gaps to the Update of the
Transportation Facilities Plan.



Mobility Implementation Plan Four-step Process

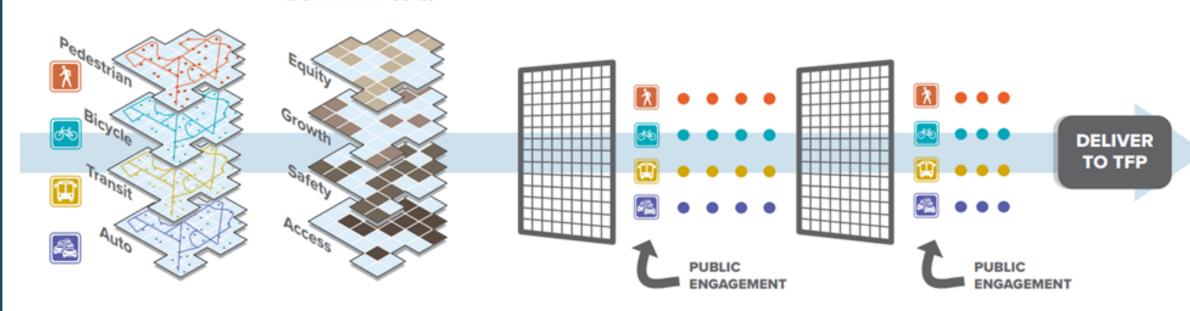
STEP 1: IDENTIFY PERFORMANCE TARGET GAPS

STEP 2: SCREEN PERFORMANCE TARGET GAPS

ALIGN WITH MIP GOALS

STEP 3: DEVELOP PROJECT CONCEPTS

STEP 4: PRIORITIZE PROJECT CONCEPTS TO INFORM THE TFP

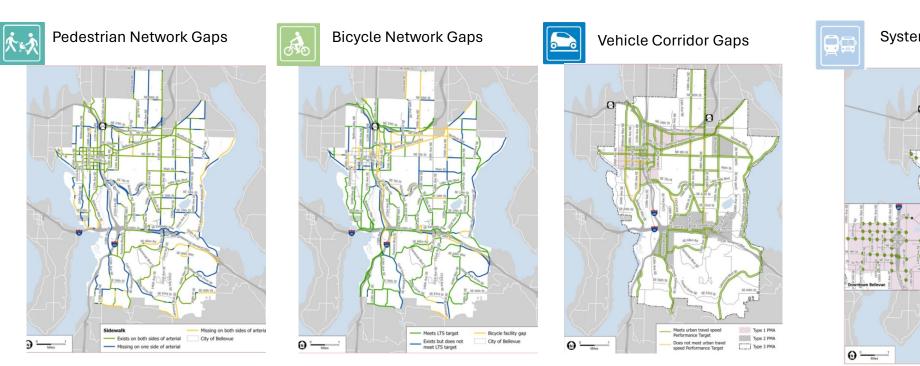


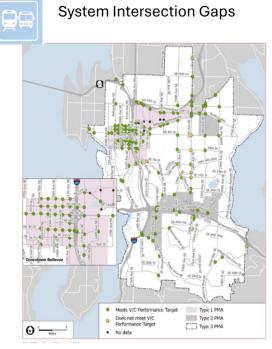
Step 1. Identify Performance Target Gaps

Purpose: Determine where the documented existing performance of the transportation network does not meet the adopted Performance Targets for each mode.

Outcome: Map and list of network performance gaps by mode (below).

✓ Step 1 is already done in the Comprehensive Plan DEIS!





Step 2. Screen Performance Target Gaps Relative to MIP Goals

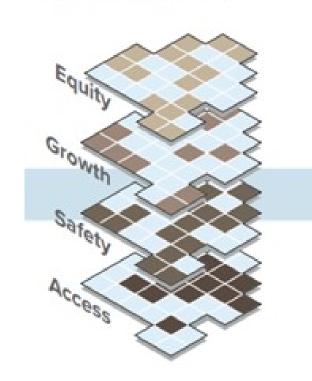
Purpose: Screen and score the existing Performance Target gaps for alignment with the four MIP goals. Determine whether to develop project concepts.

Outcome: Prioritized list of network performance target gaps for each mode.

➤ In this Step, we will not evaluate transit performance target gaps.

STEP 2: SCREEN PERFORMANCE TARGET GAPS

ALIGN WITH MIP GOALS



Step 2, Part 1 Screen Performance Target Gaps

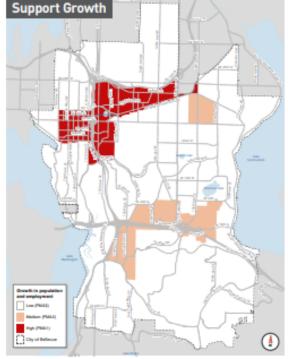
Assess Network Performance Target Gaps against MIP Goals

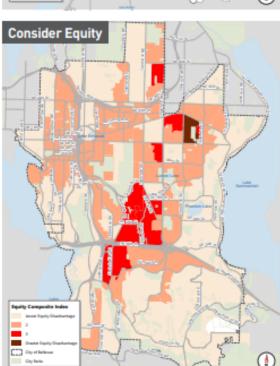
Support Growth

Improve Safety

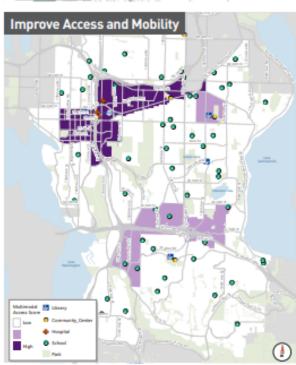
Consider Equity

Improve Access and Mobility







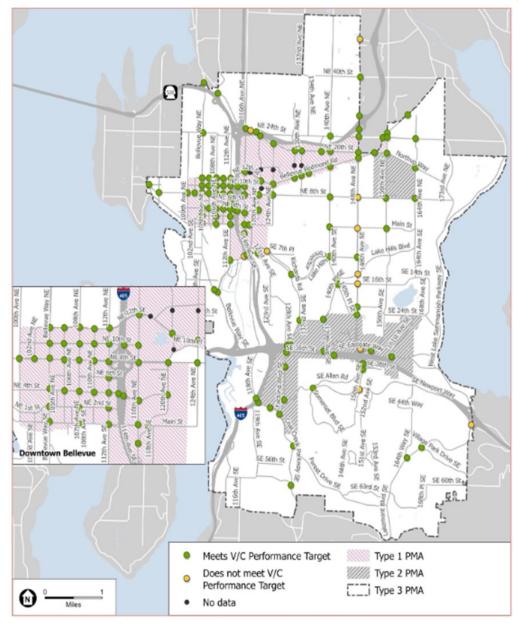


Screen Performance Target Gaps: Vehicle V/C at System Intersections



Table 4: Scoring MIP Goals for Vehicle Mode

	MIP G	oal Score:	Vehicle Mode V/C (aps an	d Corridor Trave	l Speed Gaps	
Growth Goal Score		Acce	Access/Mobility Goal Score		Equity Goal Score	Safety Goal Score	
PMA 1	1			-1	N/A	HIN	4
PMA 2	2			-2	N/A	Not-HIN	2
PMA 3	4	in these are since Belle	de Performance Target ge eas are a lower a priority vue seeks to focus on non-vehicle mode options	` I	N/A N/A	Any vehicle mode Performance Target gap that, if addressed, will result in a wider road or higher speeds	0
			Supplemental Sc	ore – Ve	hicle Mode	·	
,	V/C Perf	ormance T	arget Gap	Travel Speed Performance Target Gap			
<	10%		+ 1	< 10%		+ 1	
109	%-20%		+ 2	10%-20%		+ 2	
209	%-30%		+ 3		20%-30%	+ 3	
>	30%		+ 4		> 30%	+ 4	

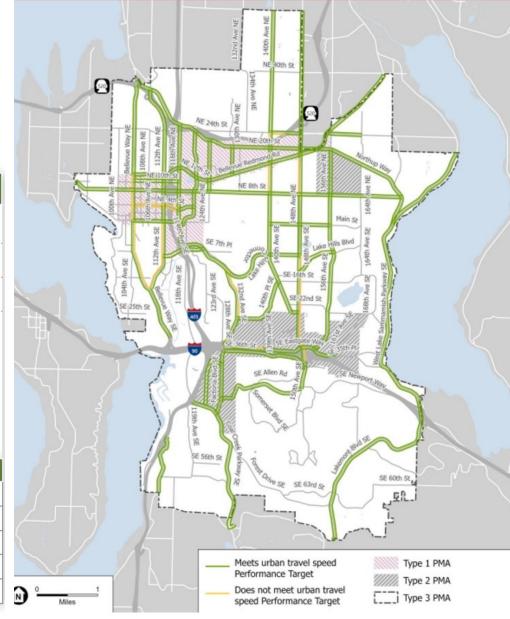


Screen Performance Target Gaps: Primary Vehicle Corridor Travel Speed



Table 4: Scoring MIP Goals for Vehicle Mode

	MIP G	oal Score: Vehicl	e Mode V/C Ga	ps and (Corridor Trave	l Speed Gaps	
Growth Goal Score		Access/ Mobi	Access/Mobility Goal Score		quity Goal Score	Safety Goal Score	
PMA 1	1		-1		N/A	HIN	4
PMA 2	2		-2		N/A	Not-HIN	2
РМА 3	4	Vehicle mode Perfor in these areas are a since Bellevue seek expanding non-vehic these areas.	lower a priority s to focus on		N/A N/A	Any vehicle mode Performance Target gap that, if addressed, will result in a wider road or higher speeds	0
		Supp	olemental Scor	e – Vehi	icle Mode		
1	V/C Perf	ormance Target G	Эар	Tra	vel Speed Perfo	ormance Target Gap)
<	10%		+ 1	< 10%		+ 1	
109	%-20%		+ 2	10%-20%		+ 2	
209	%-30%		+ 3	20	%-30%	+ 3	
>	30%		+ 4	;	> 30%	+ 4	

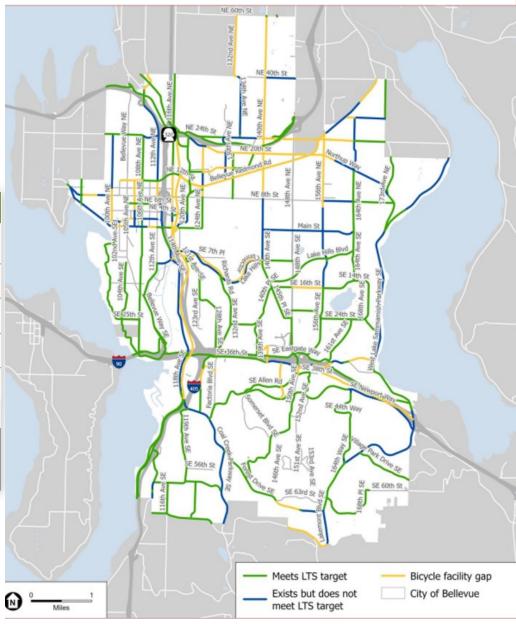


Screen Performance Target Gaps: Bicycle Network LTS and Completeness



Table 3: Scoring MIP Goals for Bicycle Mode

	М	IP Goal Score:	Bicycle Mode LTS	Gaps on Bic	ycle Net	work	
Growth Go	Growth Goal Score		Access/Mobility Goal Score		Equity Goal Score		l Score
PMA 3	1		2		1	HIN	4
PMA 2	2		4		2	Not-HIN	2
PMA 1	PMA 1 4				3		
					4		
		Supp	plemental Score -	- Bicycle Mod	le		
Physical G	ap on a Bi	icycle Network	Network Corridor		+ 2		
	Corrido	or	Priority Bicycle	+ 4			

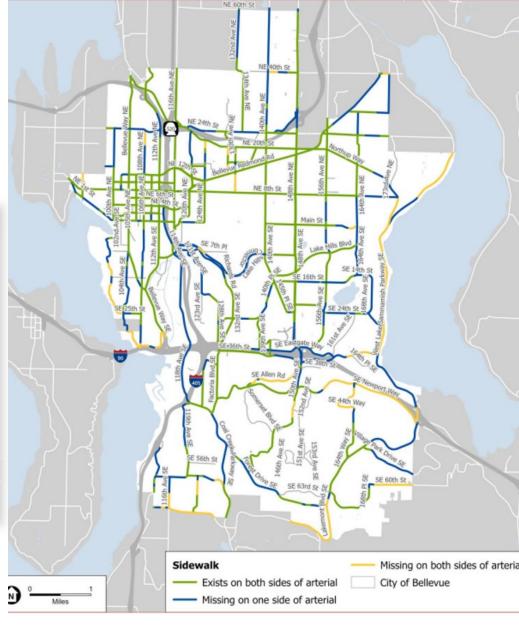


Screen Performance Target Gaps: Pedestrian Arterial Network Completeness



Table 2: Scoring for MIP Goals for Pedestrian Mode

Growth Goal Score		Access/Mobility Goal Scor (see MIP Figure 30)	e ·	Equity Goal Score (see Appendix E)	Safety Goal Score (see MIP Figure 28)	
PMA 3	1		2	1	HIN	4
PMA 2	2		4	2	Not-HIN	2
PMA 1	4	For gaps in PMA 3: Proximity to pedestrian destinations on MIP Figure 30: school, park, library, community center, hospital, grocery store	+2	3		
		For gaps in PMA 3: Proximity to FTN stop	+1	4		
		Supplemental Sc	ore – P	edestrian Mode		



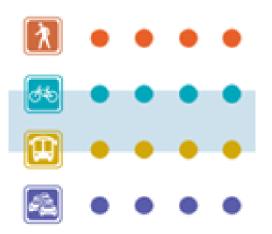
Step 3. Develop Project Concepts

Purpose: Develop project concepts to address existing Performance Target gaps.

Outcome: Vetted project concepts that address Performance Target gaps, achieve MIP goals, meet public needs, and are implementable.

➤ It may be determined through this process that it is not feasible to implement a project concept that would address an exisiting Performance Target gap.

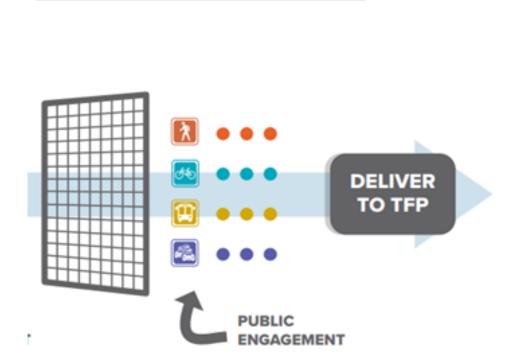
STEP 3: DEVELOP PROJECT CONCEPTS



Step 4. Screen Project Concepts for Delivery to the Transportation Facilities Plan (TFP)

Purpose: Inform the TFP update by providing list of prioritized project concepts for each mode

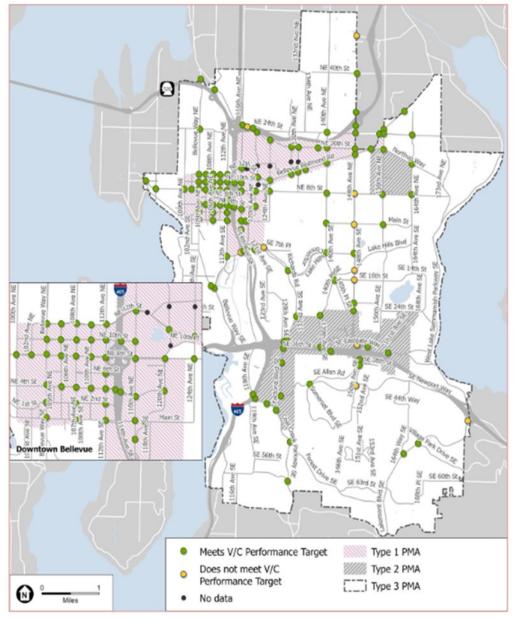
Outcome: Prioritized list of project concepts for each mode.



RITIZE PROJECT CONCEPTS

MIP Prioritization Framework Application

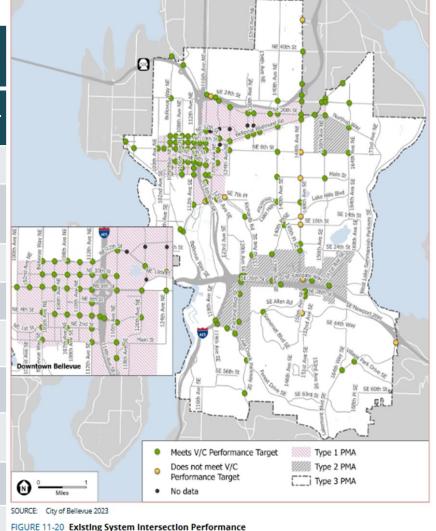
Example for Existing V/C
Performance Target Gaps at
System Intersections



System Intersection V/C Performance Target Gaps

EXISTING SYSTEM INTERSECTION V/C PERFORMANCE TARGET GAP Source: CPPU DEIS

N/S Street	E/W Street	Performance Management Area and Performance Target	Existing 2019 Base Year
148th Ave NE	NE 8th St	PMA 3: V/C = 0.85	0.99
148th Ave	Main St	PMA 3 V/C = 0.85	0.95
148th Ave SE	Lk Hills Blvd	PMA 3 V/C = 0.85	0.97
148th Ave SE	SE 16th St	PMA 3 V/C = 0.85	0.88
Lakemont Blvd SE	SE Newport Wy	PMA 3 V/C = 0.85	0.86
150th Ave SE	SE Eastgate Wy	PMA 2 V/C = 0.90	1.01
Lk Hills Connector	SE 7th Pl	PMA 1 V/C = 1.00	1.03
118th Ave SE	SE 8th St	PMA 1 V/C = 1.00	1.02
115th PI NE	Northup Wy	PMA 3 V/C = 0.85	0.95



System Intersection Project Concepts in the TFP

EXISTING INT	ERSECTION V	//C GAP	Existing TFP Project Description
N/S Street	E/W Street	Source	* Need to vet internally before providing final recommendation
148th Ave NE	NE 8th St	TFP	Widen all four approaches to provide a second left turn pocket serving each direction.
148th Ave	Main St	TFP	Add a new traffic signal and a southbound left turn lane accessing the south driveway and a left turn lane accessing southbound 148th Avenue SE from the driveway.
148th Ave SE	Lk Hills Blvd	TFP	Add a second westbound left turn pocket to increase the queuing space for this movement and to allow the eastbound and westbound through movements to run concurrently, reducing the overall intersection delay.
148th Ave SE	SE 16th St	TBD*	Widen the east curb line of 148 th Ave SE 300ft of SE 16 th St to Lake Hills Blvd.
Lakemont Blvd SE	SE Newport Wy	TFP	Un-split the southbound and northbound traffic signal phasing by changing the center lane on the southbound approach to a dedicated left turn lane instead of a shared left/through lane, subject to further analysis.
150th Ave SE	SE Eastgate Wy	TFP	Add a second northbound left turn lane with a short westbound receiving lane and a third southbound through lane starting north of Eastgate Way and extending across the I-90 overpass. The southbound left turn lane will also be extended.
Lk Hills Connector	SE 7th Pl	TFP	Add a second northbound left turn pocket to increase the queuing space for this movement and will convert the existing dedicated eastbound left turn lane to a westbound through lane to receive traffic from the new northbound left turn pocket.
118th Ave SE	SE 8th St	TFP	Widen the intersection to add a second southbound left turn lane and dedicated space for bicycles in the northbound and southbound directions.
115th PI NE	Northup Wy	TBD*	Widen southbound approach to add a dedicate right turn lane.

System Intersection V/C Project Scoring

EXISTING SYSTEM V/C PPERFORMA	MIP PRIORITIZATION SCORE							
N/S Street	E/W Street	Growth Goal Score	Access/ Mobility Goal Score	Safety Goal Score	Supplemental Score	Composite Score		
148th Ave NE	NE 8th St	4	0	0	2	6		
148th Ave	Main St	4	0	4	2	10		
148th Ave SE	Lk Hills Blvd	4	0	0	2	6		
148th Ave SE	SE 16th St	4	0	0	1	5		
Lakemont Blvd SE	SE Newport Wy	4	0	4	1	9		
150th Ave SE	SE Eastgate Wy	2	-1	0	2	3		
Lk Hills Connector	SE 7th PI	1	-2	4	1	4		
118th Ave SE	SE 8th St	1	-2	4	1	4		
115th PI NE	Northup Wy	4	0	0	2	6		

System Intersection Project Tiering

EXISTING INTERSECT		MIP PRIORITIZATION SCORE						
N/S Street	E/W Street	Growth Goal Score	Access/ Mobility Goal Score	Safety Goal Score	Supplemental Score	Composite Score	Tier	
148th Ave NE	NE 8th St	4	0	0	2	6	Mid	
148th Ave	Main St	4	0	4	2	10 🏠	High	
148th Ave SE	Lk Hills Blvd	4	0	0	2	6	Mid	
148th Ave SE	SE 16th St	4	0	0	1	5	Mid	
Lakemont Blvd SE	SE Newport Wy	4	0	4	1	9 🗘	High	
150th Ave SE	SE Eastgate Wy	2	-1	0	2	3 🗸	Low	
Lk Hills Connector	SE 7th Pl	1	-2	4	1	4 🗸	Low	
118th Ave SE	SE 8th St	1	-2	4	1	4	Low	
115th PI NE	Northup Wy	4	0	0	2	6	Mid	