



MOBILITY IMPLEMENTATION PLAN

Mobility Implementation Plan

**Transportation Commission
June 24, 2021**



Transportation

FEHR & PEERS

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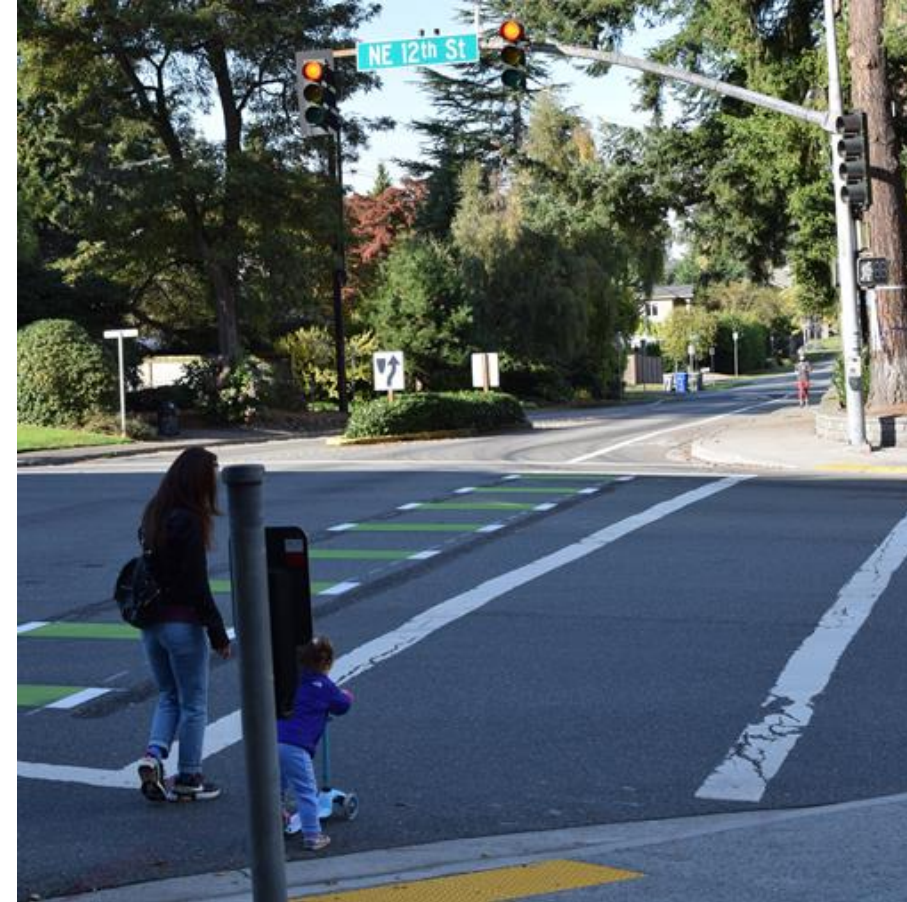
June 24, 2021 Agenda

- Public Involvement Plans
- Multimodal Level-of-Service Concurrency Standard
 - Consistency with WA Growth Management Act
- Layered Network Overview
- Vehicle Mode
 - Existing Level-of-Service Standard
 - MIP Performance Metrics
 - MIP Performance Targets
 - MIP Performance Management Areas



MIP – Public Involvement

- Mobility Implementation Plan Web Site
- It's your City July issue: On-line + 60,000+ mailing
- Neighborhood News July issue
- Fact sheet to provide foundational background for MIP
 - Summary of scope of work
 - Relevant policies
 - Summary of prior survey results on transportation
- Community questionnaire: last couple weeks of July
- Boards and Commissions
 - Planning Commission
 - East Bellevue Community Council
- Interest Groups
 - Bellevue Chamber of Commerce
 - Bellevue Downtown Association
 - Others by invitation



Multimodal Level-of-Service

- Growth Management Act – jurisdictions must:
 - Implement multimodal transportation improvements concurrent with development
 - Adopt a performance (level-of-service) standard for concurrency
 - Adopt ordinances to enforce the concurrency standard

“Transportation concurrency should encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.”

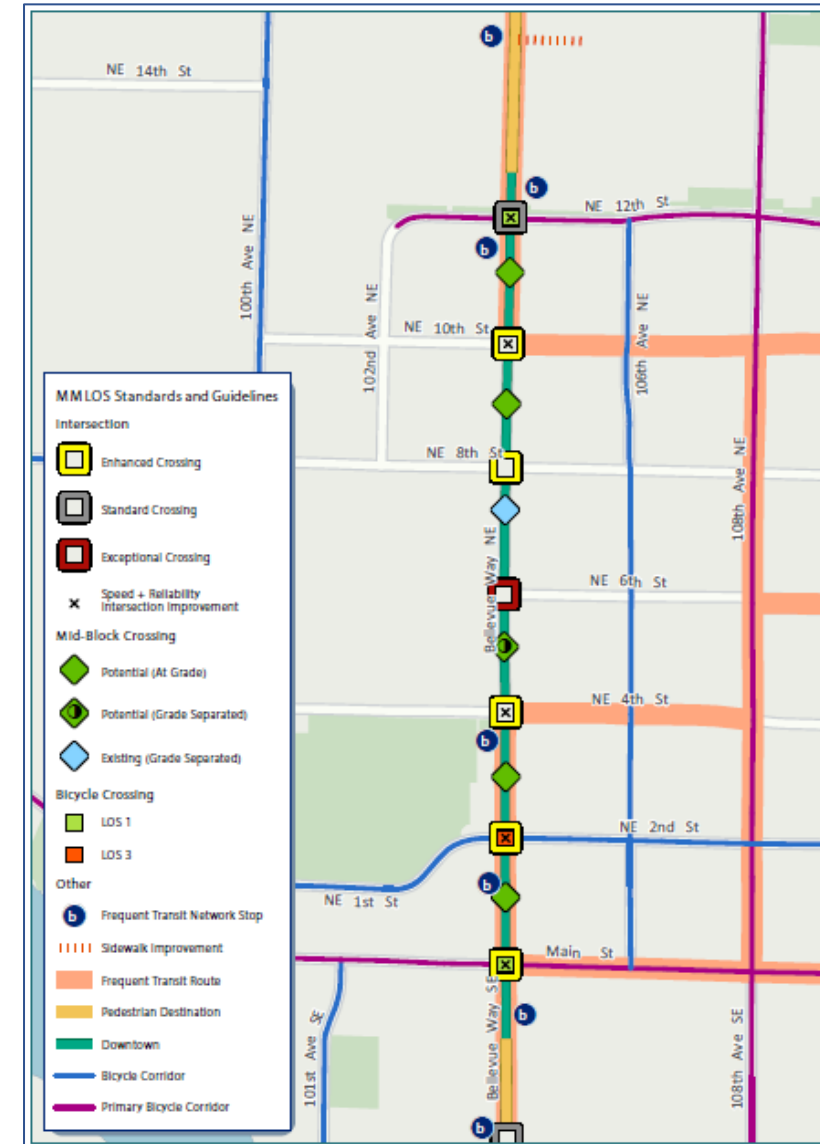
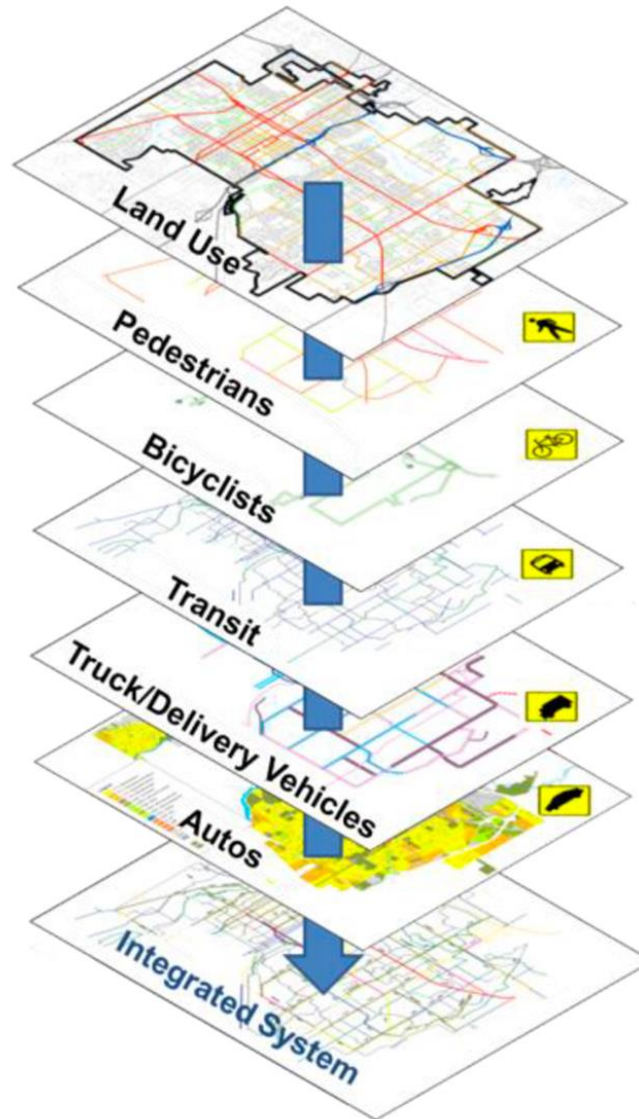
Multimodal Level-of-Service

- Washington Administrative Code further describes concurrency:
 - *"A county or city may select different ways to measure travel performance and may choose to focus on the total multimodal supply of infrastructure available for use during a peak or off-peak period."*
 - *"Multimodal level-of-service methodologies and standards should consider the needs of travelers using the four major modes of travel (auto, public transportation, bicycle, and pedestrian), their impacts on each other as they share the street or intersection, and their mode specific requirements for street and intersection design and operation."*

More information and links:
 Bellevue Mobility Implementation Plan: Background, Context, Existing Conditions, and Best Practices.

Layered Network

- Fundamental component of earlier MMLOS work
- Context-based
 - Land use
 - Transportation system
 - User expectations
 - Modal priority



Performance Metrics: Summary

Mode	TC Recommendation from MMLOS	Staff Proposal for MIP
	<i>MMLOS Metric</i>	<i>MIP Metric</i>
Pedestrian	Width of Sidewalk + Landscape	Same as MMLOS
	Frequency and Treatment of Arterial Crossings	
Bicycle	Level of Traffic Stress	
	Corridors and Intersections	
Transit	Bus Stop Components	
	Transit Speed on Frequent Transit Network between Activity Centers	
	Volume/Capacity at System Intersections	
Vehicle	Corridor Travel Speed	

Vehicle LOS – Existing Conditions

**Existing
MMA Category**

**Existing
V/C Standard**

**Downtown/
Regional Center**

0.95

Activity Area

0.95

**Mixed Commercial/
Residential Areas**

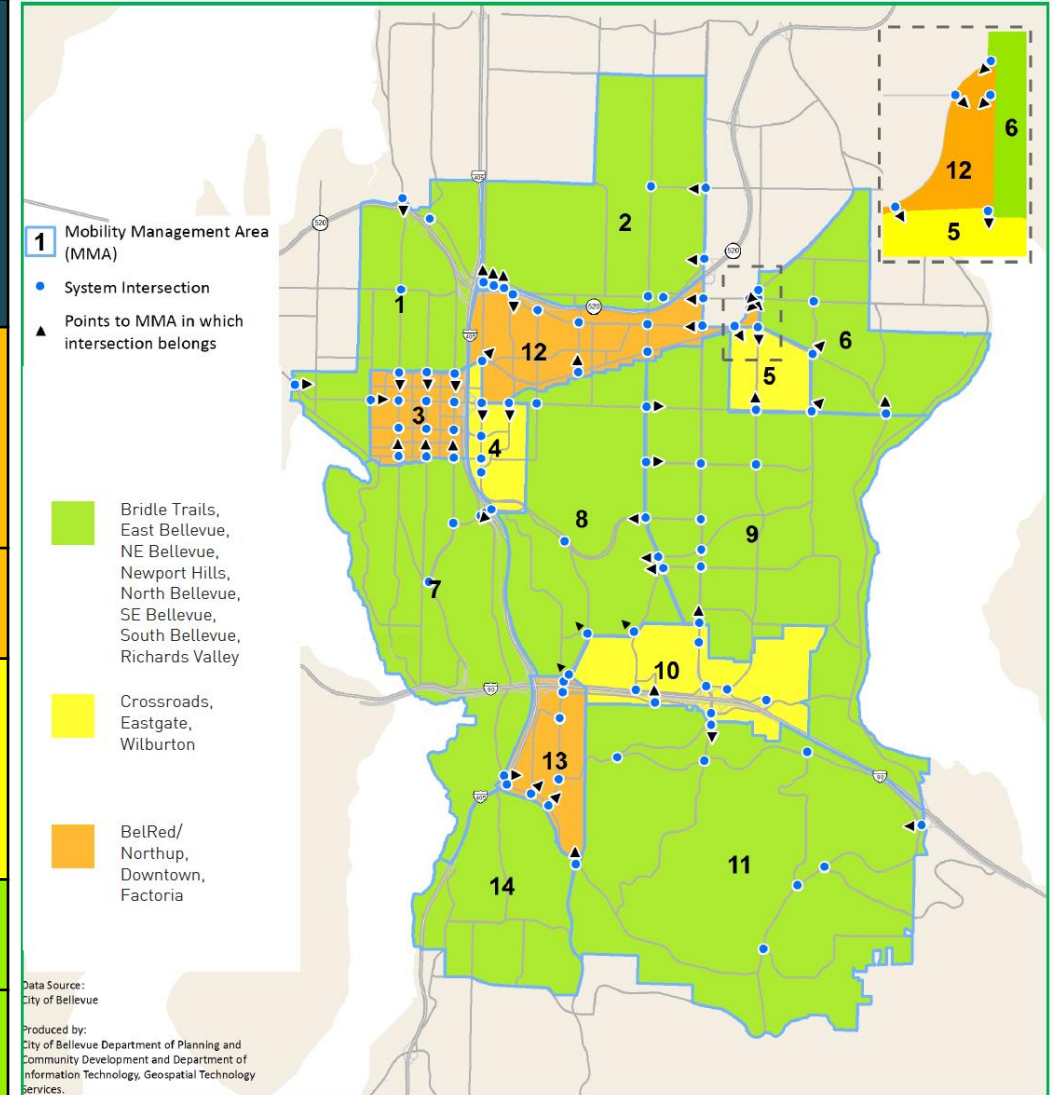
0.90

Residential Group 1

0.85

Residential Group 2

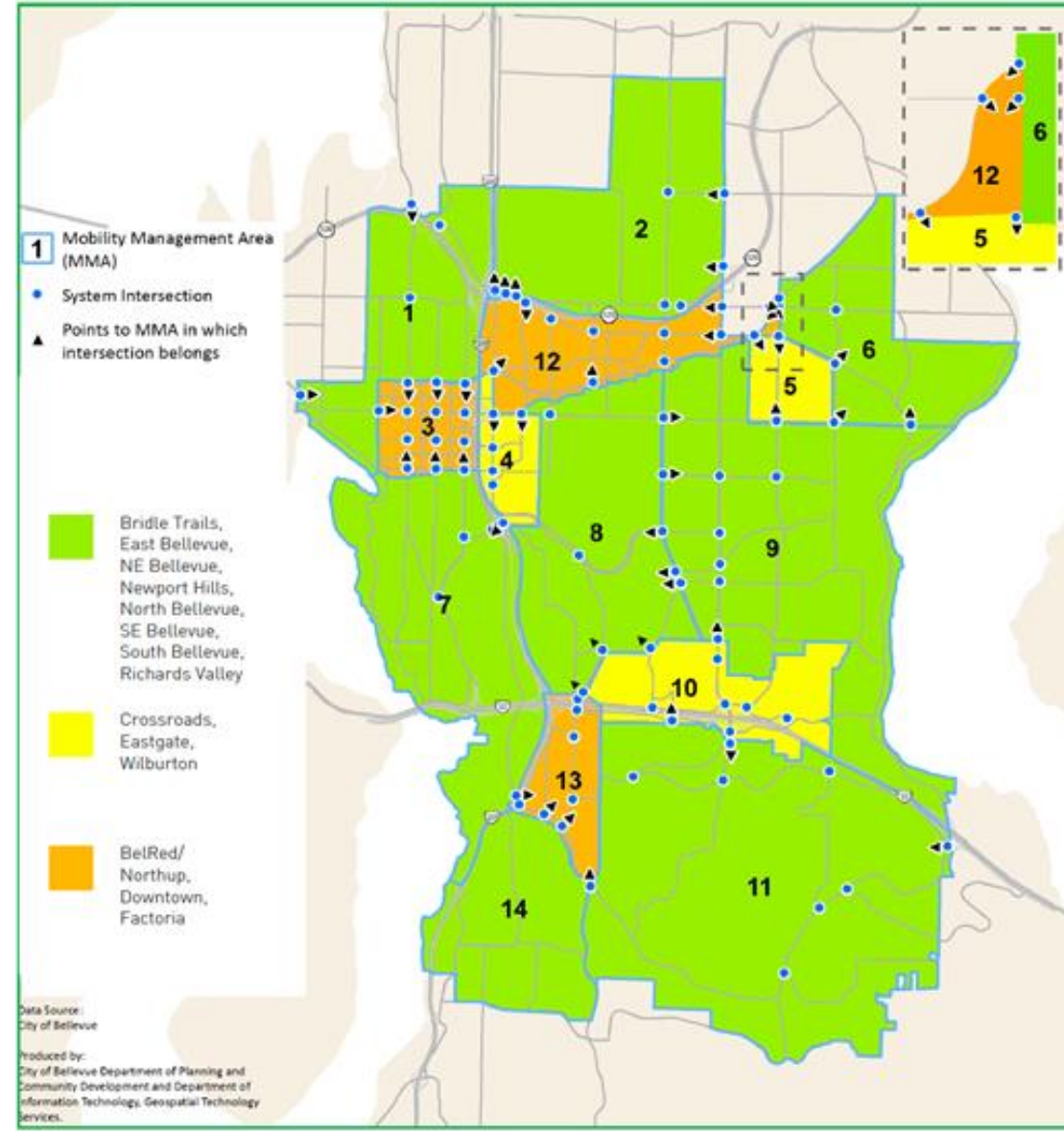
0.80



Vehicle LOS – Mobility Management Areas

Traffic Standards Code establishes 14 Mobility Management Areas

- 99 System intersections citywide
 - MMA 14: Newport Hills: 0 system intersections
 - MMA 12: Bel-Red/Northup: 15 system intersections
- V/C is measured against the LOS standard for the MMA
- Averaged within the MMA
- Congestion allowance



Vehicle Performance Metrics for Concurrency

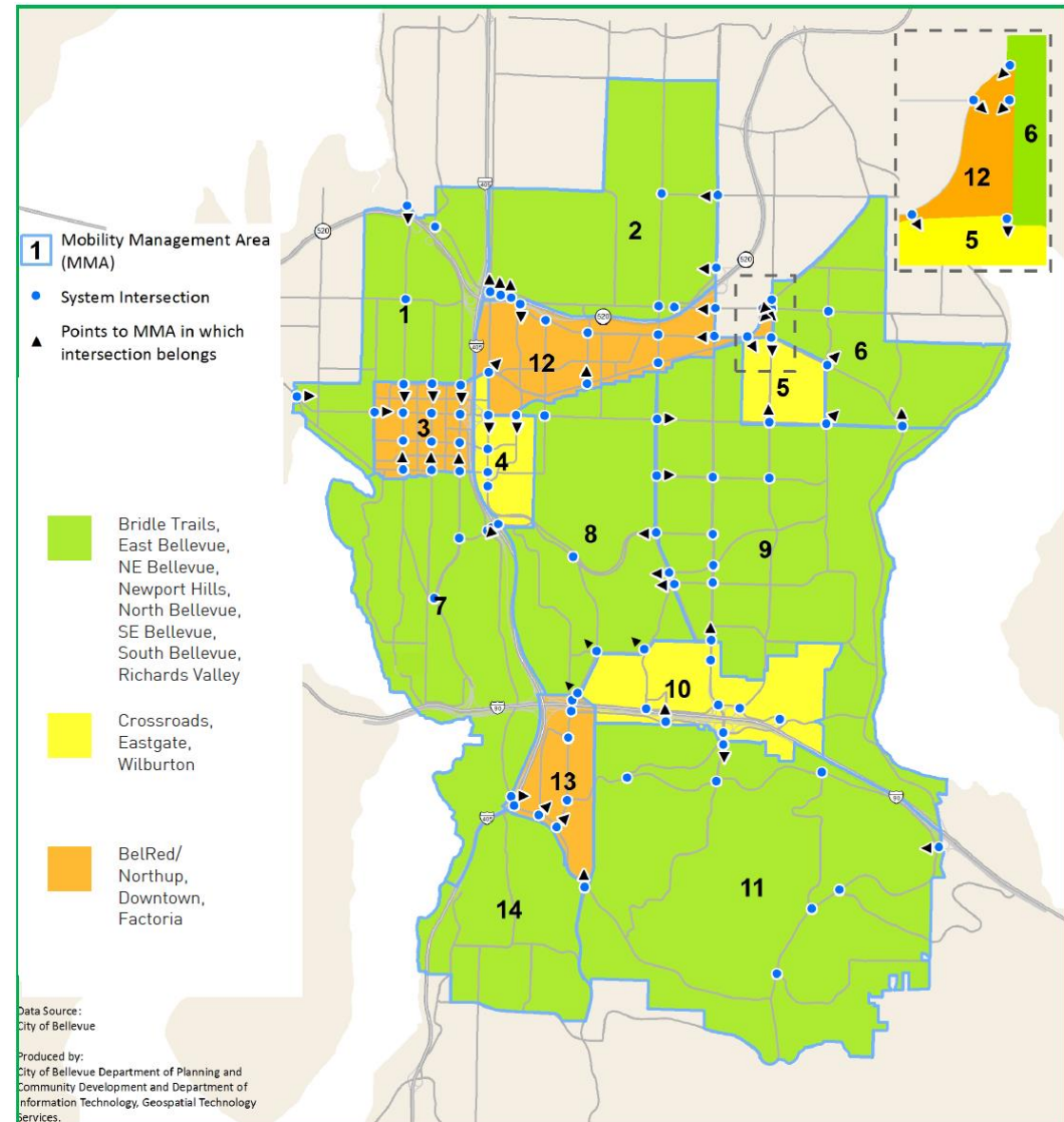
Performance Metrics for MIP are the same as TC recommended in MMLoS Metrics, Standards, and Guidelines

- V/C at system intersections
- Corridor travel speed
- PM peak period (4-6 PM)
- Measure driver comfort



New Concept: Corridor Based Performance Targets

- Based on staff discussions of what is not working well with today's system
- Some corridors primarily serve dense areas but travel through residential areas
- Context of corridor function is not included in current system
- Bellevue Way example



Performance Targets – Vehicles @ Intersections

Existing MMA Category	Existing V/C Standard	Staff-Proposed Performance Management Area Corridor Category	V/C Performance Target
Downtown/ Activity Centers	0.95	Downtown, BelRed, Wilburton	TBD
Mixed Commercial/ Residential Areas	0.95	Factoria	TBD
	0.90	Crossroads, Eastgate	
Residential Group 1	0.85	Residential Group	TBD
Residential Group 2	0.80		

Performance Targets – Vehicles on Corridors

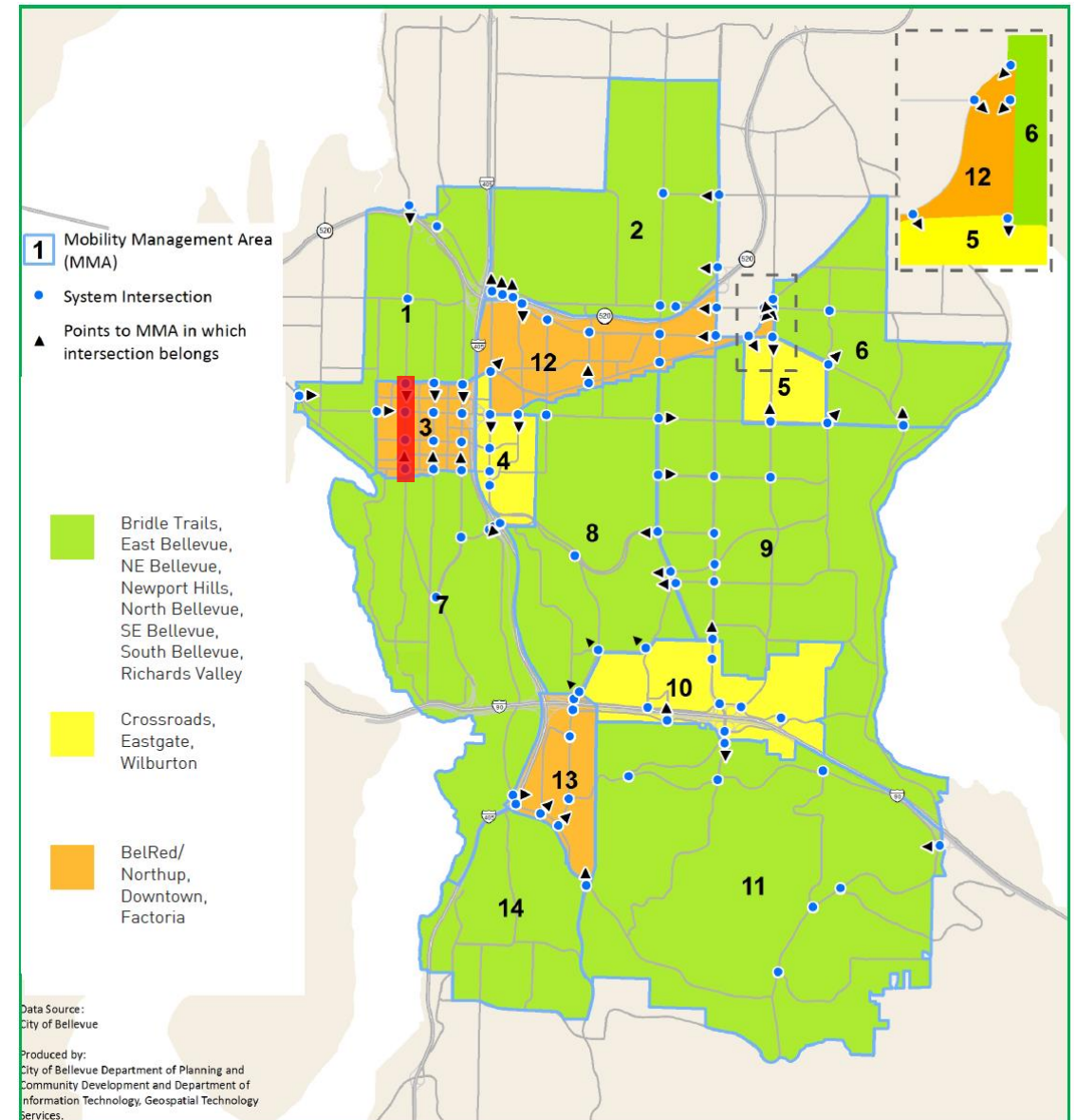
	TC Recommendation from MMLOS	Staff Proposal for MIP
Vehicle	MMLOS Guideline	MIP Target
	40% Speed Limit with MMA Group Overlay	40% Speed Limit with Proposed Performance Management Area Overlay

Land Use Category	Typical Urban Travel Speed - MMLOS Based on 40% of Posted Speed Limit within Performance Management Area Groups	Typical Urban Travel Speed Performance Target Mobility Implementation Plan
Downtown/ Activity Center	Between 0.75 and 0.5 times the Typical Urban Travel Speed	TBD
Mixed Commercial/ Residential	Between 0.9 and 0.75 times the Typical Urban Travel Speed	TBD
Residential Group	Between 1.1 and 0.9 times the Typical Urban Travel Speed	TBD

Corridor Based Vehicle Performance Targets

Bellevue Way Example

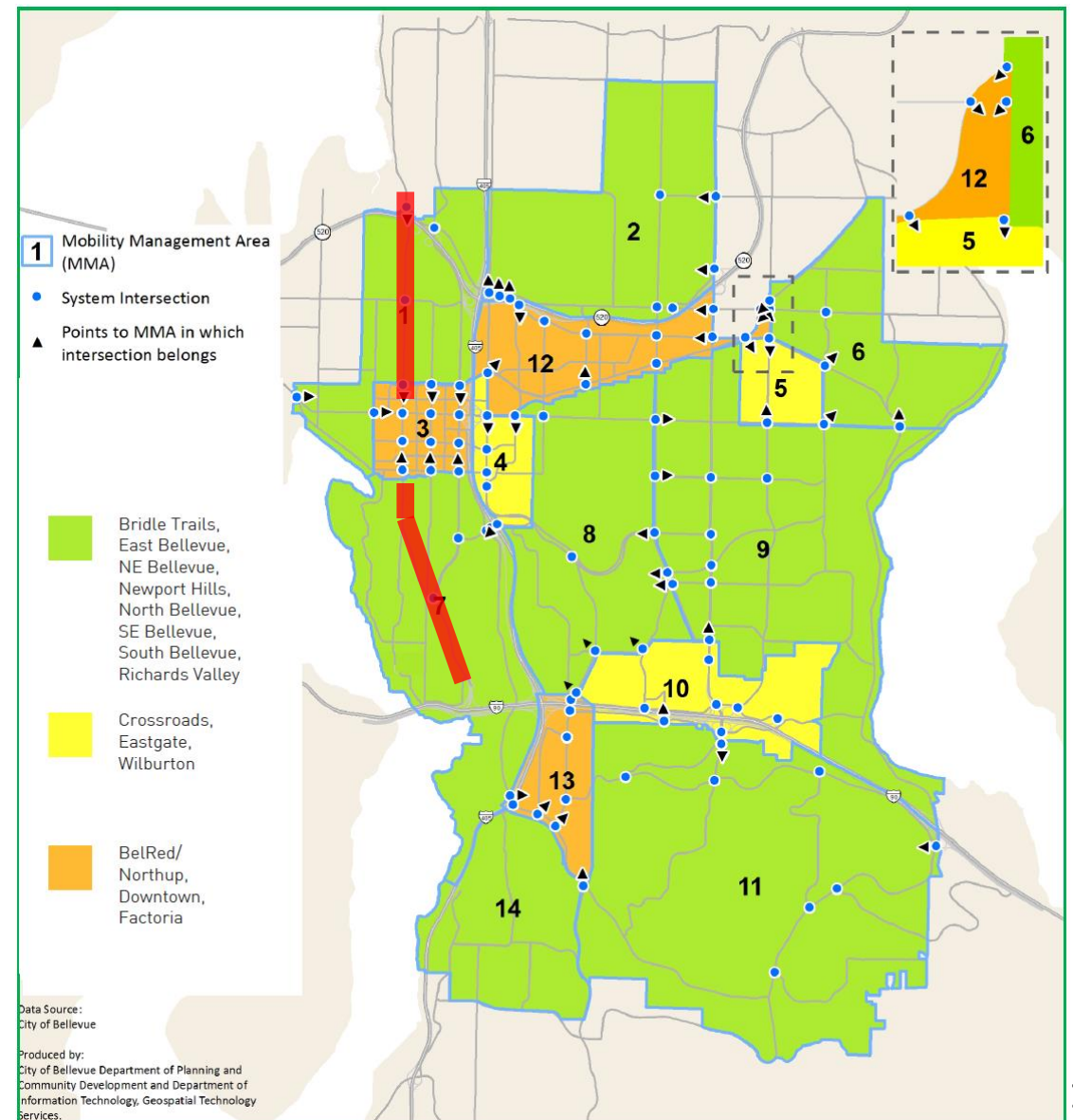
- Downtown section:
 - v/c Performance Target: 0.95
 - Travel Speed Performance Target:
 - 0.75 to 0.5 times typical urban travel speed
 - 9-6 MPH



Corridor Based Vehicle Performance Targets

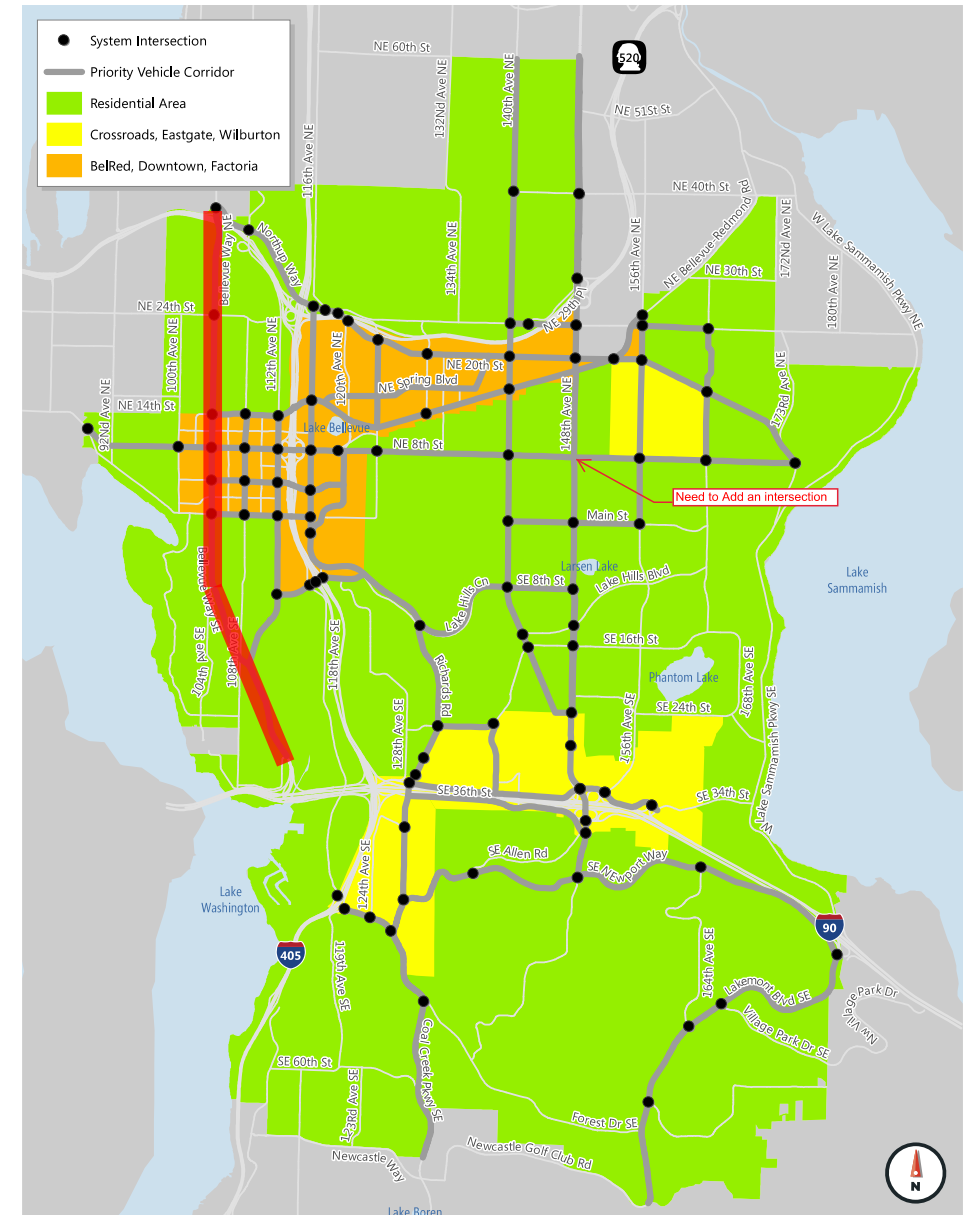
Bellevue Way Example

- North and South Bellevue sections:
 - v/c Performance Target: 0.85
 - Travel Speed Performance Target:
 - 1.1 to 0.9 times typical urban travel speed
 - 16-13 MPH
- Practicality of maintaining relatively uncongested conditions on route connecting downtown to regional highways



Corridor-Based Performance Targets

- Staff proposal: Define vehicle LOS Performance Targets using a corridor-based approach, rather than PMAs alone
- Performance Target informed by PMA
- Corridor function is taken into account
- All intersections and corridor segments evaluated
- Performance Target averaged over corridor functional group or PMA
- TC asked to recommend Performance Targets and finalize PMAs
- Existing conditions analysis will help guide discussion

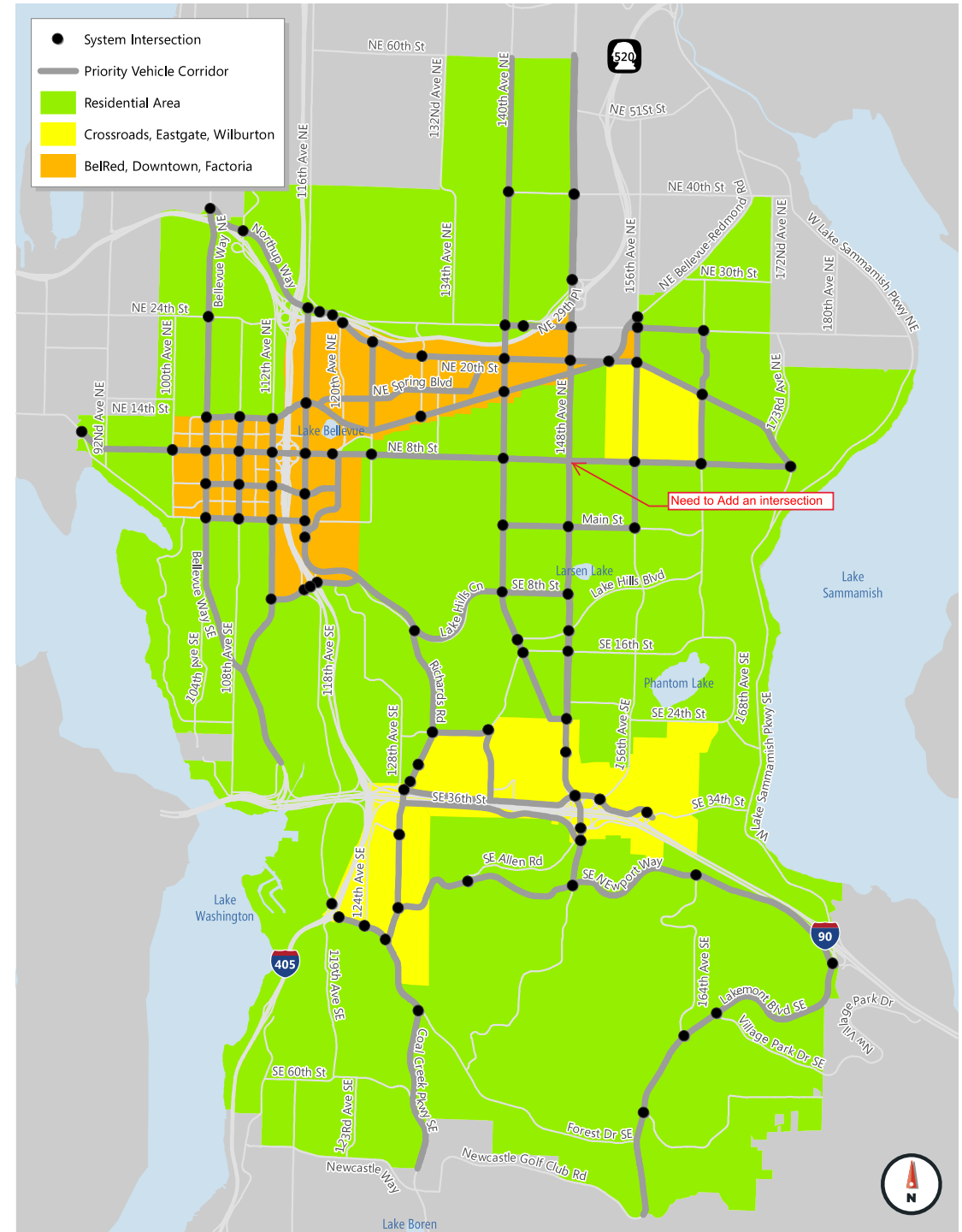


Performance Metrics and Targets – Summary

	TC Recommendation for MMLOS			Mobility Implementation Plan		
Mode	MMLOS Metric	MMLOS Target	MMLOS Geography	MIP Metric	MIP Target	MIP Geography
Pedestrian	Width of Sidewalk + Landscape	Varies by Land Use	Arterials Citywide	Per MMLOS	Per MMLOS	Per MMLOS
	Frequency and Treatment of Arterial Crossings	Varies by Land Use	Arterials Citywide	Per MMLOS	Per MMLOS	Per MMLOS
Bicycle	Level of Traffic Stress Corridors and Intersections	LTS 1 on Priority Bicycle Corridors LTS 2 or 3 on Bicycle Network Corridors	Citywide Corridors and Intersections	Per MMLOS	Per MMLOS	Per MMLOS
Transit	Transit Speed on Frequent Transit Network between Activity Centers	14 mph between Activity Centers	FTN between Activity Centers	Per MMLOS	Per MMLOS	Per MMLOS
	Bus Stop Components	Varies by Bus Stop Type	Citywide	Per MMLOS	Per MMLOS	Per MMLOS
Vehicle	Volume/Capacity at System Intersections	Varies by MMA	Mobility Management Area	V/C	TBD	TBD
	Corridor Travel Speed	40% Speed Limit with MMA Group Overlay	Primary Vehicle Corridor	Corridor Travel Speed	TBD	TBD

Discussion

- Clarifying questions
- Questions, comments or recommendations on Vehicle Level-of-Service
 - Performance Metrics
 - Performance Management Areas
- Questions or comments on Vehicle Level-of-Service
 - Performance Targets



Next Steps

July 8 TC Meeting

- Review existing conditions MMLoS performance relative to 2017 Performance Targets
- Preliminary TC concurrence on approach using corridors

July 22 TC Meeting

- Review future growth forecast of MMLoS performance relative to 2017 Performance Targets
- Equity Index preliminary recommendation and results of existing conditions analysis
- MIP Supplemental Environmental Metrics





Thank You!



Level-of-Service in Bellevue

Toward a Multimodal Approach to Mobility

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Please visit the

[Mobility Implementation Plan](#) web site