



OR 99W South Corvallis Facility Plan

Stakeholder Advisory Group Meeting 10

October 26, 2022

Agenda

1. Welcome & Meeting Purpose

2. Schedule Overview:
Recent Activities

3. Reminders: _____ Vision & Evaluation Criteria
_____ Project Alternatives
_____ Growth & No Build Considerations

4. Motor Vehicle Assessment

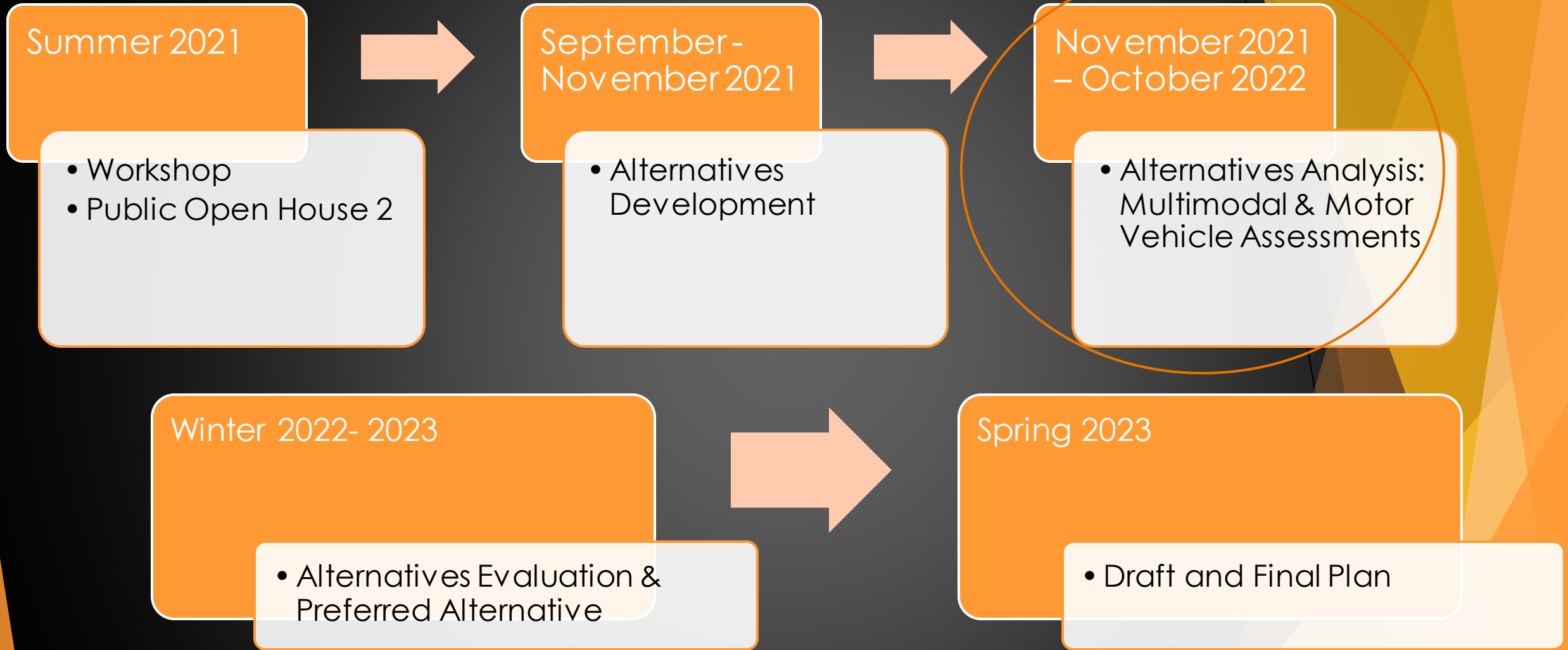
5. Next Steps & Adjourn

1. Welcome & Meeting Purpose



Remember core project decisions & review/discuss
motor vehicle analysis

2. Schedule Overview



3. Reminders

Corridor Vision

*“OR 99W (South 3rd Street) contributes to the sense of place and community identity desired by residents, business and property owners, and visitors to the South Corvallis area. People of **all ages and abilities** find facilities and amenities along the corridor that **safely support and comfortably encourage walking, biking, and the use of transit**. A mix of business and civic uses attract and serve adjoining neighborhoods, as well as the broader community, and the corridor is easy to find and travel to by all modes from nearby destinations, including those north of the river. The size, mix, and speed of transportation facilities (such as sidewalks, bike lanes, motor vehicle travel lanes) are **well-suited to the adjacent land uses** and character of each corridor segment. **Travel speeds are managed and crossing treatments are provided** such that people driving contribute to the sense of vitality, while not detracting from the safety or comfort of people of all ages and abilities. **Gateway features** reinforce the entry to Corvallis for travelers to recognize the character of the area and adapt their behaviors and expectations accordingly.”*

3. Reminders

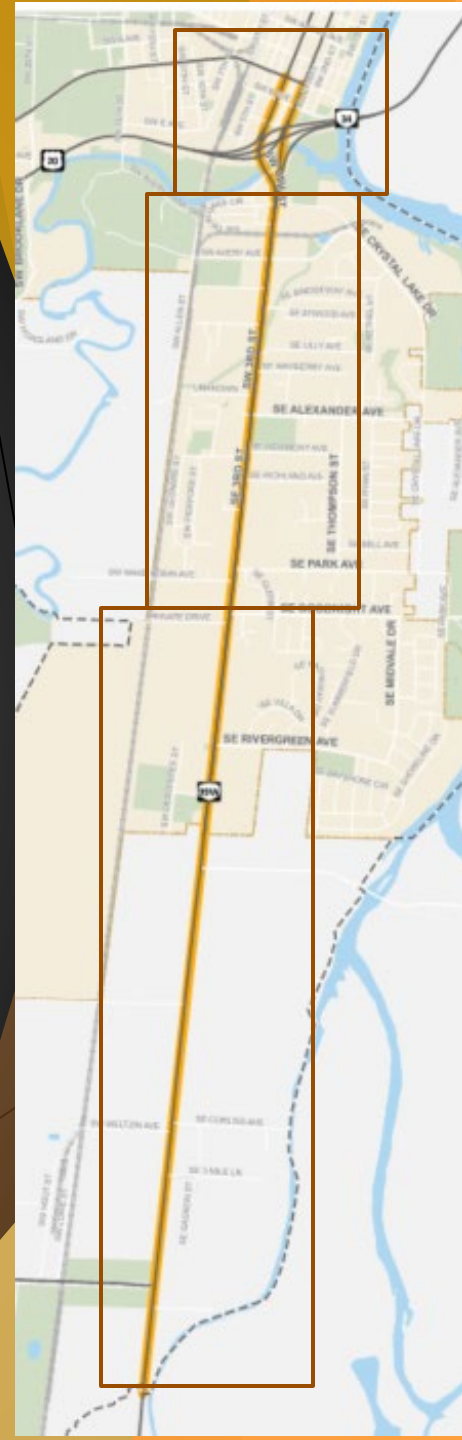
Evaluation Criteria and Performance Measures

- Criteria and meant to represent vital aspects of the corridor vision.
- Performance measures strive for equity in service to all modes and users.

Criteria	Measure(s)
Safety	Crash Reduction Factors (CRFs)
Convenience (Pedestrian and Bicycle)	Distance between crossings; what is reachable within a 15-min walk or bike ride on low stress facilities
Comfort (Pedestrian and Bicycle)	Pedestrian and bicycle LTS
Aesthetics	Qualitative assessment
Connectivity (Motorist)	Travel time
Feasibility	Anticipated cost; consistency with BUD
Equity and Suitability	Consistency with vision; expected to benefit transportation disadvantaged communities
Mode Split	Mode split for trips 3 miles or less

3. Reminders: Project Alternatives

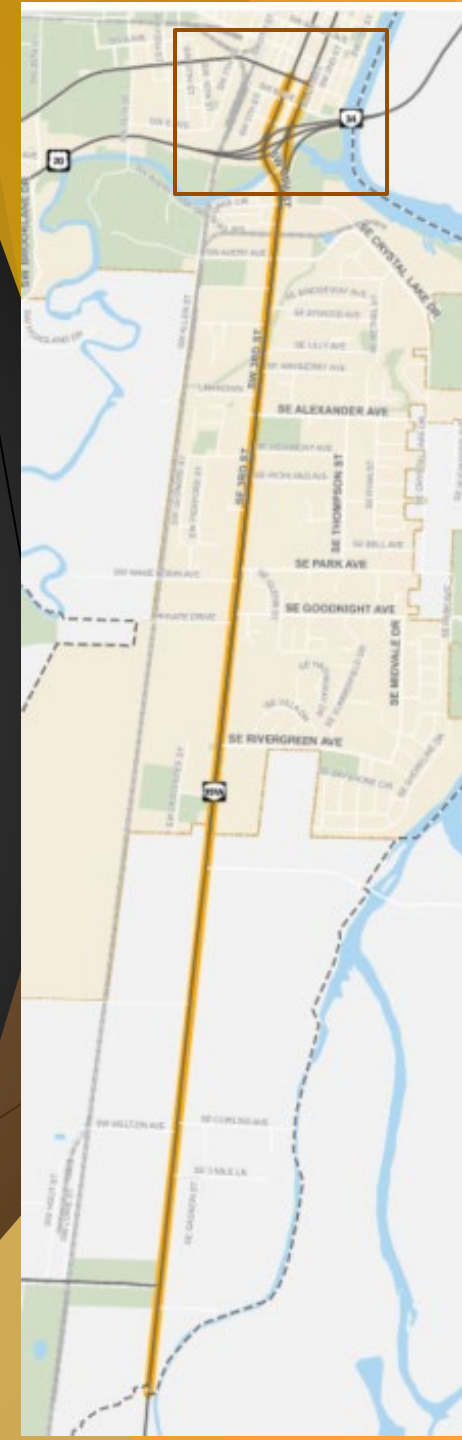
- ▶ Segment 1: Western Boulevard to SE Crystal Lake Drive
- ▶ Segment 2, Alternative A: SE Crystal Lake Drive to SE Goodnight Avenue
- ▶ Segment 2, Alternative B: SE Crystal Lake Drive to SE Goodnight Avenue
- ▶ Segment 3: SE Goodnight Avenue to Southern Urban Growth Boundary



3. Reminders: Project Alternatives

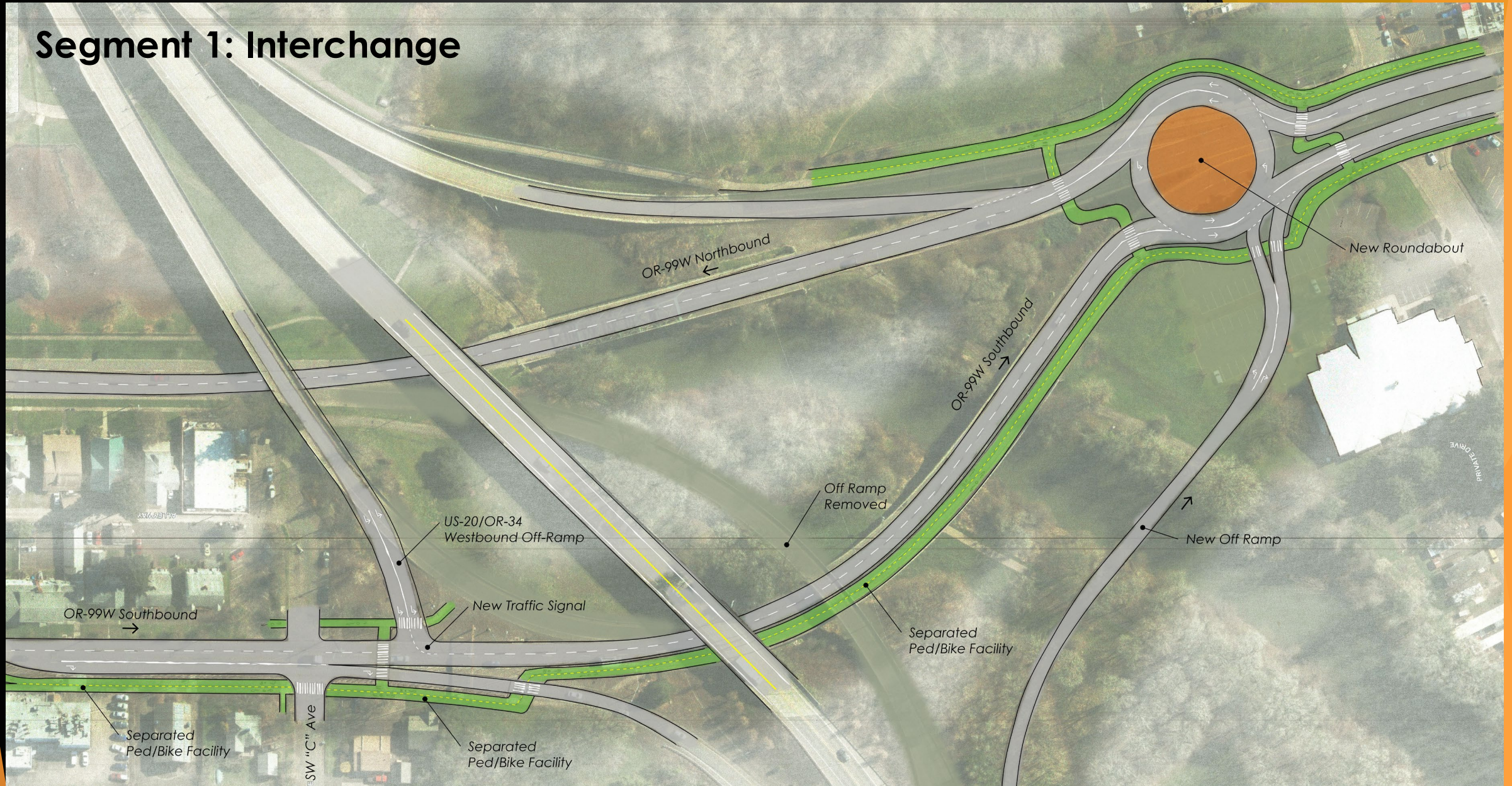
Segment 1: North of Interchange

- Identical treatments across alternatives
- Western Boulevard: add protected left-turns to reduce conflicts with pedestrians and through vehicles
- Two lanes southbound with a raised two-way shared use path
- Improved wayfinding for northbound existing trail
- Improve existing sidewalk condition and increase density of street trees adjacent to OR 99W northbound



3. Reminders: Project Alternatives

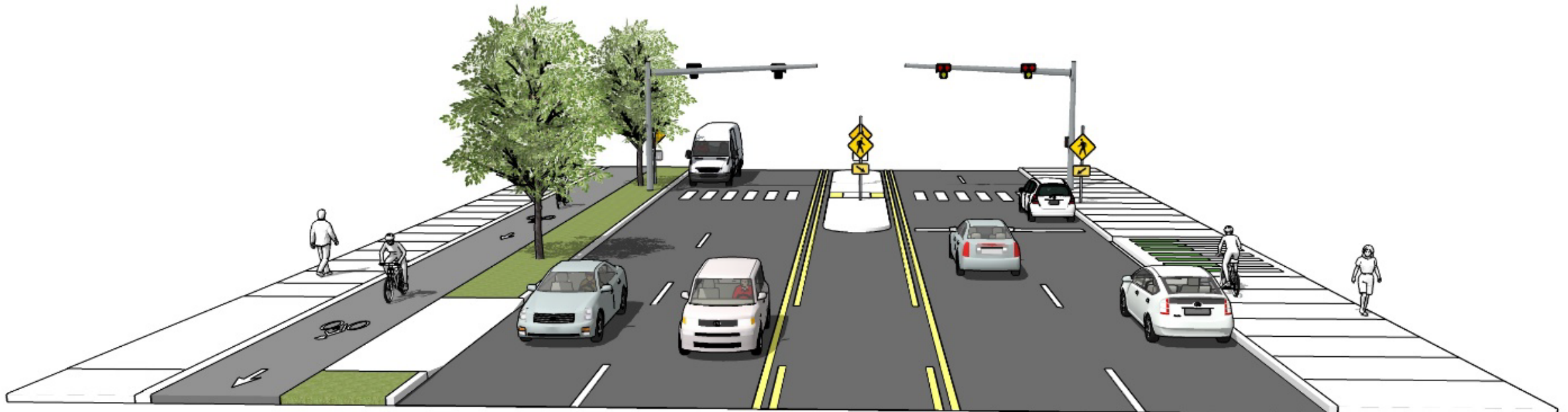
Segment 1: Interchange



3. Reminders: Project Alternatives

Segment 1: Interchange to Crystal Lake Drive

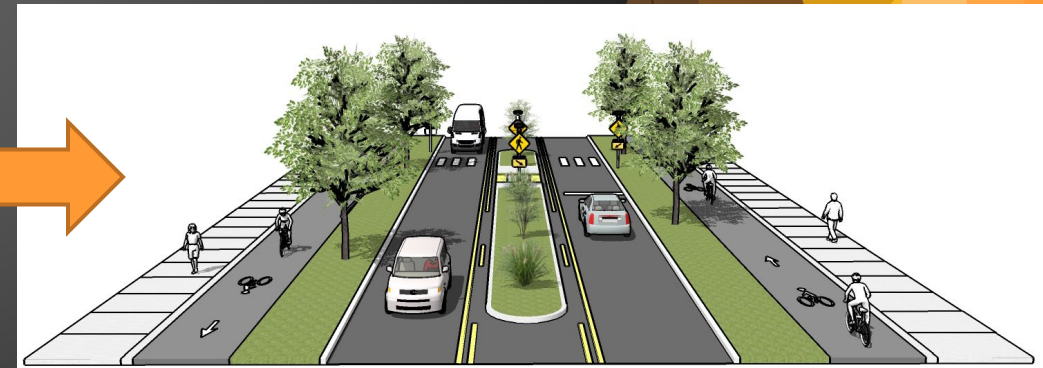
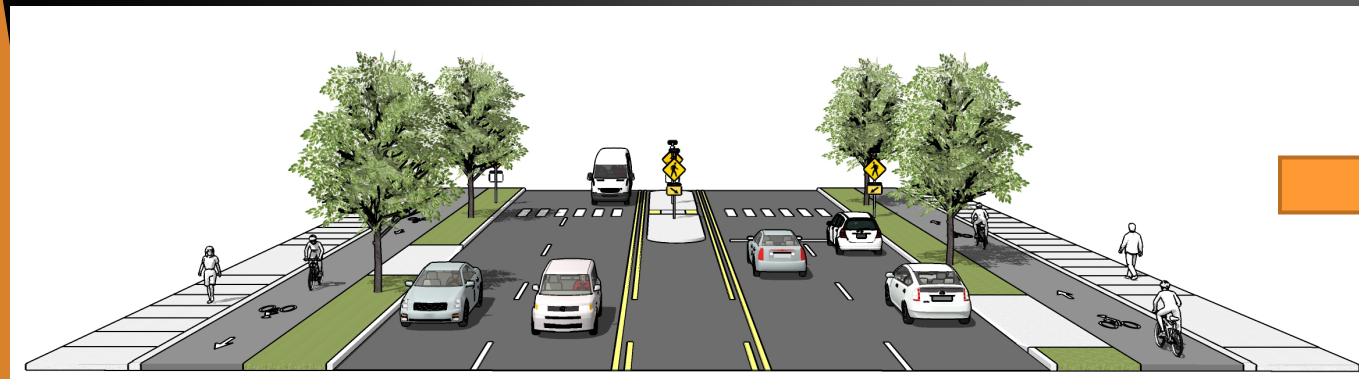
- Identical treatments for both alternatives
- Maintains the five-lane highway, adds separated bicycle and pedestrian facilities on the west side, and adds regular crossings



3. Reminders: Project Alternatives

Segment 2: Crystal Lake Drive to Goodnight Avenue

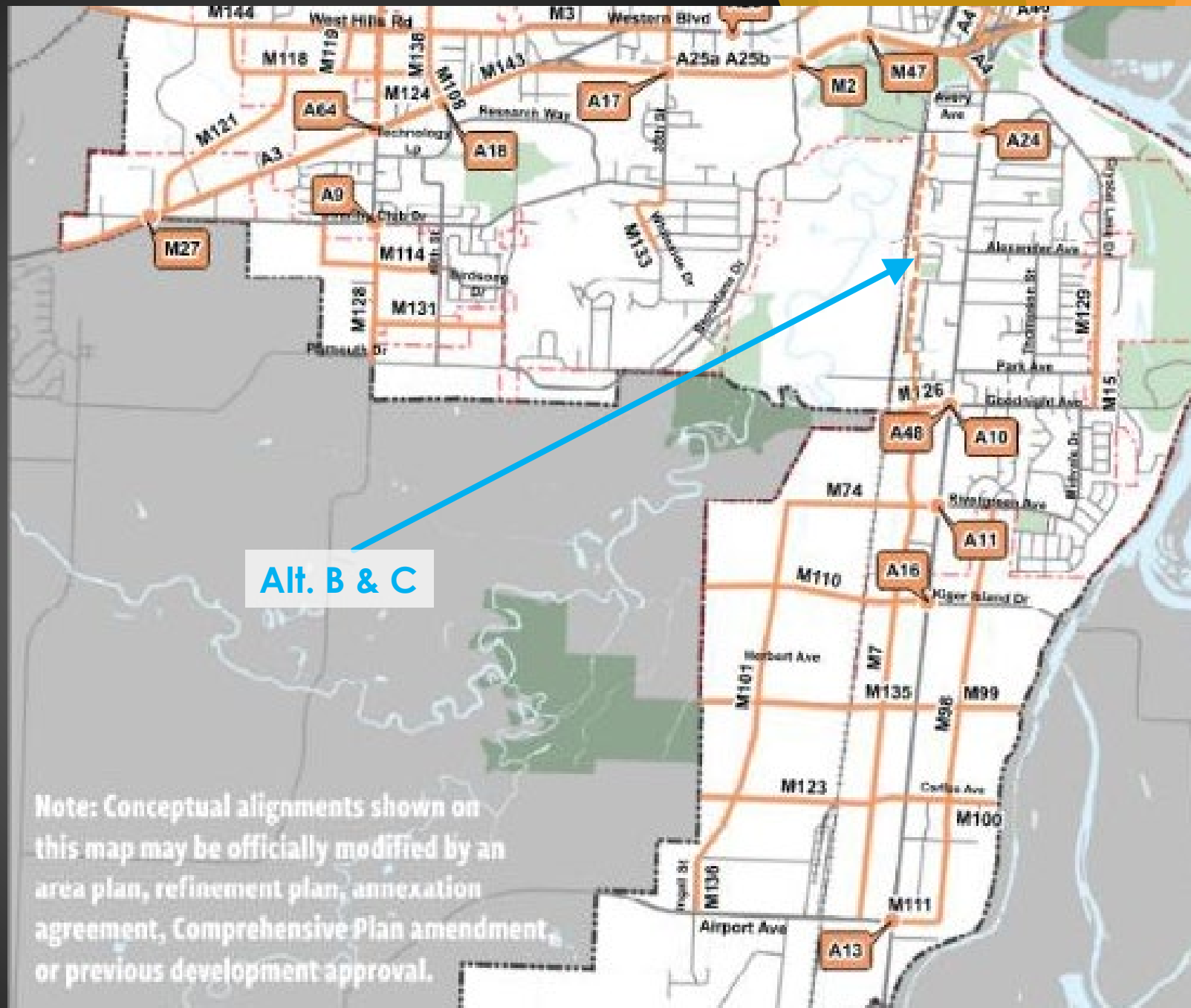
- Our alternatives transition from five-lanes to three-lanes at different locations:
 - Alternative A- transitions at Goodnight Avenue
 - Alternative B- transitions at Cummings Avenue (north of the Mill Race)
 - Alternative C- transitions at Prairie Avenue



3. Reminders: Project Alternatives

Proposed Parallel Networks:

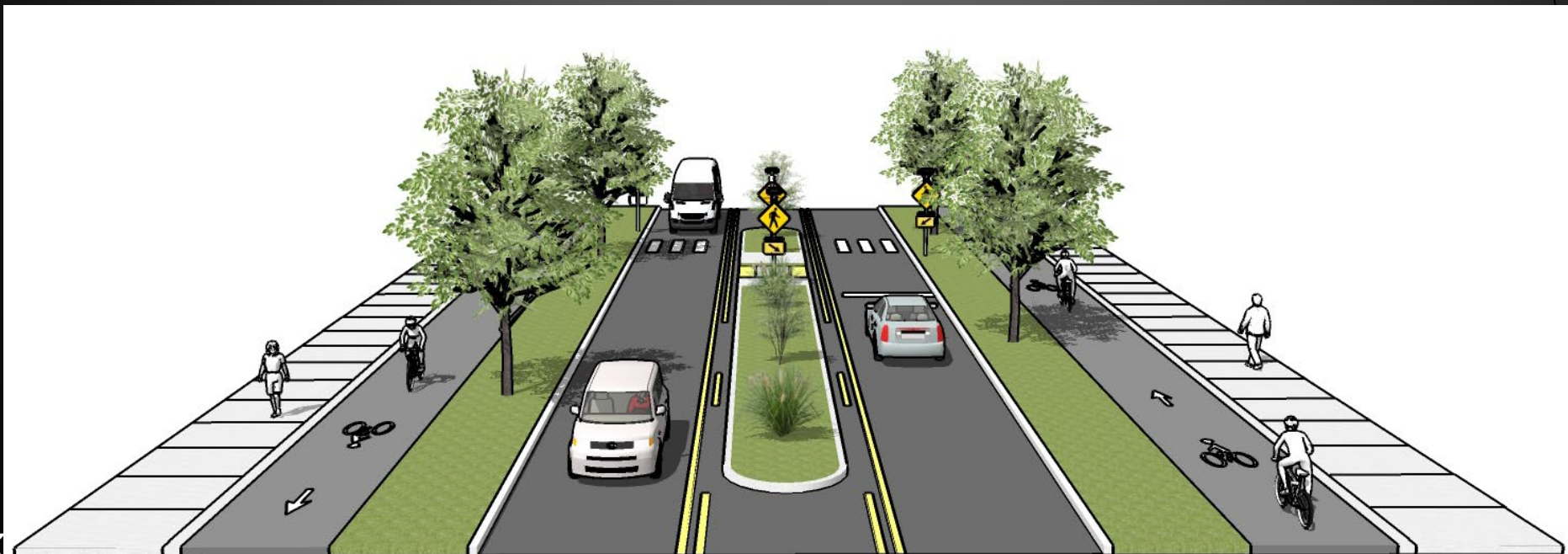
- **Alternative A (Goodnight)**- no added parallel network
- **Alternative B (Cummings)**- new parallel roadway from Avery Avenue to Goodnight Avenue
- **Alternative C (Prairie)** – partial parallel network between Avery and Goodnight (with a break at the Mill Race)



3. Reminders: Project Alternatives

Segment 3: Goodnight Avenue to Southern Urban Growth Boundary

- Identical treatments for all alternatives
- **Two to three-lane highway** with parallel side streets and includes roundabouts at key intersections, consistent medians with street trees, separated walking and biking facilities, regular crossings



3. Reminders: Growth & No-Build Considerations

Future Corvallis Considerations

- ▶ Alternatives are compared to no-build scenarios
- ▶ Anticipated to see quite a bit of development in south Corvallis between 2020 and 2040:
 - ▶ Corvallis's population to grow by 17% (62,900 to 73,700) and employment to grow 42% (32,900 to 46,700)
 - ▶ South Corvallis's population to grow by 35% (8,700 to 11,700) and employment by 85% (2,500 to 4,600)
- ▶ Daily traffic volumes grow too
 - ▶ Marys River crossings grow from 36,900 to 51,800 (40% increase)
 - ▶ Local traffic is 42% of daily river crossings
 - ▶ Through traffic is 58% of daily river crossings
- ▶ Some parallel network to 99W in the TSP, but otherwise reliant on the highway for all new local trips (trips within Corvallis), especially on the west side

4. Motor Vehicle Analysis

5. Next Steps

- ▶ Alternatives evaluation
- ▶ Preferred alternative development

Questions/Comments?

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Agency Project Manager

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Thank You!

OR 99W South Corvallis Facility Plan

Motor Vehicle Alternatives Analysis Summary

SAG Meeting #10

October 26, 2022

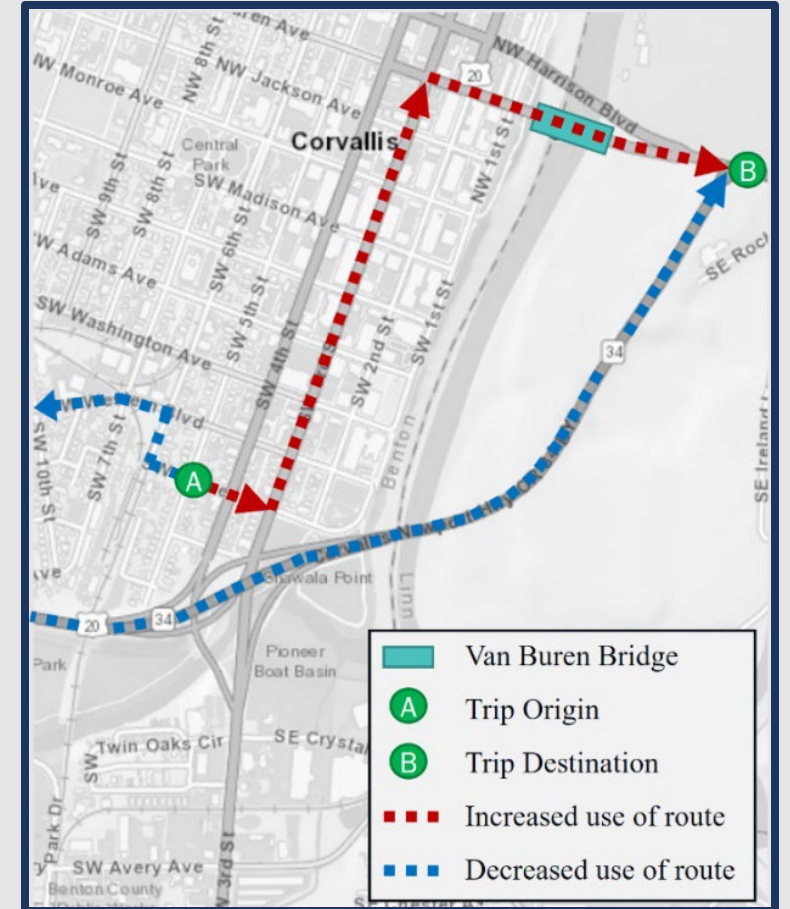
Analysis Updates:

Model/Network Refinement

Van Buren Bridge Project

Avery/Crystal Lake Intersection Improvements

Updating the Build Alternatives
A, B & C



Build Alternatives:

Where does the three-lane cross section begin?

Alternative A

South of Goodnight Ave

Alternative B

SB = south of Cummings Ave

NB = Bridgeway Ave

Alternative C

South of Prairie Dr



Build Alternatives:

What are the differences in the local network?

Alternative A

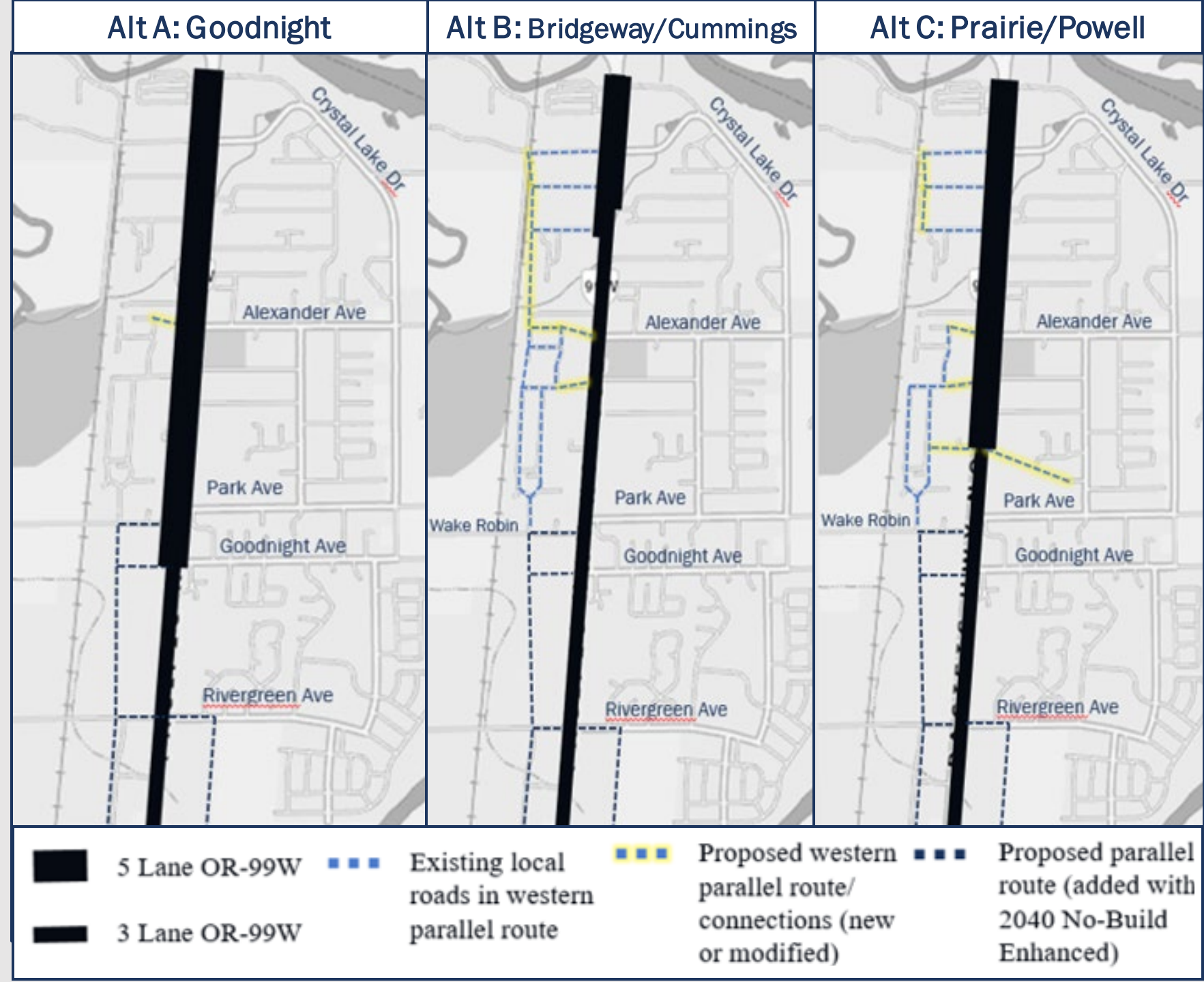
Extends Alexander Ave

Alternative B

Includes new roadway(s) from Avery Ave to Goodnight Ave

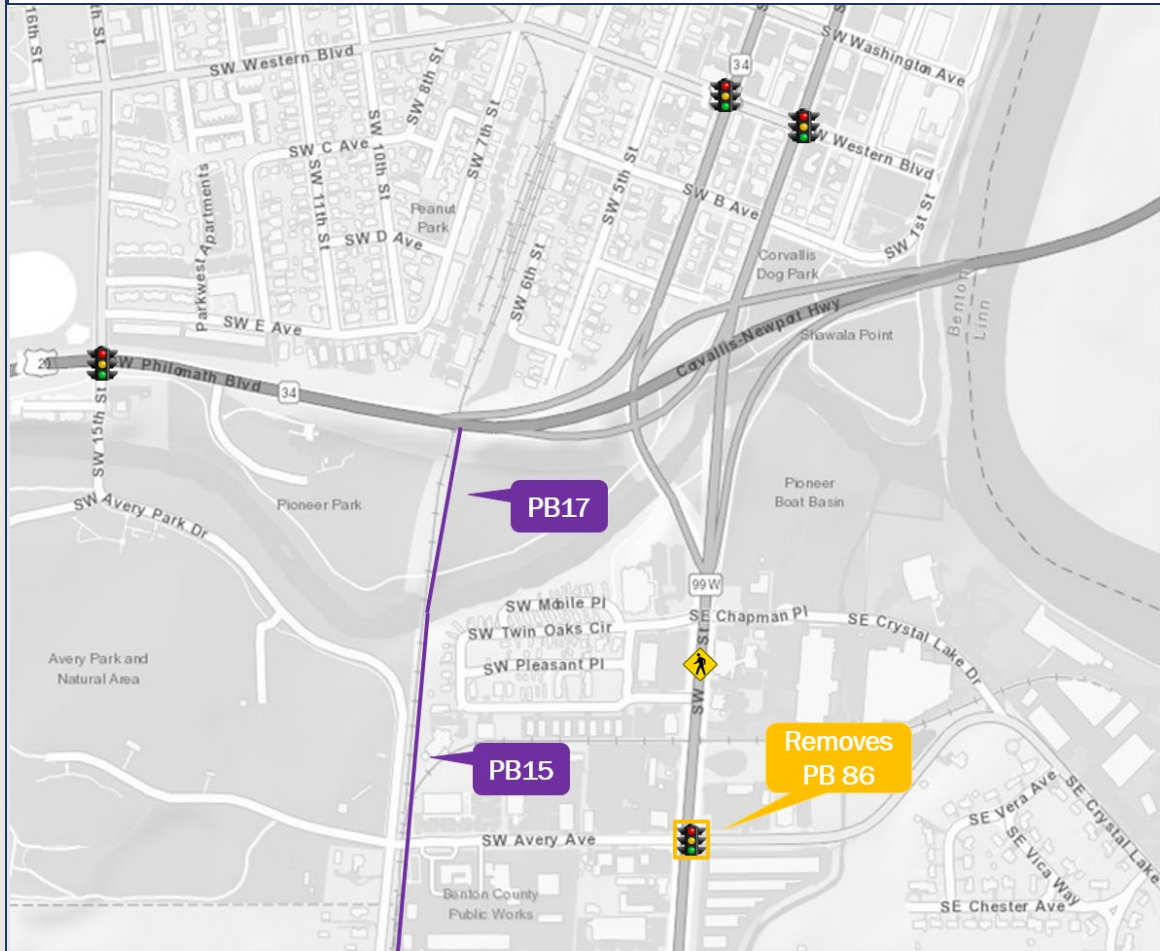
Alternative C

Includes partial connection(s) from Avery Ave to Goodnight Ave. Adds and E/W route extending Prairie Ave and Powell Ave.

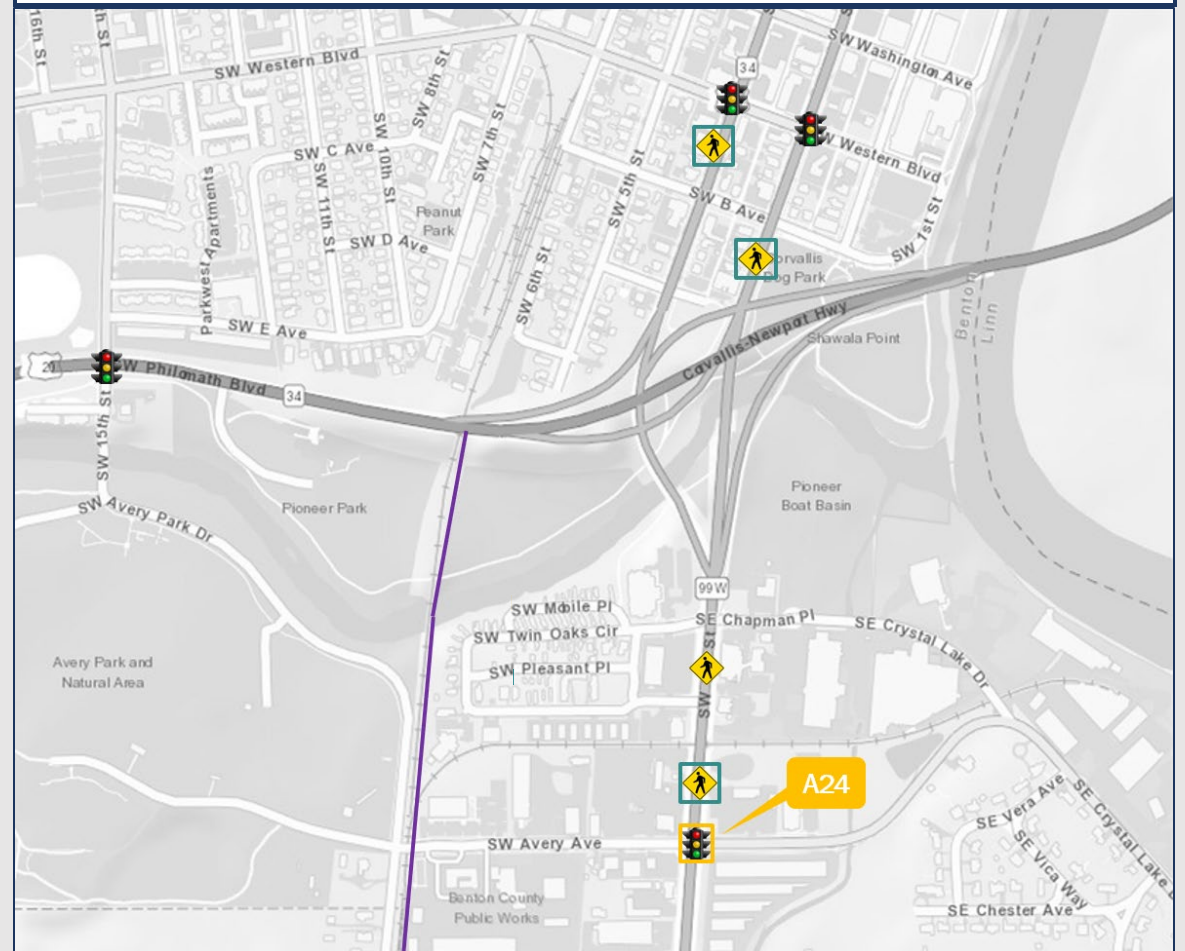


Segment 1: Western to Avery Ave / Crystal Lake Dr

No-Build CLEAN



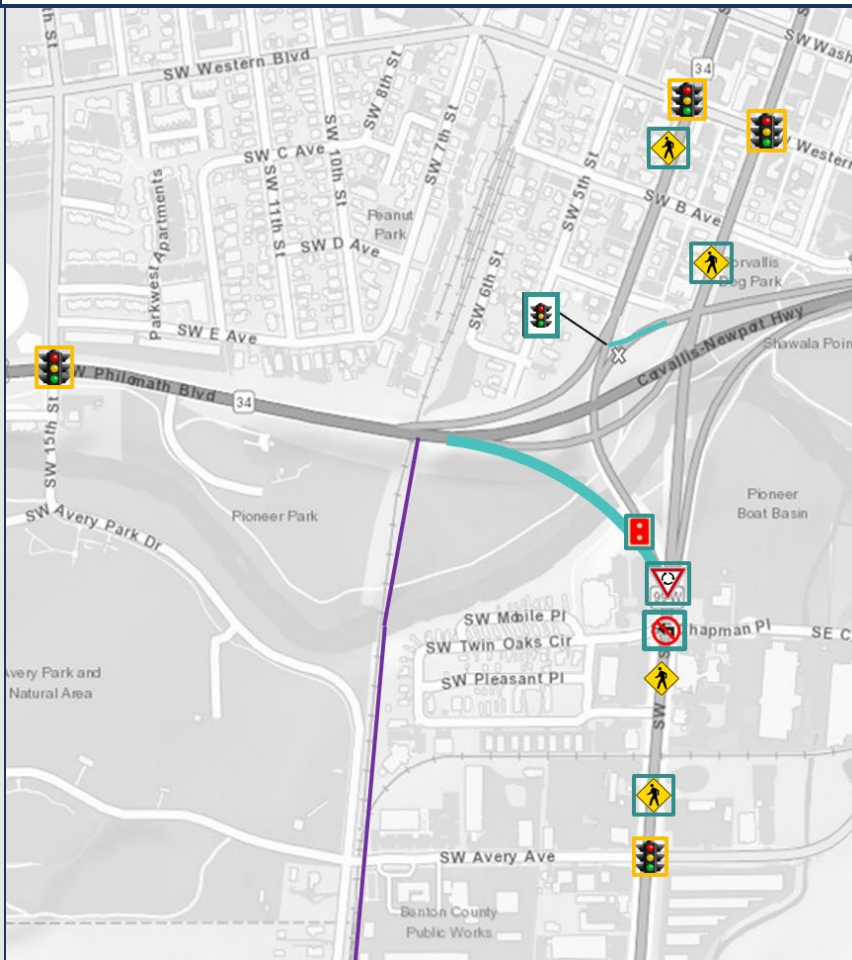
No-Build ENHANCED



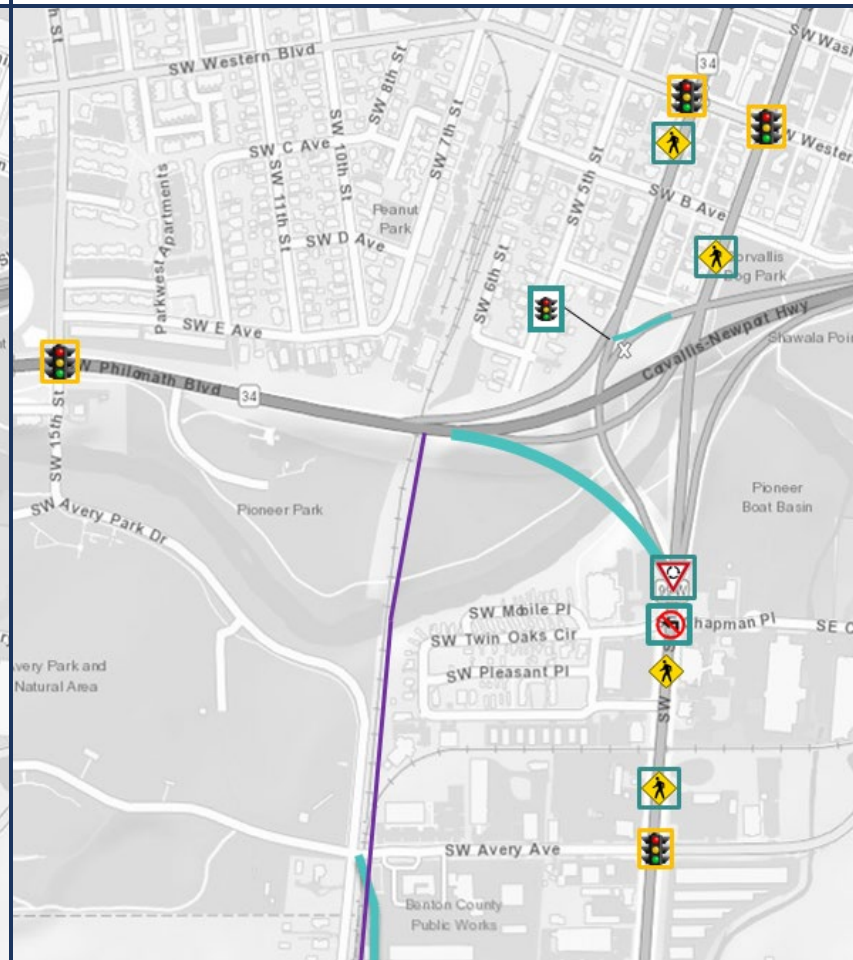
- | | | | | | | | |
|--|--------------------------|--|------------------------------|--|----------------------------|--|----------------------------|
| | Existing Signal | | Existing Pedestrian Crossing | | Multi-Use Path | | New Roundabout Meter |
| | Modified Existing Signal | | Modified Pedestrian Crossing | | New or realigned roadway | | New Roundabout |
| | New Signal | | New Pedestrian Crossing | | OR 99W modified to 3 lanes | | New Left Turn Restrictions |

Segment 1: Western to Avery Ave / Crystal Lake Dr

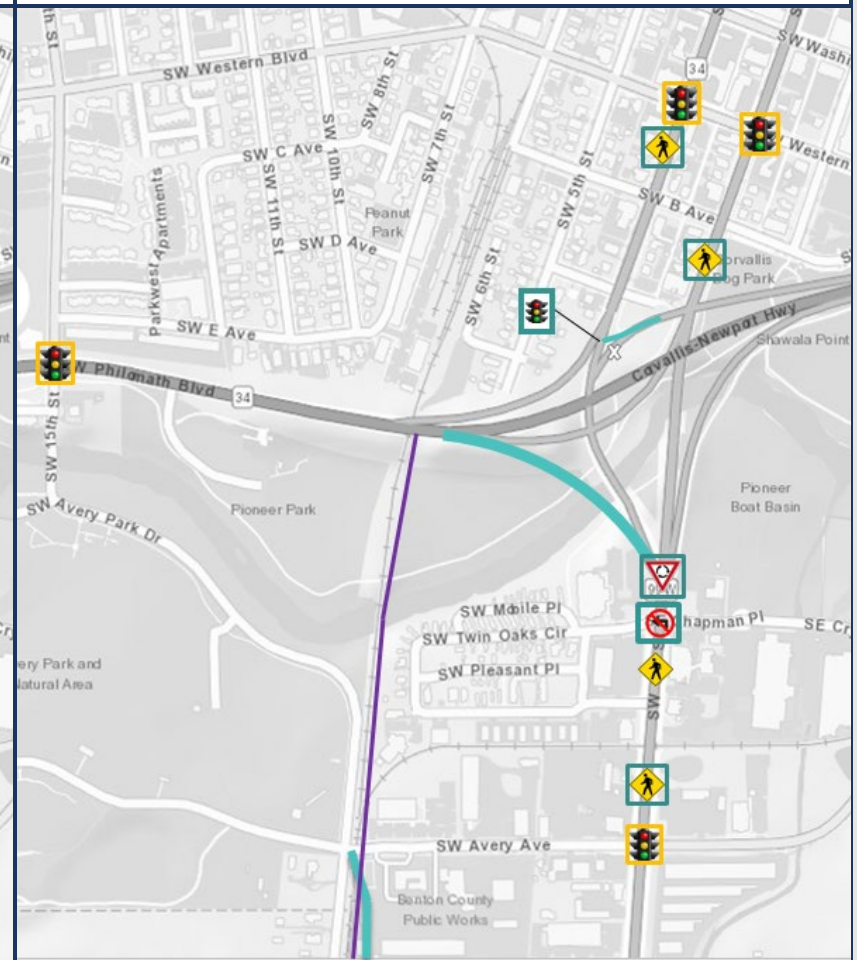
Alternative A: Goodnight



Alternative B: Bridgeway/Cummings

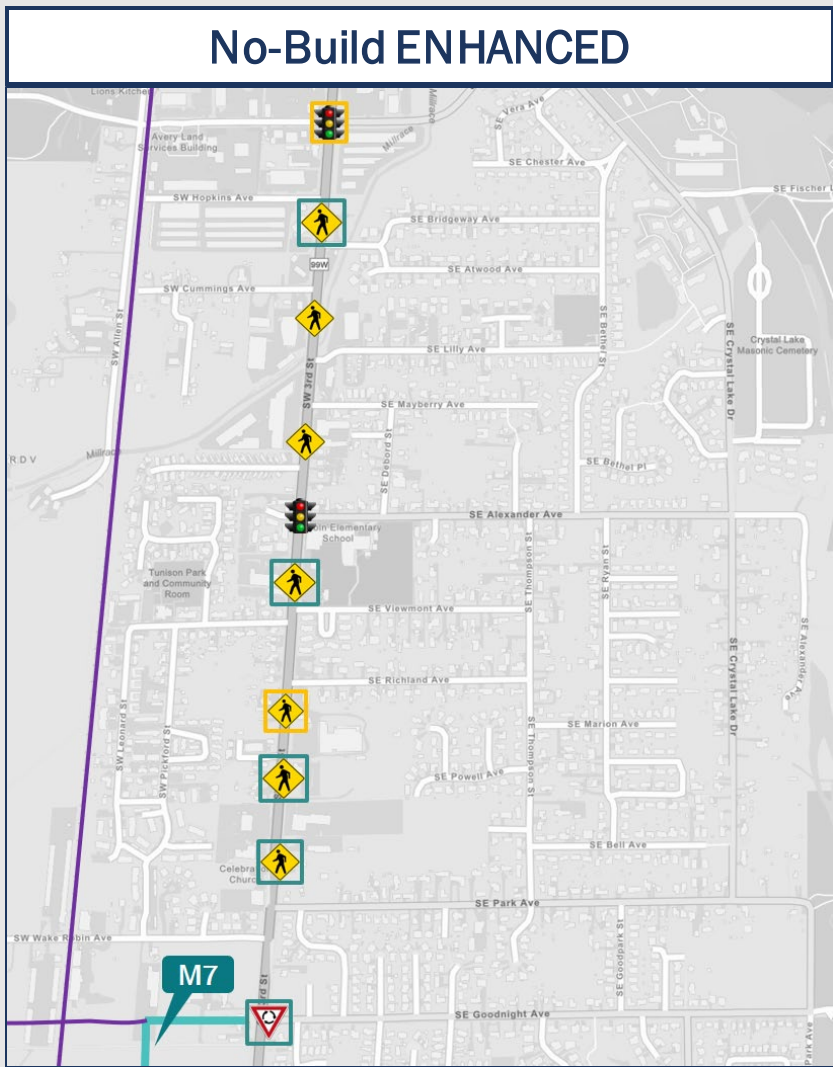
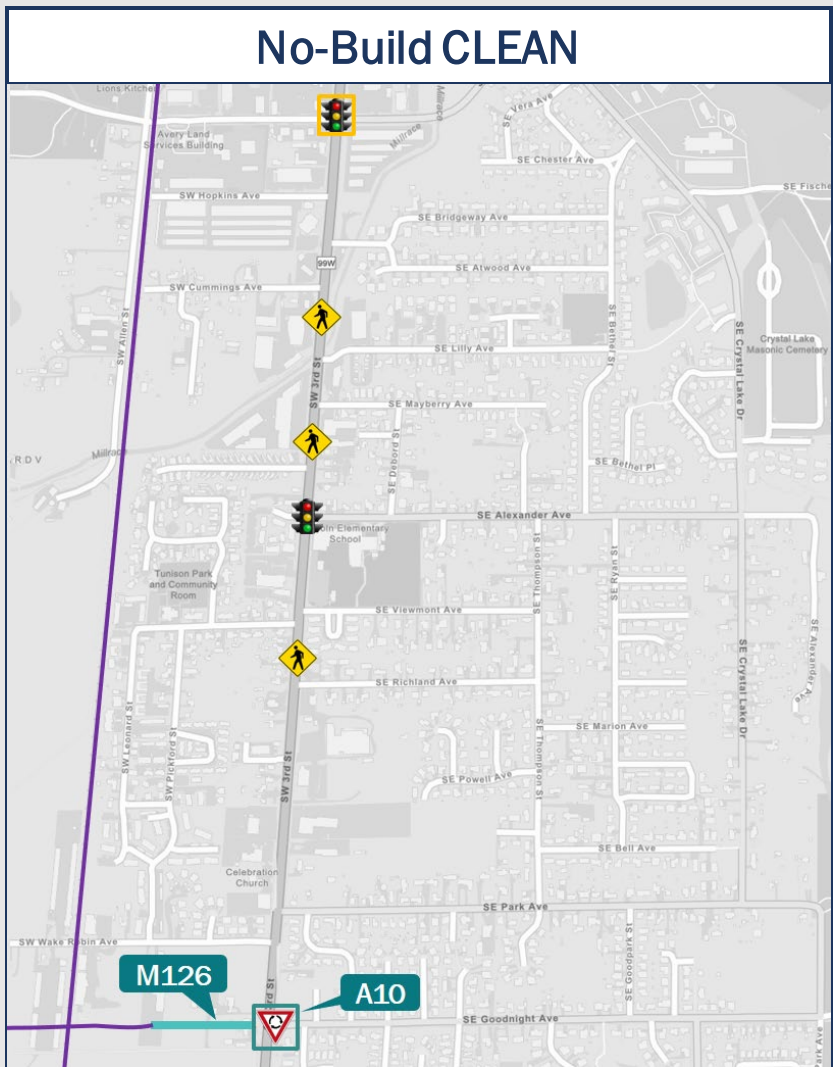


Alternative C: Prairie/Powell



- | | | | |
|--|--|--|--|
|  Existing Signal |  Existing Pedestrian Crossing |  Multi-Use Path |  New Roundabout Meter |
|  Modified Existing Signal |  Modified Pedestrian Crossing |  New or realigned roadway |  New Roundabout |
|  New Signal |  New Pedestrian Crossing |  OR 99W modified to 3 lanes |  New Left Turn Restrictions |

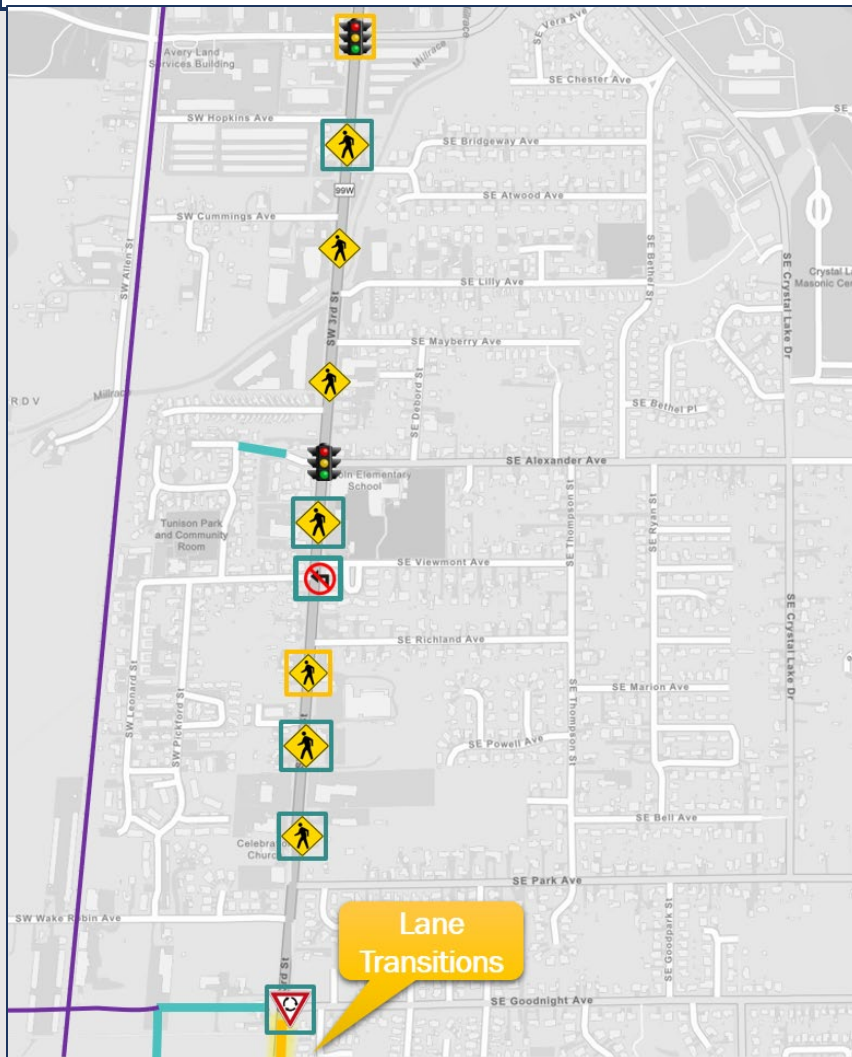
Segment 2: Avery Ave / Crystal Lake Dr to Goodnight Ave



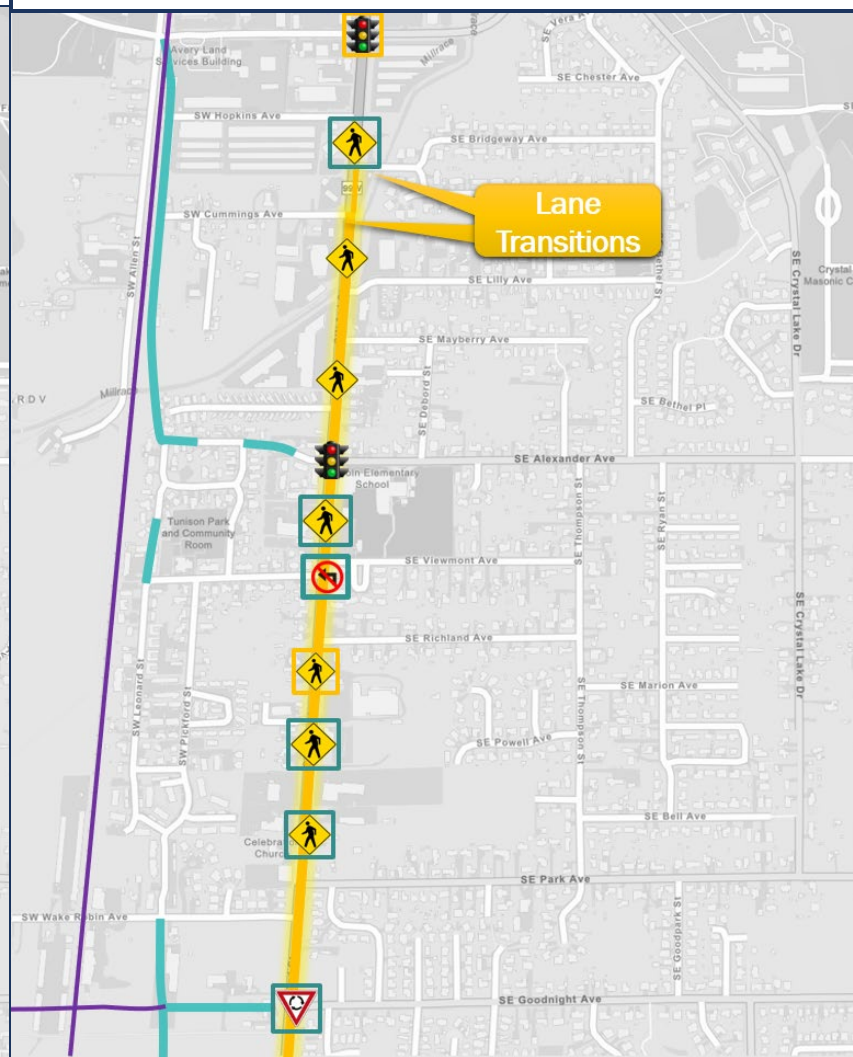
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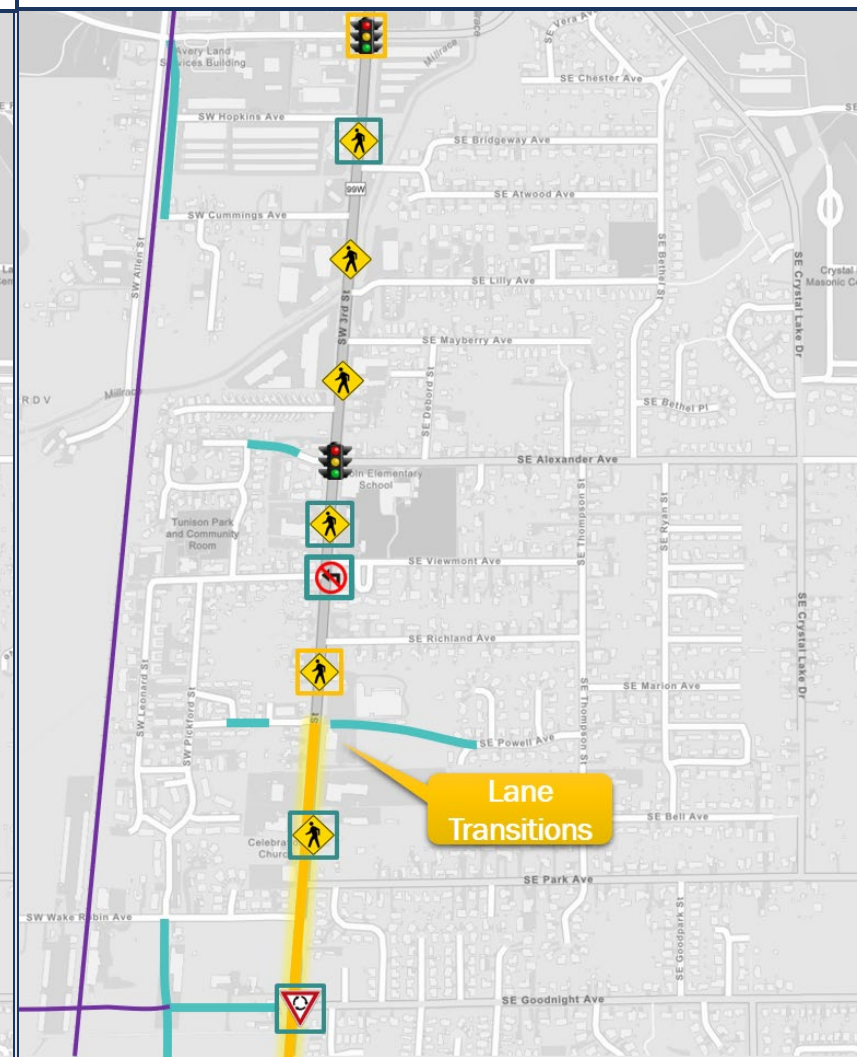
Alternative A: Goodnight



Alternative B: Bridgeway/Cummings

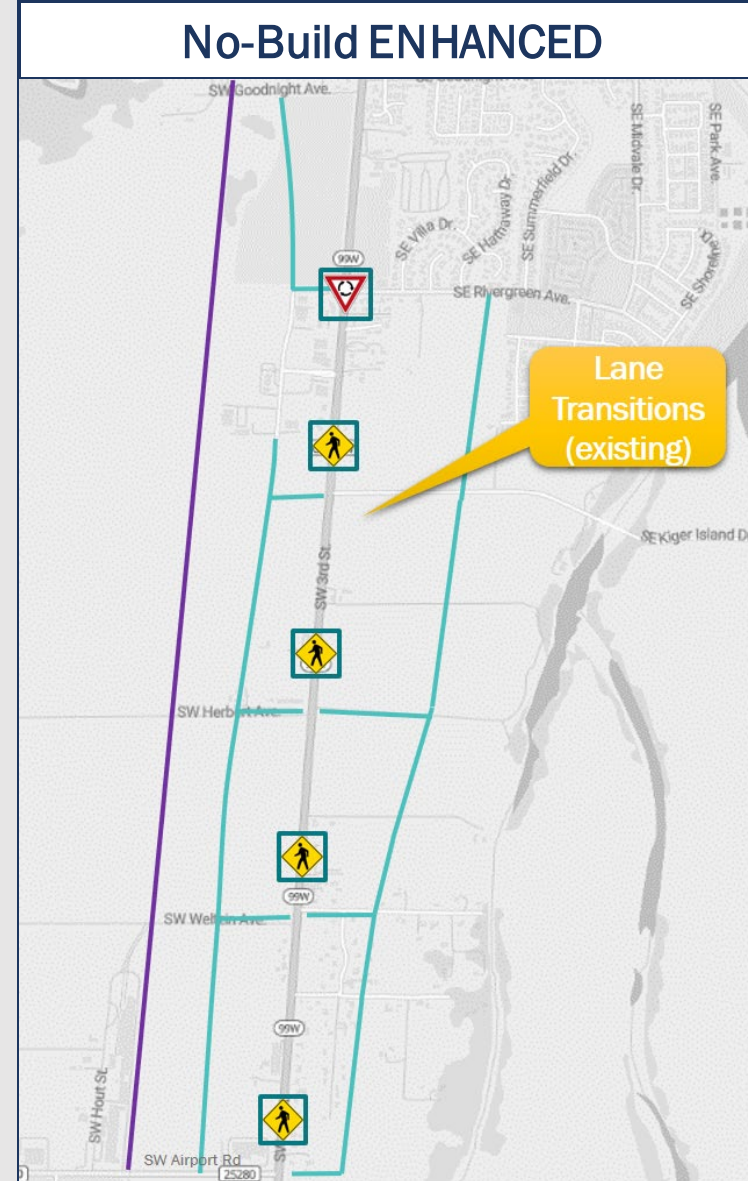
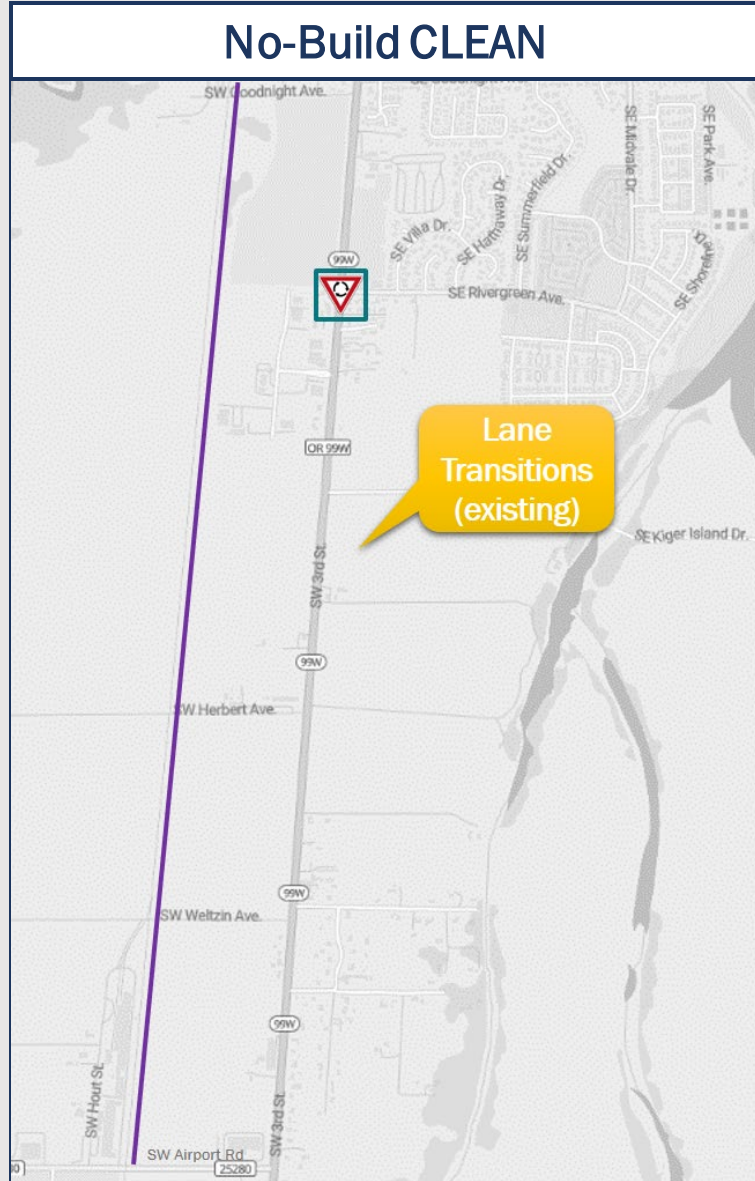


Alternative C: Prairie/Powell



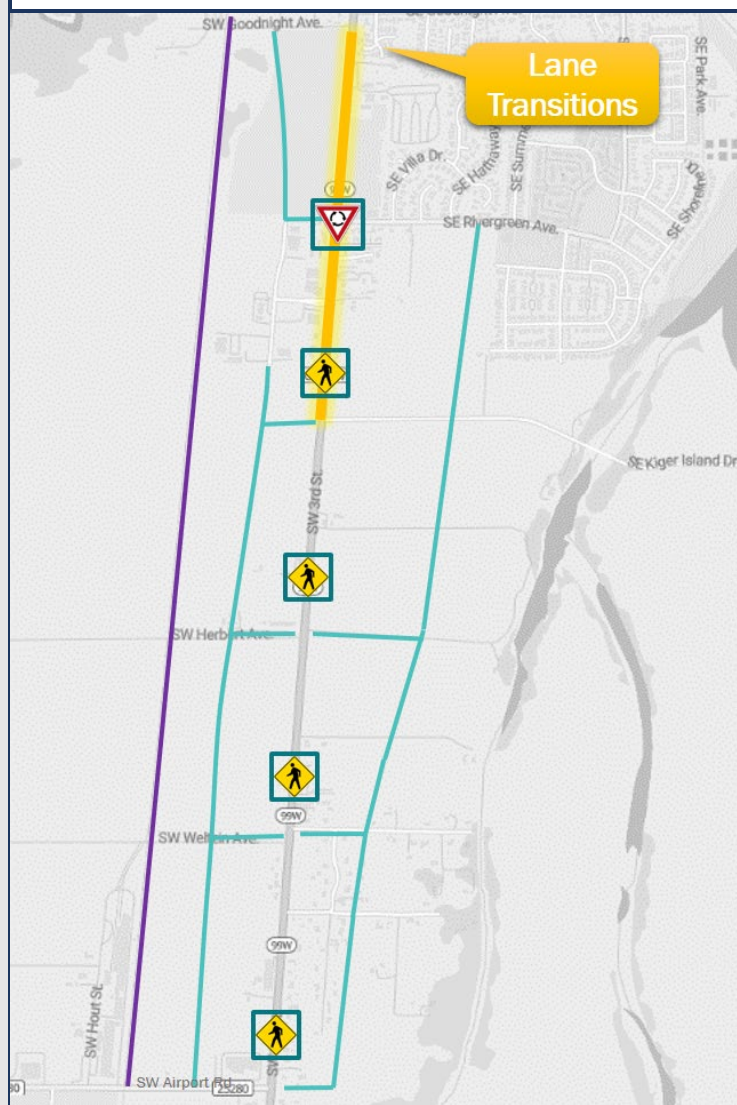
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Segment 3: Goodnight Ave to Airport Rd

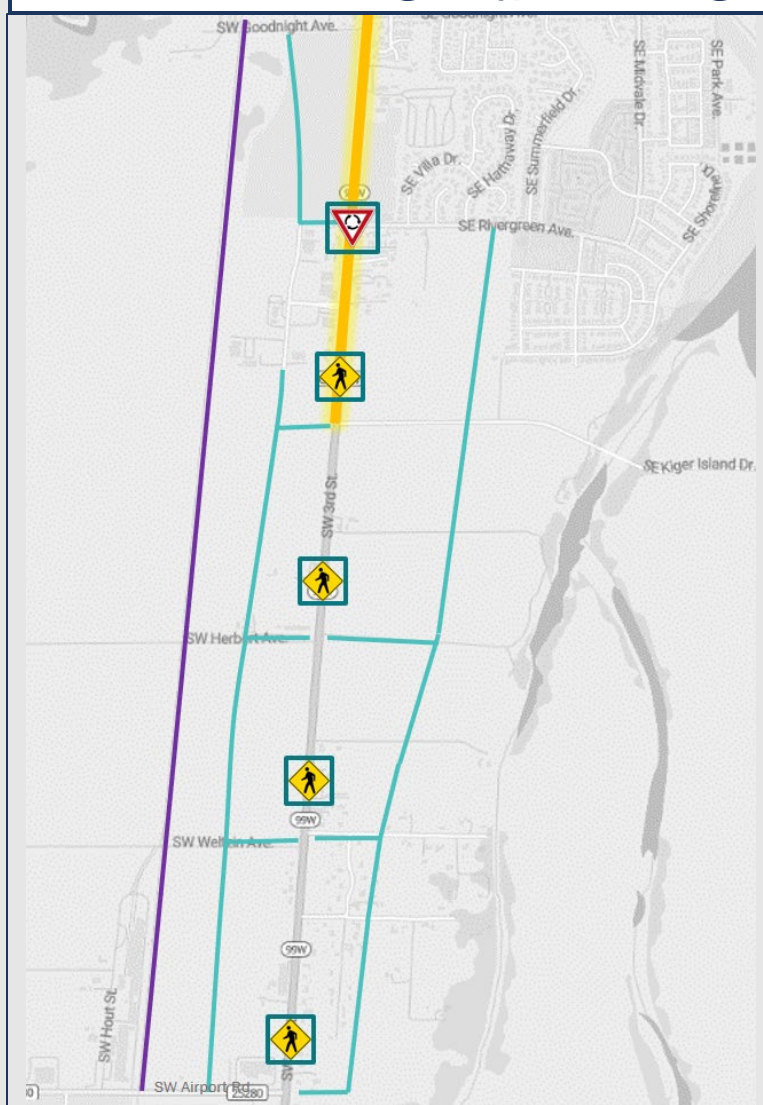


Segment 3: Goodnight Ave to Airport Rd

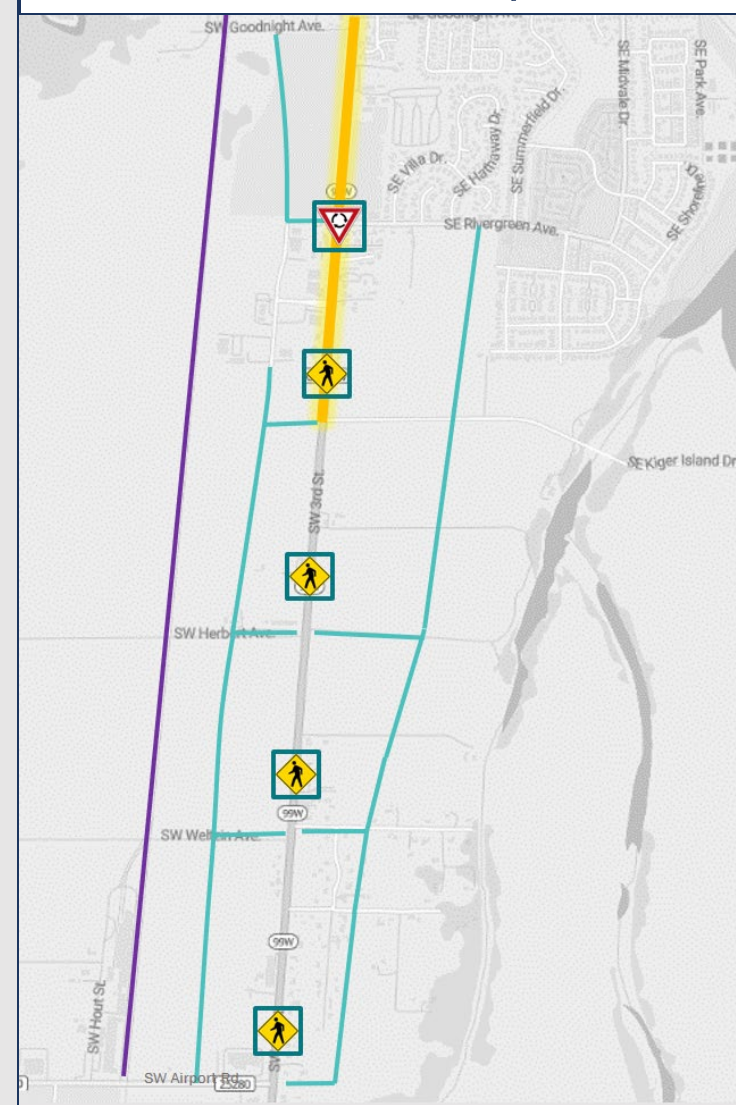
Alternative A: Goodnight



Alternative B: Bridgeway/Cummings



Alternative C: Prairie/Powell



Analysis Results Summary:

Comparison Criteria:	No-Build (Clean)	No-Build (Enhanced)	Alternative A (Goodnight)	Alternative B (Bridgeway)	Alternative C (Prairie/Powell)
Intersections exceeding capacity	10	11	3	2	1
Average NB&SB Travel Speed (Percent change from the Clean No-Build)	N/A	-3%	-5%	-17%	-12%
Average NB&SB Travel Time (Percent change from the Clean No-Build)	N/A	17%	12%	33%	25%
Diverted Demand (Total volume diverted)	3,700	2,700	1,400	9,300	7,800
Peak Spreading (Average estimated hours of congestion)	2+	5	6	8	8
Modal Split (% Auto Trips)	80%	79%	79%	79%	79%
Daily On-Road VMT per Capita Relative to Clean No-Build	N/A	-2%	-3%	-4%	-4%

Analysis Results:

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Modal Split (% Auto Trips)	80%	79%	79%	79%	79%
Daily On-Road VMT per Capita Relative to Clean No-Build ²	N/A	-2%	-3%	-4%	-4%

Summary of v/c Results:

- v/c < 0.70
- v/c 0.70 to 0.85
- v/c 0.86 to 1.00
- v/c > 1.00 (0.90 for R/A)



	Intersection	CLEAN No-Build	ENHANCED No-Build	Alternative A (Goodnight)	Alternative B (Bridgeway)	Alternative C (Prairie/Powell)
Segment 1	Western & 4 th	Signal	Signal	Signal	Signal	Signal
	Western & 3 rd	Signal	Signal	Signal	Signal	Signal
	B Ave & 4 th St	TWSC	TWSC	TWSC	TWSC	TWSC
	B Ave & 3 rd St	TWSC	TWSC	TWSC	TWSC	TWSC
	15 th St/OR34	Signal	Signal	Signal	Signal	Signal
	EB OR34/US20 Off-Ramp	N/A	N/A	Roundabout	Roundabout	Roundabout
	WB OR34 Off-Ramp	N/A	N/A	Signal	Signal	Signal
	Twin Oaks/Chapman PI	TWSC	TWSC	RIRO	RIRO	RIRO
	Avery/Crystal Lake	Signal	Signal	Signal	Signal	Signal
Segment 2	Alexander Ave	Signal	Signal	Signal	Signal	Signal
	Viewmont Ave	TWSC	TWSC	RIRO+LI	RIRO+LI	RIRO+LI
	Tunison Ave	TWSC	TWSC	RIRO+LI	RIRO+LI	RIRO+LI
	Richland Ave	TWSC	TWSC	TWSC	TWSC	TWSC
	Prairie/Powell ¹	N/A	N/A	N/A	N/A	N/A
	Park Ave	TWSC	TWSC	TWSC	TWSC	TWSC
	Wake Robin Ave	TWSC	TWSC	TWSC	TWSC	TWSC
	Goodnight Ave	Roundabout	Roundabout	Roundabout	Roundabout	Roundabout
Segment 3	Rivergreen Ave	Roundabout	Roundabout	Roundabout	Roundabout	Roundabout
	Kiger Island Dr	TWSC	TWSC	TWSC	TWSC	TWSC
	Airport Ave	TWSC	TWSC	TWSC	TWSC	TWSC

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~ Demand that exceeds the capacity of the system and users make choices to avoid congestion ~

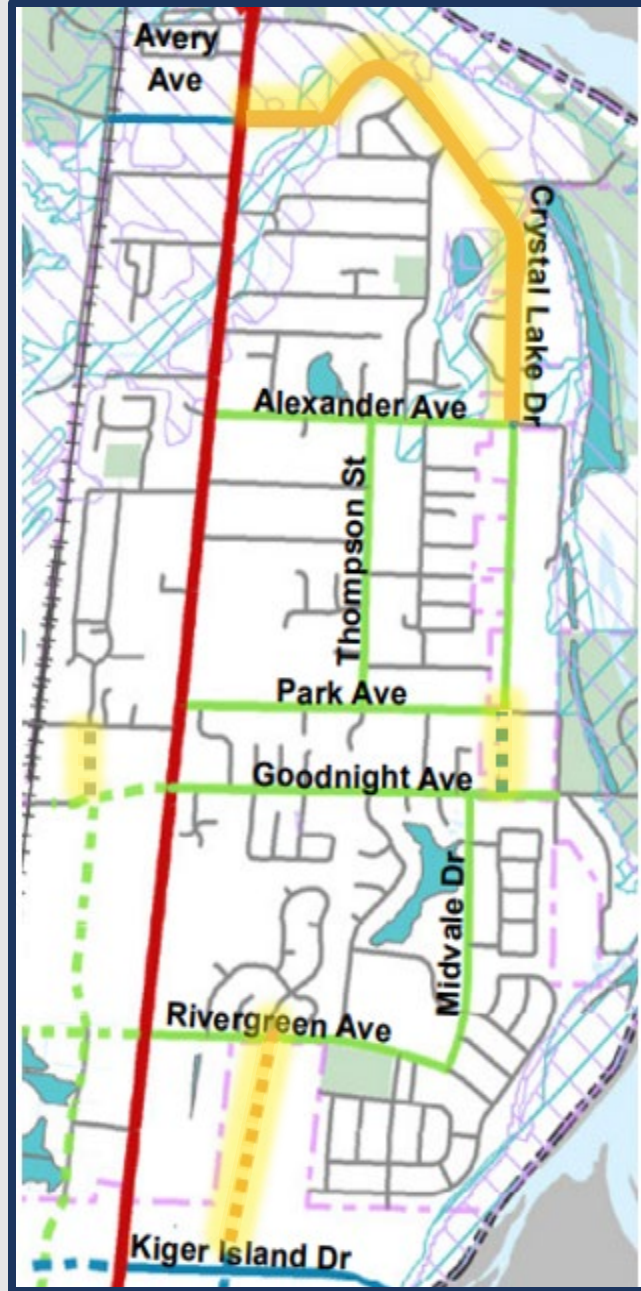
2020 Existing



No-Build: Clean



No-Build: Enhanced



Existing Street	Planned Street	Volume Threshold Range
		>5,000
		2,500 to 5,000
		600 to 2,500
		600 to 1,250
		<1,000

Alternative A

Alternative B

Alternative C



Existing Street	Planned Street	Volume Threshold Range
		>5,000
		2,500 to 5,000
		600 to 2,500
		600 to 1,250
		<1,000

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Key Takeaways:

Adding pedestrian enhancements and reducing the vehicle lanes on OR99W causes increased congestion. The excess demand is choosing other routes and other times to travel but this ultimately impacts local roadways. Not enough trips are served by changing the mode of travel to discount the excess demand.

Tradeoffs:

- Pedestrian and bicycle safety and comfort improvements verses congestion
- More robust local street network versus a more congested OR 99w

Questions/Discussion
