

# ALBANY-US 20 STUDY City Council Presentation

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# AGENDA

## 1 Background

- Purpose of the Study
- ODOT Jurisdiction

## 2 Overview of Process

- Corridor Evaluation
- Alternatives Screening
- Concepts

## 3 Traffic Analysis Findings

- Future Baseline Traffic Conditions Animations
- Baseline (No-Build) Conditions Key Findings - Summary
- Project Bundles
- Project Bundle Future Traffic Conditions Animations
- Alternatives Analysis Key Findings – Summary

## 4 Next Steps

- Prioritized List of Projects on the Corridor
- ARTS Grant Application
- Transportation System Plan (TSP) Update



# Background

# Study Purpose

- **Evaluate Current and Future Traffic Conditions on the US 20 Corridor through Albany**
  - **Study Extents: US 20 (including Lyon Street and Ellsworth Street) from 99E to North Albany Road**
- **Identify projects to improve transportation conditions on the corridor**
- **Develop a recommended implementation sequence for proposed improvements**

# ODOT Jurisdiction

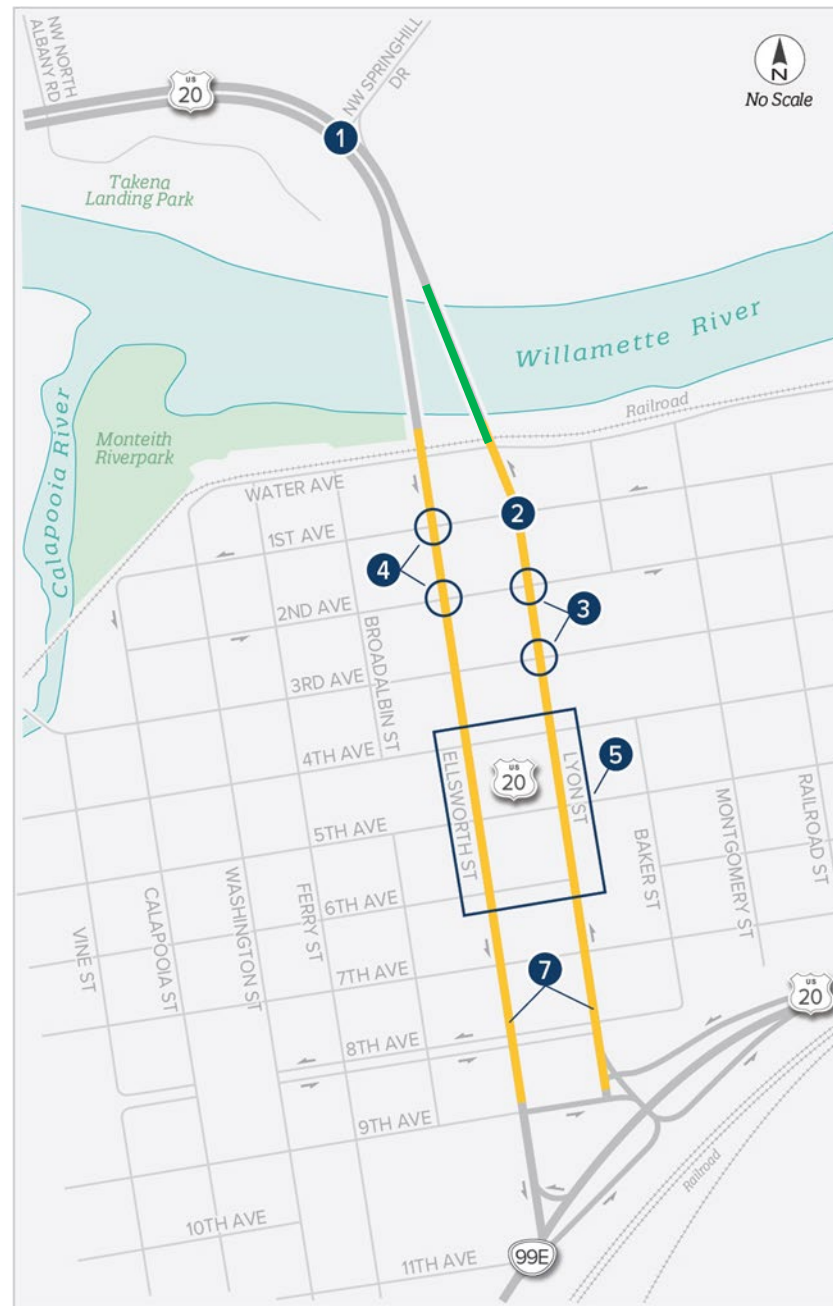
**The US 20 Corridor is under ODOT jurisdiction, and all proposed improvements must receive ODOT approval for implementation**



## **Overview of Study Process**

# Corridor Evaluation

Existing and Future (20-year horizon) Transportation Needs (Safety, Bicycle/Pedestrian, and Traffic Operations) were identified within the Project Study Area



## TIER 1 SCREENING LOCATIONS & NEEDS

- 1 SPRINGHILL/US 20
- 2 1ST/LYON
- 3 2ND/3RD/LYON
- 4 1ST/2ND/ELLSWORTH
- 5 DOWNTOWN UNSIGNALIZED INTERSECTIONS
- 6 9TH/LYON/OR 99E
- 7 LYON/ELLSWORTH BIKE FACILITIES

- Safety Need
- Multimodal Need
- Operational Need

# Alternatives Screening

- **Alternatives were developed targeting the identified corridor needs**
- **Initial Alternatives were screened for fatal flaws against Evaluation Criteria**
  - **Motor Vehicle Operations**
  - **Parking Impacts**
  - **Impacts to Pedestrian, Bicycle, and Transit Facilities**
  - **Impacts to Existing Driveway Access**
  - **Safety**
  - **Cost**
- **Alternatives passing initial screening were further conceptually design and analyzed, resulting in our current findings**



# Concepts

- **Concepts were conceptually designed and evaluated against 20-year horizon traffic conditions**
- **Some concepts are intersection focused, while others span segments of the US 20 corridor**

# SPRINGHILL DRIVE/US 20 - ALTERNATIVES

**TRUCK ROUTE**

Alternative 1C - Establish truck route signing on Hickory St

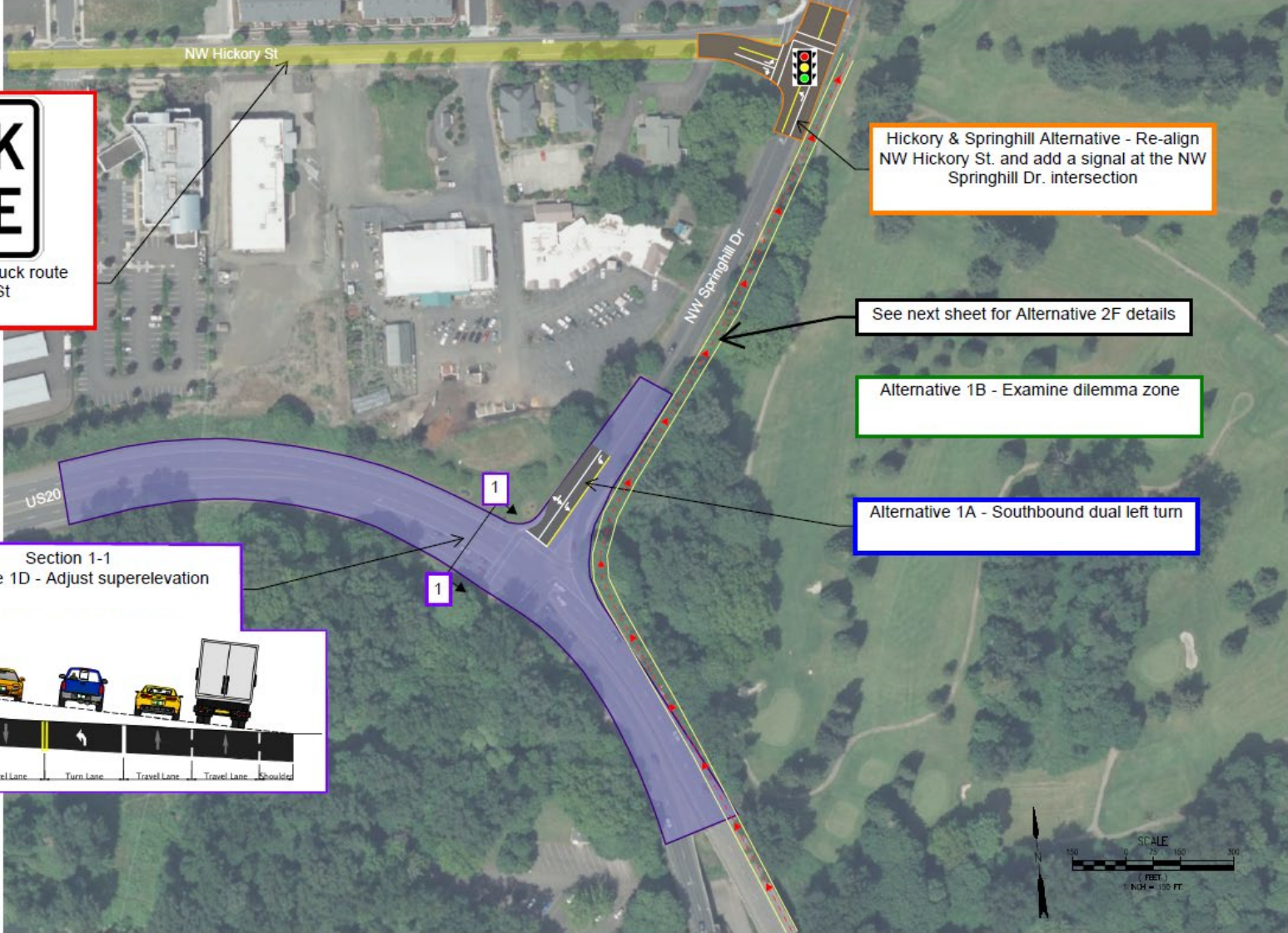
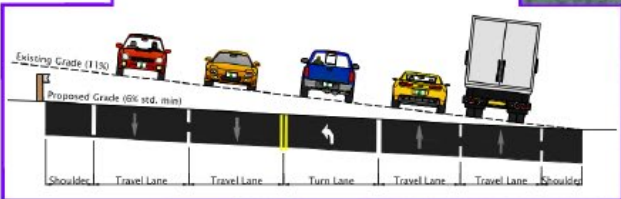
Hickory & Springhill Alternative - Re-align NW Hickory St. and add a signal at the NW Springhill Dr. intersection

See next sheet for Alternative 2F details

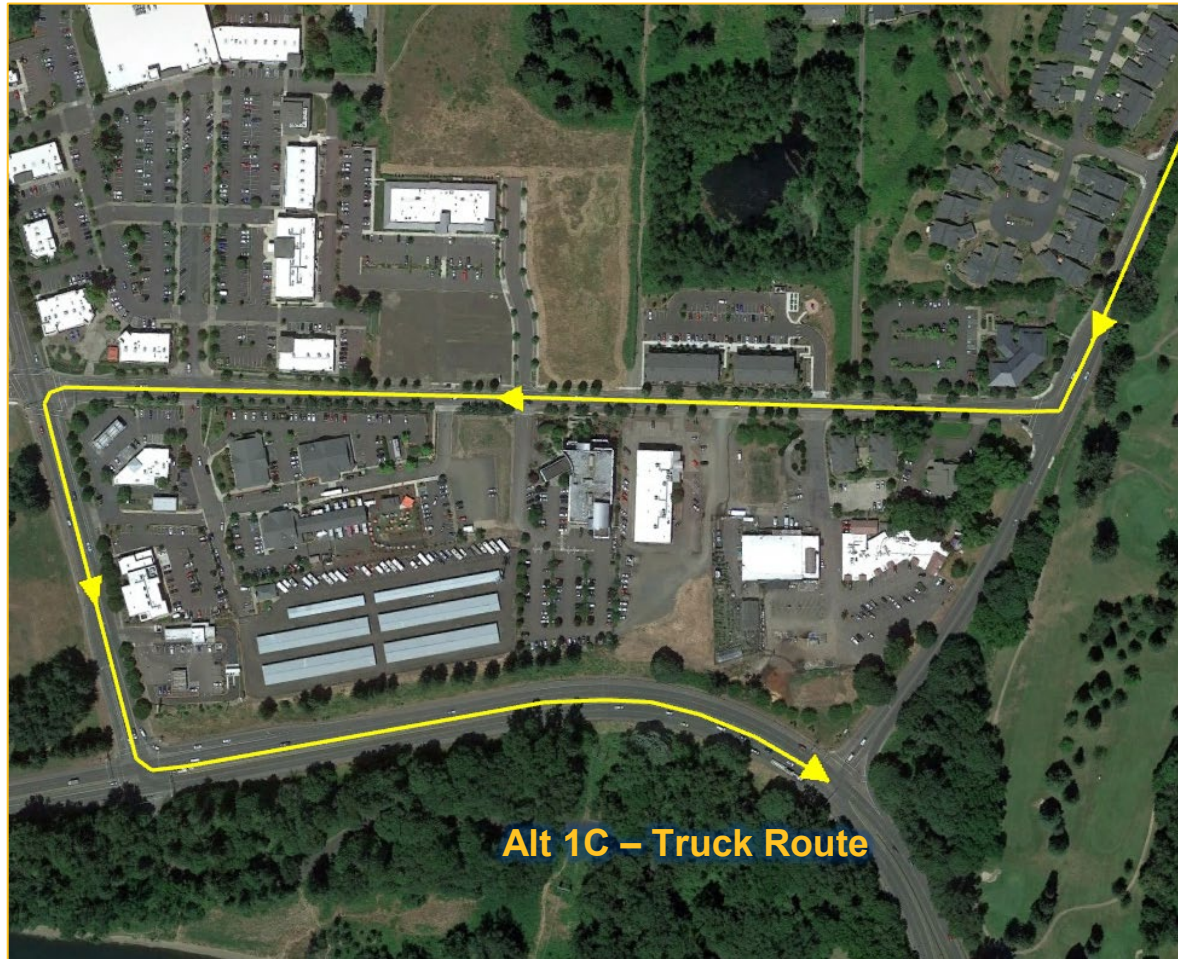
Alternative 1B - Examine dilemma zone

Alternative 1A - Southbound dual left turn

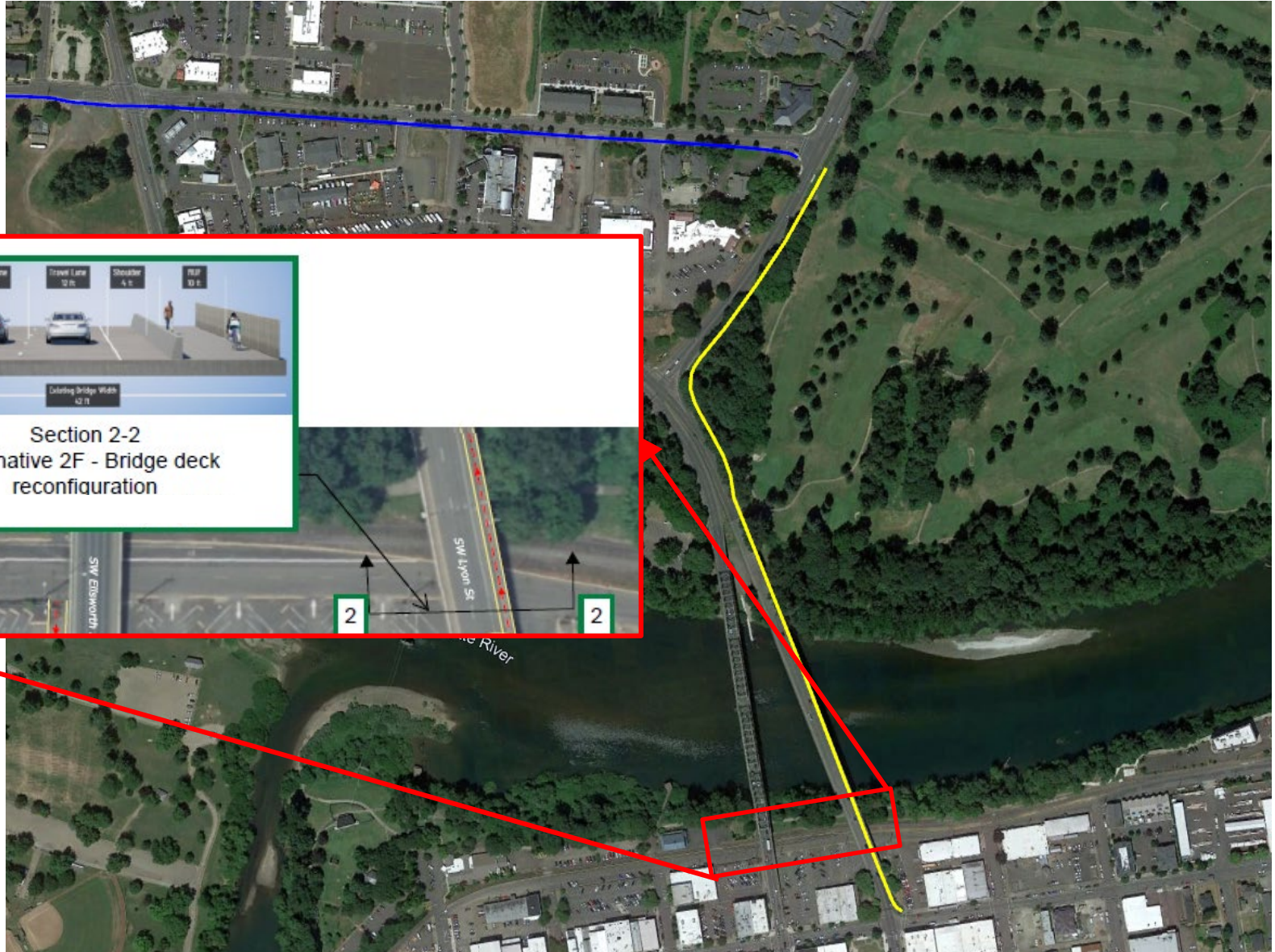
Section 1-1  
Alternative 1D - Adjust superelevation



# SPRINGHILL DRIVE/US 20 - ALTERNATIVES



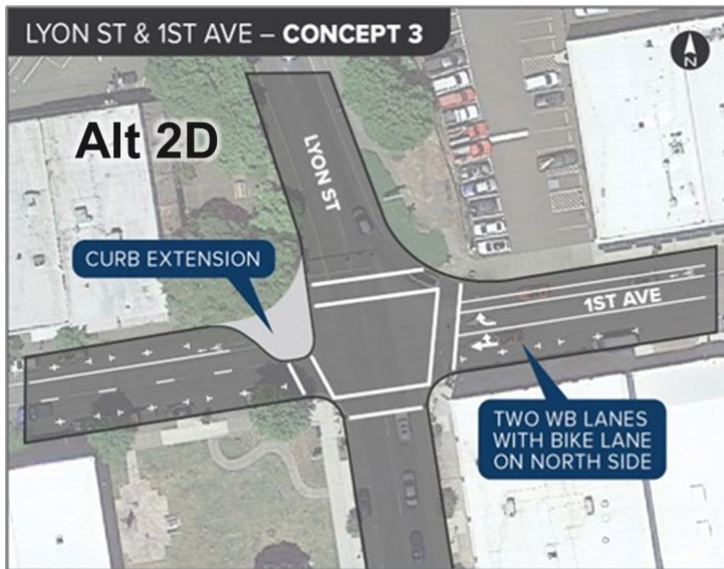
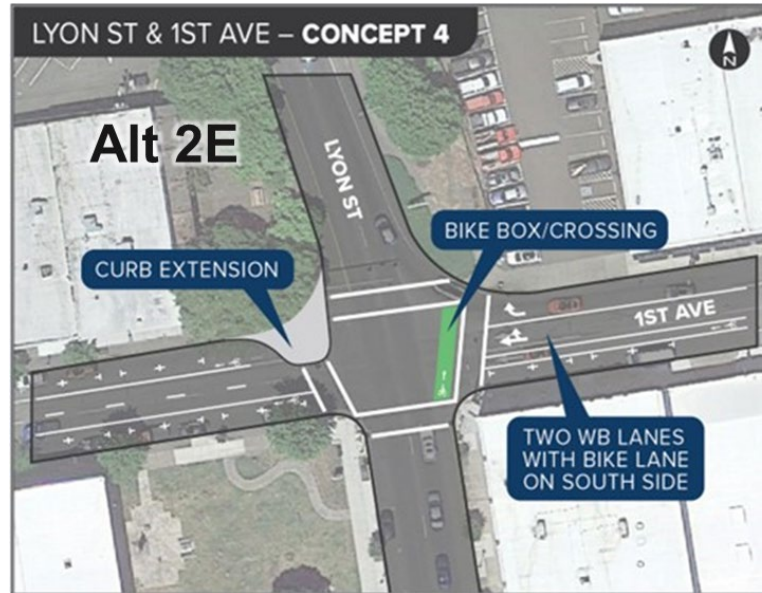
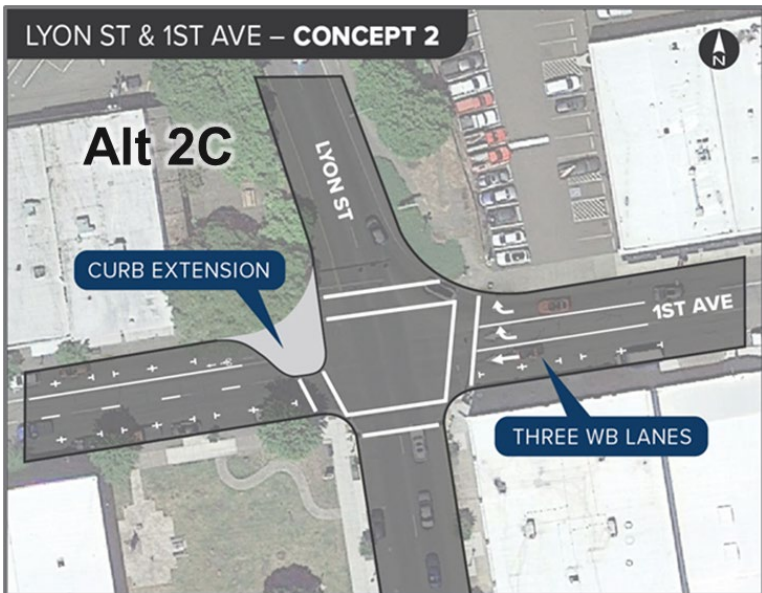
# Lyon Street Bridge Alternative



Section 2-2  
Alternative 2F - Bridge deck  
reconfiguration



# 1ST AVENUE/LYON STREET - Alternatives



# 2<sup>nd</sup> AVENUE/ELLSWORTH ST



# Downtown RRFB Crossings



**RRFB ON NORTH CROSSWALK**

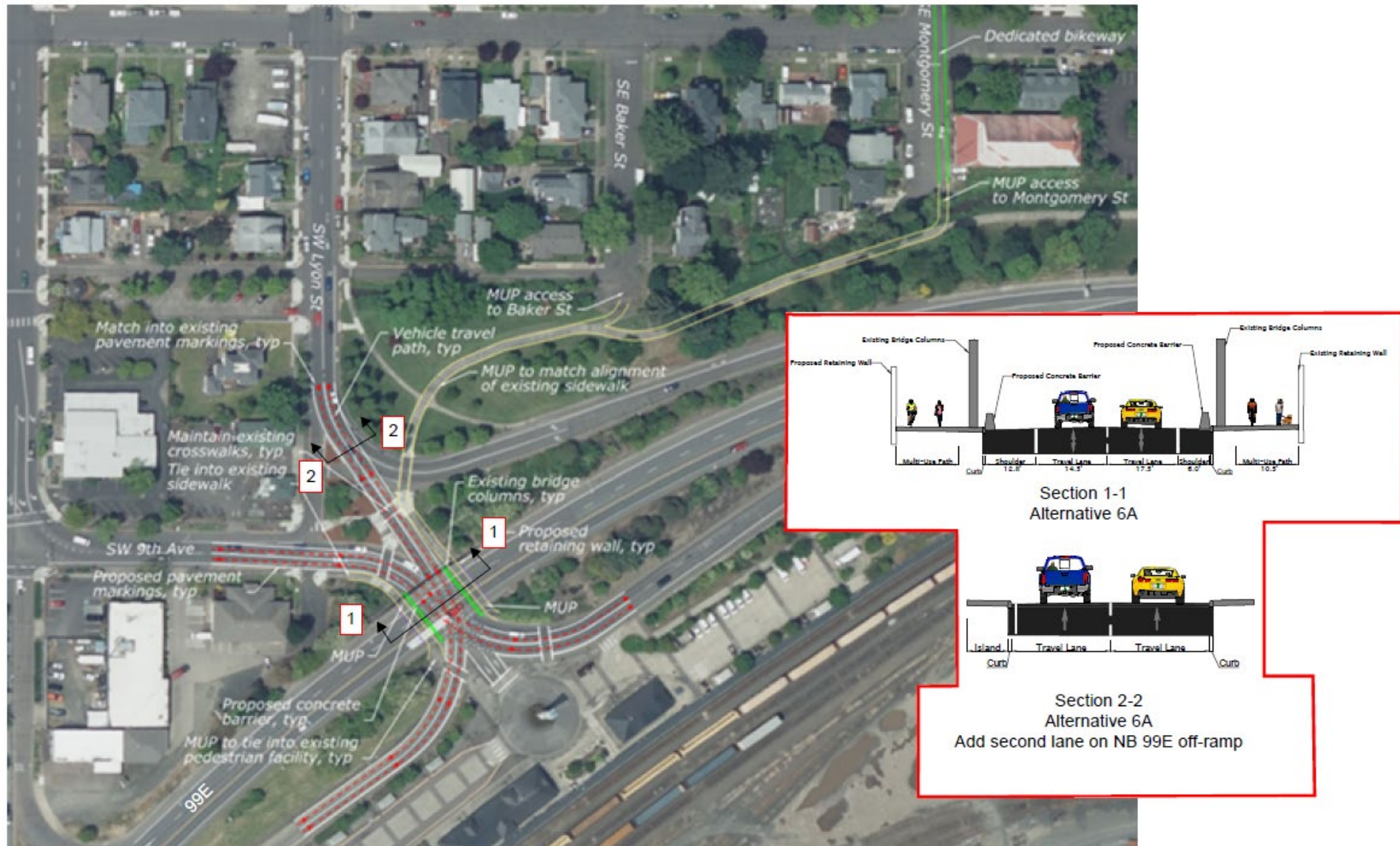
Alternative 5B - Add RRFB on upstream crosswalks



Example RRFB crossing

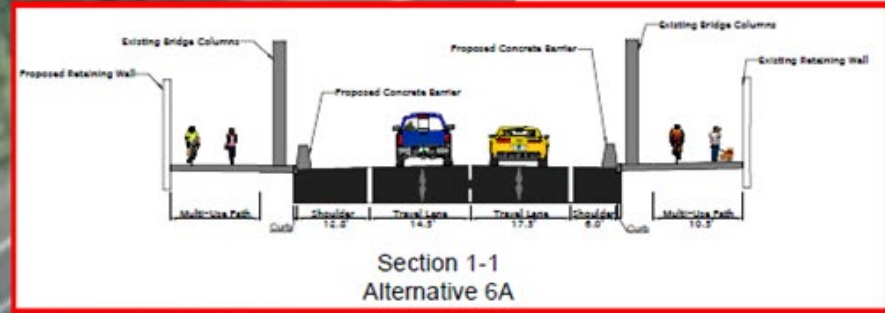
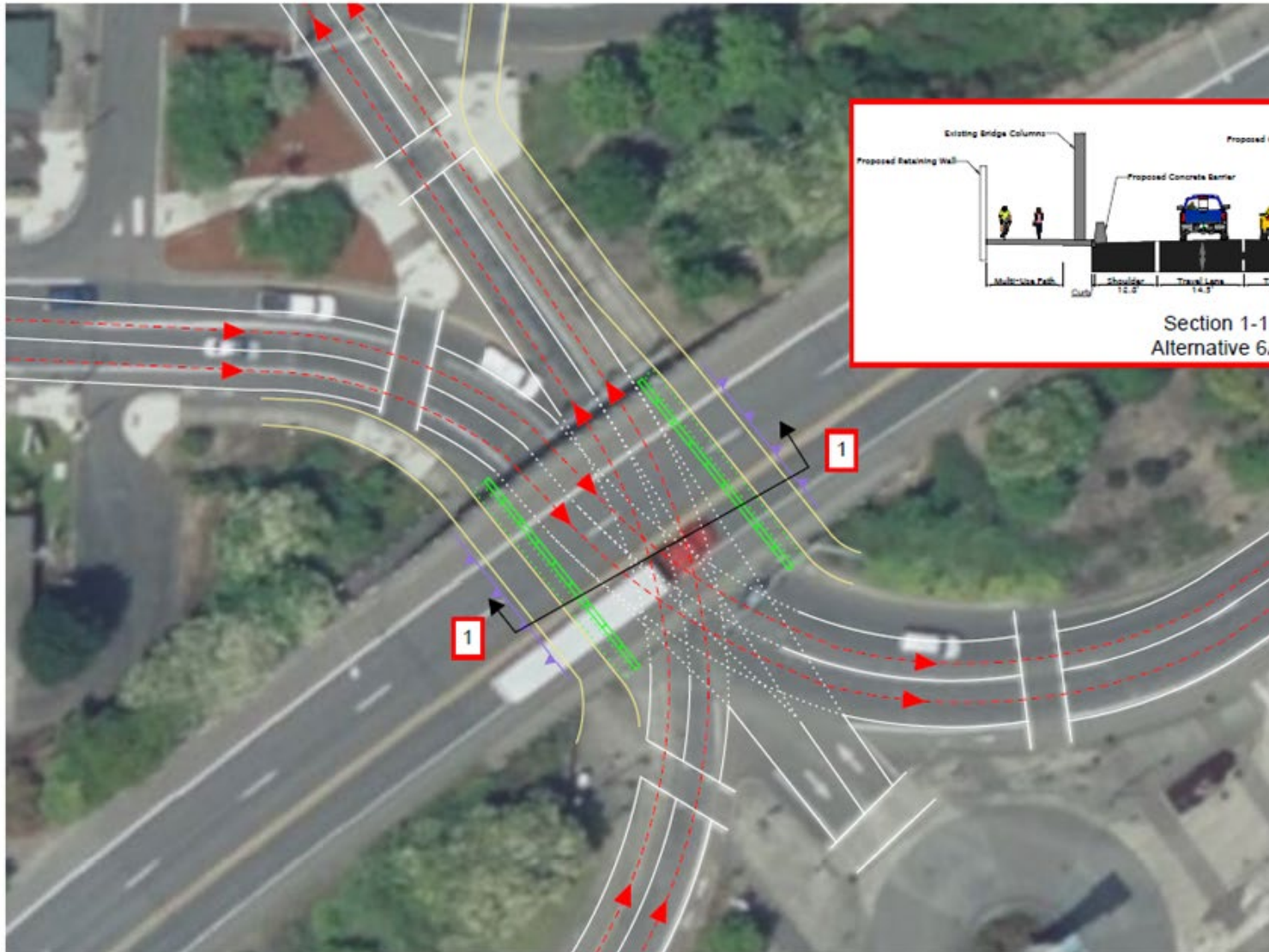


# 9th/Lyon/OR 99E



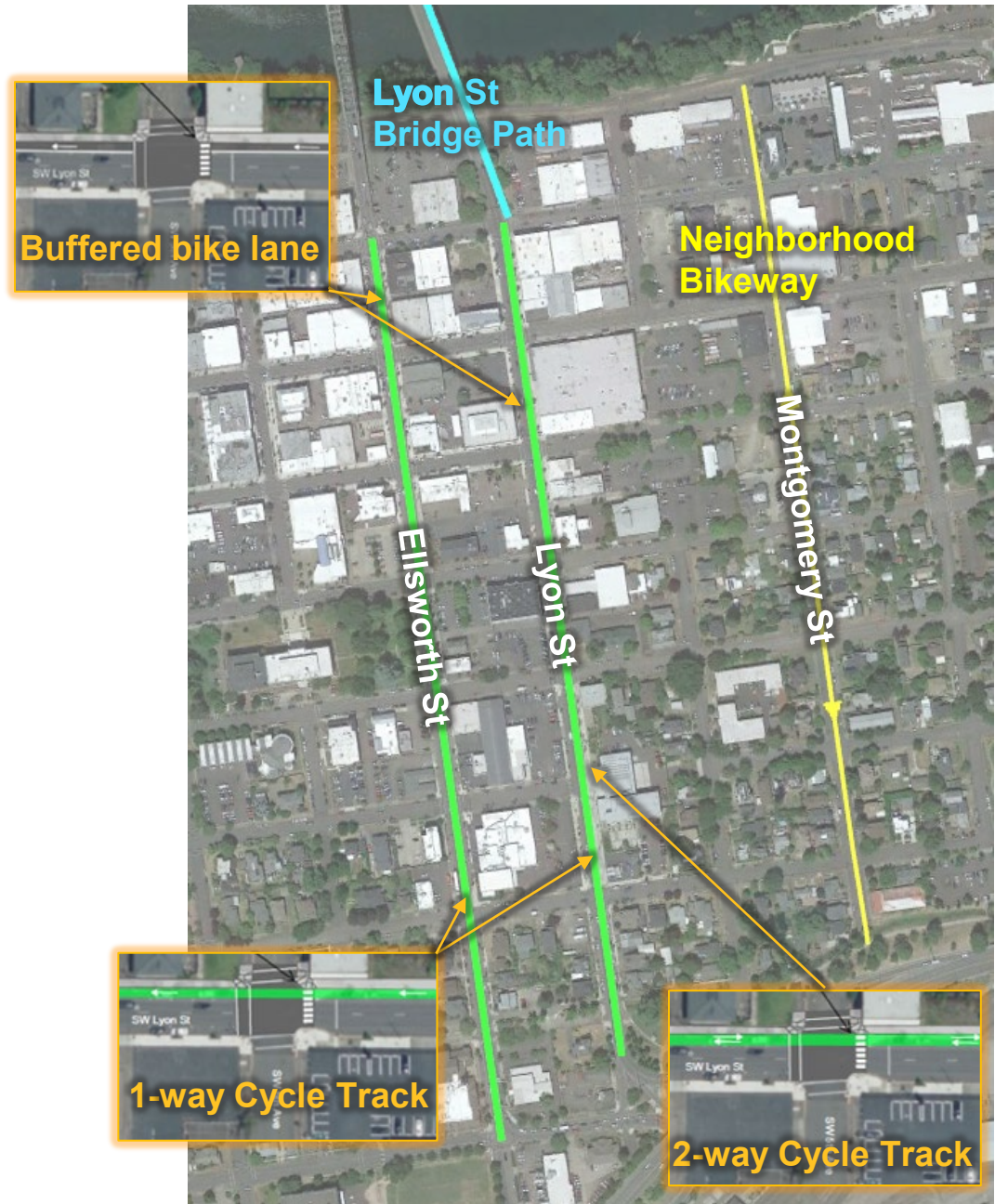


# 9th/Lyon/OR 99E Continued



# Lyon/Ellsworth Bike Facilities

- On-Corridor Concepts
  1. 2-way Cycle Track on Lyon Street
  2. 1-way Cycle Tracks on Lyon St (northbound) and Ellsworth St (southbound)
  3. Buffered bike lanes on Lyon St and Ellsworth St
- Off-Corridor Concepts
  1. Montgomery St Neighborhood Bikeway



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## Traffic Analysis Findings

# Future Baseline Traffic Conditions Animations

# Baseline (No-Build) Conditions Key Findings - Summary

**System Wide – PM peak hour delay increases from 1.5 to nearly 10 minutes per vehicle**

## **Springhill/US 20**

- Southbound queuing on Springhill

## **1<sup>st</sup>/Lyon**

- Westbound right turn bottleneck
- This would cause more traffic to shift to 99E Eastbound off-ramp, and to local streets such as 3<sup>rd</sup> and 4<sup>th</sup>

## **1<sup>st</sup>/2<sup>nd</sup>/Ellsworth**

- Heavy southbound left turn plus limited green time create queues back through N Albany Road
- 2<sup>nd</sup> Eastbound queues up
- Could cause more traffic to shift to local streets such as 3<sup>rd</sup> and 4<sup>th</sup>

## **99E/9<sup>th</sup>/Lyon**

- Northbound off-ramp queues

# Project Bundles – Concepts included in all analysis bundles

## Springhill Drive/US 20

- Dual Southbound Left Turns

## Lyon Street Bridge

- 2-way Multi-Use path on Lyon Street Bridge

## 1st and 2nd Ave/Ellsworth Street

- Signal Timing adjustments
- New Southbound Left Turn Lane at 2<sup>nd</sup>/Ellsworth

## Downtown Unsignalized Intersections

- RRFBs at 4<sup>th</sup> and 5<sup>th</sup> / Ellsworth, and 4<sup>th</sup> and 5<sup>th</sup> and 6<sup>th</sup> / Lyon

## 9th Ave/Lyon Street/OR 99E Ramps

- Dual lane northbound 99E off-ramp

# Project Bundles – Alternatives

Location	Project	Bundle #1	Bundle #2	Bundle #3
Springhill/US 20	Truck Route to Hickory	X		
	Superelevation Adjustment		X	X
1 <sup>st</sup> /Lyon	Dual WBR, WBT, Bike lane north side 1 <sup>st</sup>	X		
	WBR, WBTR, Bike lane north side of 1 <sup>st</sup>		X	
	WBR, WBTR, Bike lane on south side of 1 <sup>st</sup>			X
Corridor Bike Facilities	2-way cycle track on Lyon Street (east side)	X		
	1-way cycle tracks on Lyon and Ellsworth		X	
	Buffered bike lanes on Lyon and Ellsworth			X

# Project Bundle Future Traffic Conditions Animations



# Alternatives Analysis Key Findings – Summary

**System Wide – Future conditions PM peak hour delay decreases from 10 to 3-4 minutes per vehicle**

## **Springhill/US 20**

- New dual left movement better manages queuing on Springhill
- Increased throughput on US 20 highlights bottleneck on north side of the Lyon Street bridge where the westbound right turn lane to Springhill opens up

## **1<sup>st</sup>/Lyon**

- All dual right turn movement alternatives improve queuing and capacity on 1<sup>st</sup> Avenue
- Bike lane on south side of 1<sup>st</sup> Avenue reduces conflicts for the westbound right turn

# Alternatives Analysis Key Findings – Summary

## 1<sup>st</sup>/2<sup>nd</sup>/Ellsworth

- Southbound left turn lane improves southbound throughput over the Ellsworth bridge
- Signal timing adjustments provide additional southbound through movement capacity

## 99E/9<sup>th</sup>/Lyon

- Dual lane off-ramp helps

### Peak Period (4-6 PM) Throughput at Key Locations

Location	No-Build	Bundle #1	Bundle #2	Bundle #3
Lyon Street Bridge (Northbound)	4,417	5,009 (+13%)	4,896 (+11%)	4,964 (+12%)
Ellsworth Street Bridge (Southbound)	3,345	3,858 (+15%)	3,837 (+15%)	3,864 (+15%)
Westbound Right Turn at 1 <sup>st</sup> Ave and Lyon St	1,014	1,550 (+53%)	1,503 (+48%)	1,501 (+48%)



**Next Steps**

# Upcoming Items

- + Develop a recommended prioritized list of projects on the corridor incorporating Council feedback received today**
- + ODOT ARTS Grant Application**
- + Transportation System Plan (TSP) Update**

# THANK YOU

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