

2020 Concurrency Update

Transportation Commission Briefing
September 10, 2020

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Why are we here

To brief the Commission about

- Findings from 2020 concurrency update
- How the concurrency tool will be used in development review
- Limitations of the existing standards and methodology

No action is requested of the Commission

What is a currency report?

An assessment of the performance of

- The existing roadway system
- When approved development and six-year Capital Investment Program (CIP) projects are in place.

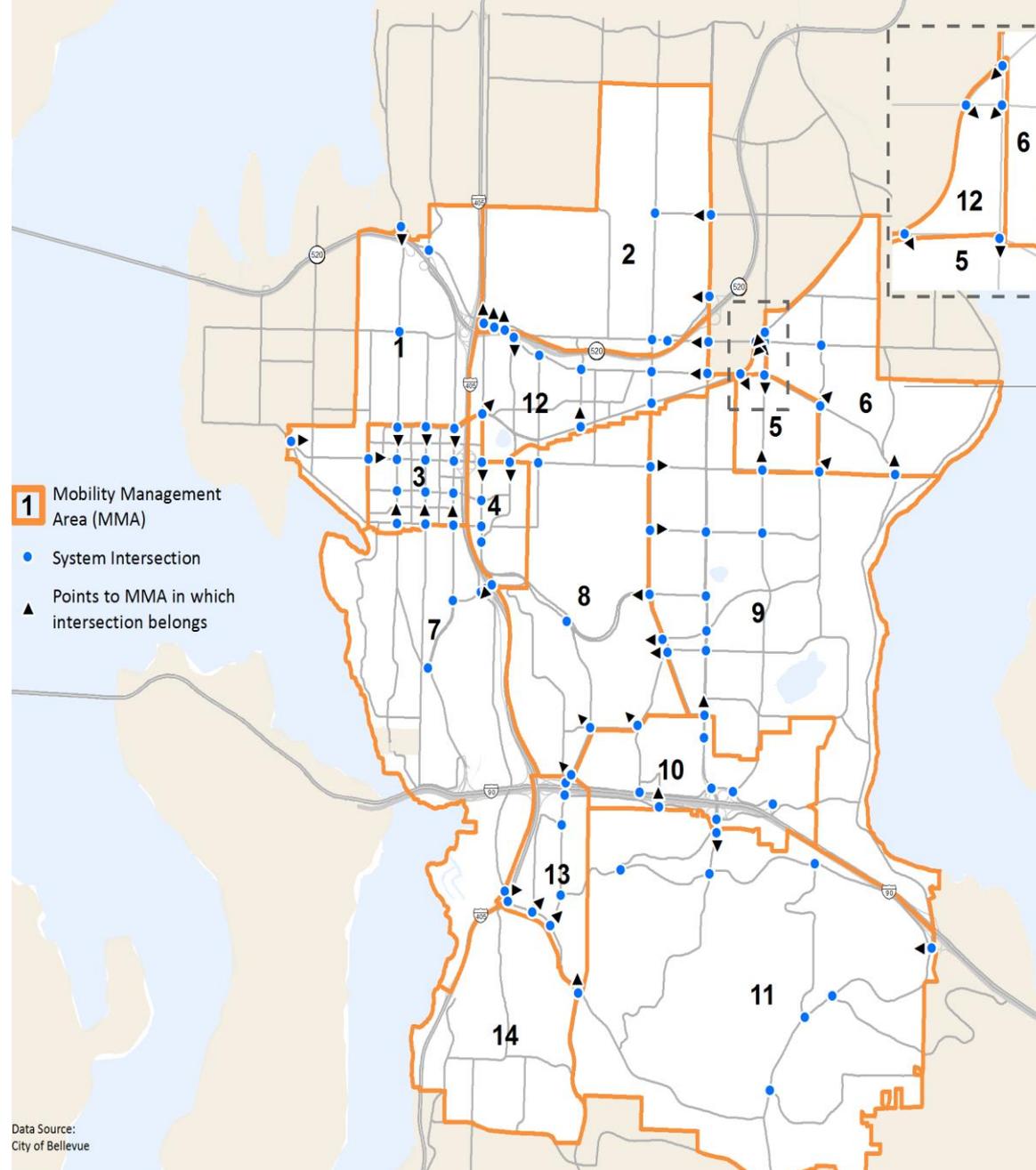
It is performed to fulfill GMA requirement

It is codified in the City's Traffic Standards Code (Chapter 14.10)

Bellevue's Traffic Standards Code

Two metrics for intersections in each MMA:

- Volume/Capacity ratio
- Congestion Allowance



What are the standards?

MMA		Concurrency Standard	
		V/C Ratio	Congestion Allowance
1	North Bellevue	0.85	3
2	Bridle Trails	0.80	4
3	Downtown	0.95	9
4	Wilburton	0.90	3
5	Crossroads	0.90	2
6	Northeast Bellevue	0.80	2
7	South Bellevue	0.85	4
8	Richards Valley	0.85	5
9	East Bellevue	0.85	5
10	Eastgate	0.90	4
11	Southeast Bellevue	0.80	3
12	BelRed/Northup	0.95	7
13	Factoria	0.95	5
14	Newport Hills*	-	-

Methodology and Process

Tools:

- BKR Model
- LOS analysis tools developed in-house

Inputs:

- Existing transportation system
- Existing development
- Approved development
- Funded projects (CIP and Congestion Levy)

Analysis Period:

- 4:00 – 6:00 PM peak period on a typical weekday

Methodology Improvements

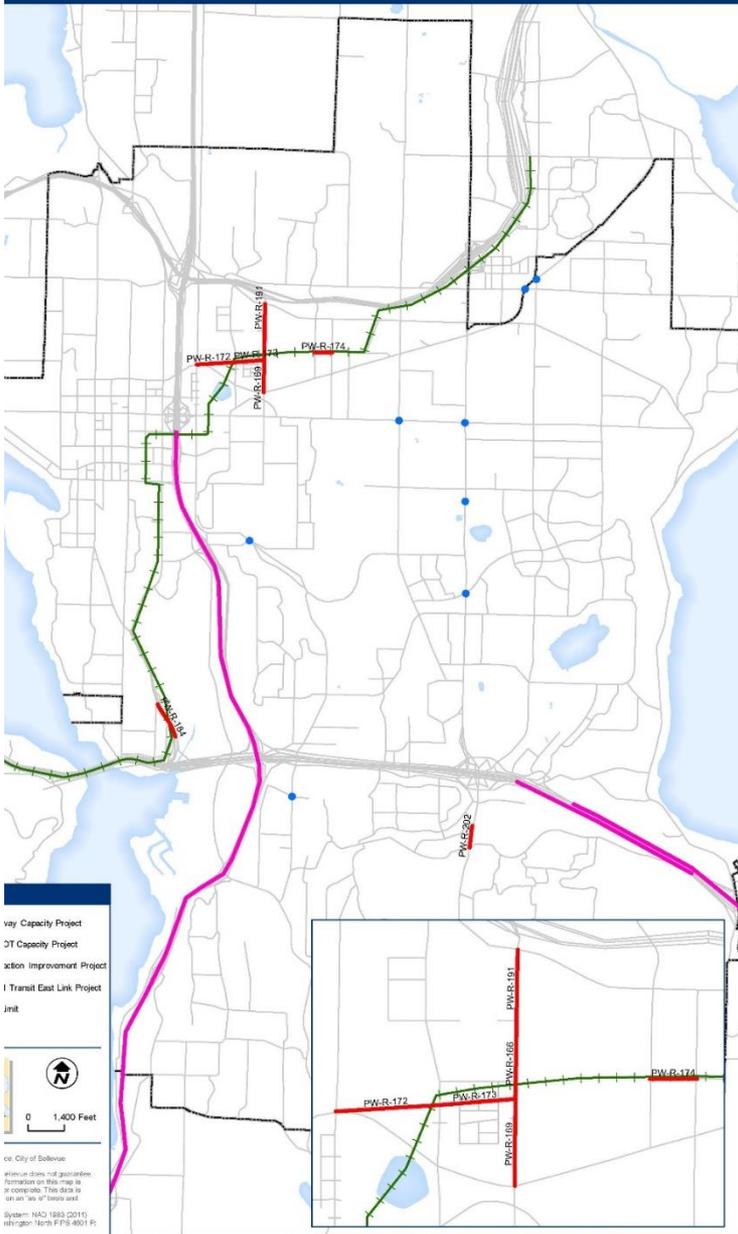
Used the New BKR model – BKRCast

- Non motorized travel are more explicitly represented
- More zones and network details
- More sensitive to land use density and mixed uses
- More realistically model individual daily activities and travel behaviors
- More sensitive to time of day travel and peak spreading

Approved developments

As of December 2019

MMA	Name	Commercial Square Feet	Residential Units
1	North Bellevue	1,600	-
2	Bridle Trails	70,800	4
3	Downtown	2,378,900	1,820
4	Wilburton	434,200	-
5	Crossroads	-	11
6	Northeast Bellevue	-	9
7	South Bellevue	124,000	13
8	Richards Valley	44,300	2
9	East Bellevue	220,300	58
10	Eastgate	-	1
11	Southeast Bellevue	-	18
12	Bel-Red Northup	1,232,900	539
13	Factoria	-	4
14	Newport Hills	-	13
Total		4,507,000	2,492



Capacity Projects Included In the Analysis

- 124th Ave. NE - NE 12th St. to Northup Way
- 130th Ave. NE- NE 20th to NE Bel-Red Rd.

- NE Spring Boulevard Stage 1 & 2
- Newport Way/150th Ave SE
- 148th Ave./Lake Hills Blvd.
- 148th Ave. SE/Kelsey Creek Shopping Center
- 148th Avenue NE/NE 8th St.
- NE 8th St./140th Ave. NE
- Lake Hills Connector/SE 8th St.
- I-90 Auxiliary Lanes (WSDOT)
- I-405 Express Toll Lanes (WSDOT)
- Bellevue Way/ 112th Ave. S Bellevue P & R to I-90 (Sound Transit)
- East Link Light Rail (Sound Transit)

Findings

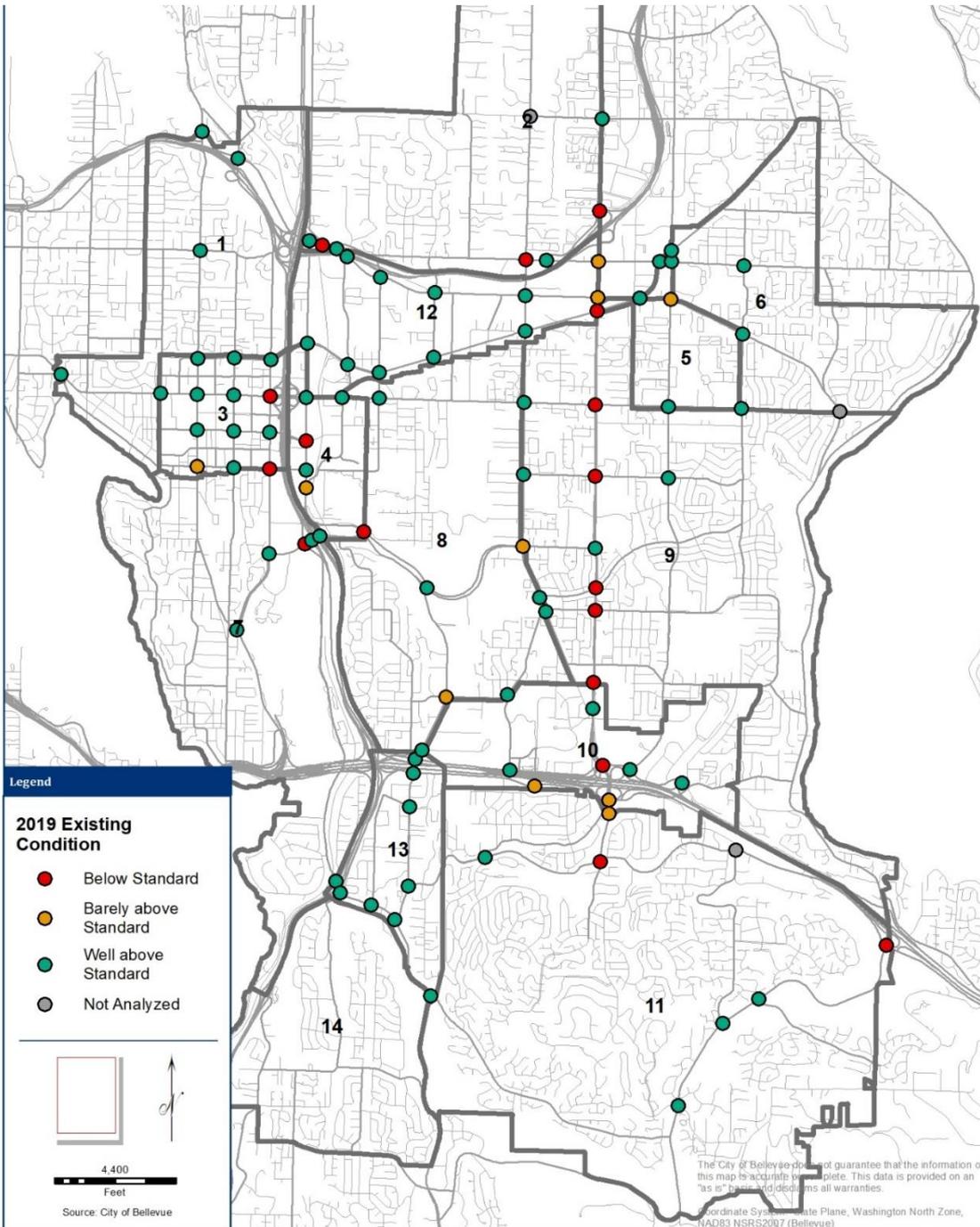
The existing roadway system meets the city's traffic standards

- All MMAs are within the average V/C ratios allowed by the concurrency standard
- All MMAs meet their congestion allowance

MMA		Concurrency Standard		2019 Existing Condition				2020 Concurrency Platform			
		V/C Ratio	Congestion Allowance	V/C Ratio Test		Congestion Allowance Test		V/C Ratio Test		Congestion Allowance Test	
				V/C Ratio	Standard Met?	No of Intersections Below the Standard	Standard Met?	V/C Ratio	Standard Met?	No of Intersections Below the Standard	Standard Met?
1	North Bellevue	0.85	3	0.64	Yes	0	Yes	0.66	Yes	0	Yes
2	Bridle Trails	0.80	4	0.69	Yes	3	Yes	0.71	Yes	3	Yes
3	Downtown	0.95	9	0.72	Yes	2	Yes	0.82	Yes	3	Yes
4	Wilburton	0.90	3	0.75	Yes	1	Yes	0.81	Yes	1	Yes
5	Crossroads	0.90	2	0.71	Yes	0	Yes	0.70	Yes	0	Yes
6	N-E Bellevue	0.80	2	0.70	Yes	0	Yes	0.70	Yes	0	Yes
7	South Bellevue	0.85	4	0.76	Yes	1	Yes	0.76	Yes	2	Yes
8	Richards Valley	0.85	5	0.70	Yes	1	Yes	0.73	Yes	1	Yes
9	East Bellevue	0.85	5	0.83	Yes	5	Yes	0.80	Yes	4	Yes
10	Eastgate	0.90	4	0.72	Yes	1	Yes	0.73	Yes	2	Yes
11	S-E Bellevue	0.80	3	0.71	Yes	2	Yes	0.73	Yes	1	Yes
12	Bel-Red/Northup	0.95	7	0.73	Yes	1	Yes	0.74	Yes	2	Yes
13	Factoria	0.95	5	0.79	Yes	0	Yes	0.80	Yes	0	Yes
14	Newport Hills*	-	-	-	-	-	-	-	-	-	-

Analysis Results

2019 Existing Condition



How is the “concurrency platform” used in development review?

It is used to test proposed development and answer:

- Does average V/C for each MMA meet the standard?
- Does the number of “failed” intersections exceed the congestion allowance?

The results inform our Development Services Department if development should be:

- Approved, or
- Approved with mitigations requirement, or
- Denied

Observations about the existing standards

- The current standards and methodology are auto focused
- Performances are measured at about 100 “System Intersections”
- The performance of transit and nonmotorized modes was not measured
- This approach to concurrency is not comprehensive and not sustainable
- An update to the Standards is needed

Questions and Discussion

Thank You!

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