



# Portland Metro Area Value Pricing Feasibility Analysis

Clark County Board of Councils



March 27, 2018

# Presentation overview

- ❑ Background and process for value pricing analysis
- ❑ What we're hearing: public engagement
- ❑ What we're learning: Round 1 analysis and Round 2 concepts
- ❑ Equity considerations
- ❑ Next steps

# Regional growth

**From 2014-15 the  
Portland area grew  
by 30,761 people**

**35,800 jobs were  
added**

Peak congestion periods  
are getting longer and  
encroaching into the  
middle of the day.

Trips are taking longer,  
impacting passenger  
vehicles, public  
transportation and freight  
movement.

# From 2013 to 2015...



WHILE THE  
POPULATION  
HAS GROWN  
BY **3.0%**,






HOURS OF  
CONGESTION  
HAVE  
INCREASED **13.6%**,

AND DAILY VEHICLE  
HOURS OF DELAY  
HAVE  
INCREASED **22.6%**.

# I-5 corridor performance






I-5   Corridor		2015	2013 vs 2015 Change
 <b>Hours of Congestion</b> (Daily Hours)	NB	15.7	+9.0%
	SB	15.5	+0.6%
 <b>Daily Vehicle Hours Delay</b> (Daily Vehicle Hours)	NB	6,440	+18.1%
	SB	6,095	+23.6%
 <b>Annual Crashes</b>	NB	556	+12.0%
	SB	564	+17.0%

Source: ODOT. June 2017. Portland Region 2016 Traffic Performance Report.

# I-205 corridor performance



I-205   Corridor		2015	2013 vs 2015 Change
 <b>Hours of Congestion</b> (Daily Hours)	NB	9.8	+32.4%
	SB	10.0	+47.1%
 <b>Daily Vehicle Hours Delay</b> (Daily Vehicle Hours)	NB	5,468	+45.0%
	SB	4,462	+52.6%
 <b>Annual Crashes</b>	NB	476	+18.0%
	SB	430	+45.0%



# What's the problem?

State of Oregon Transportation Department

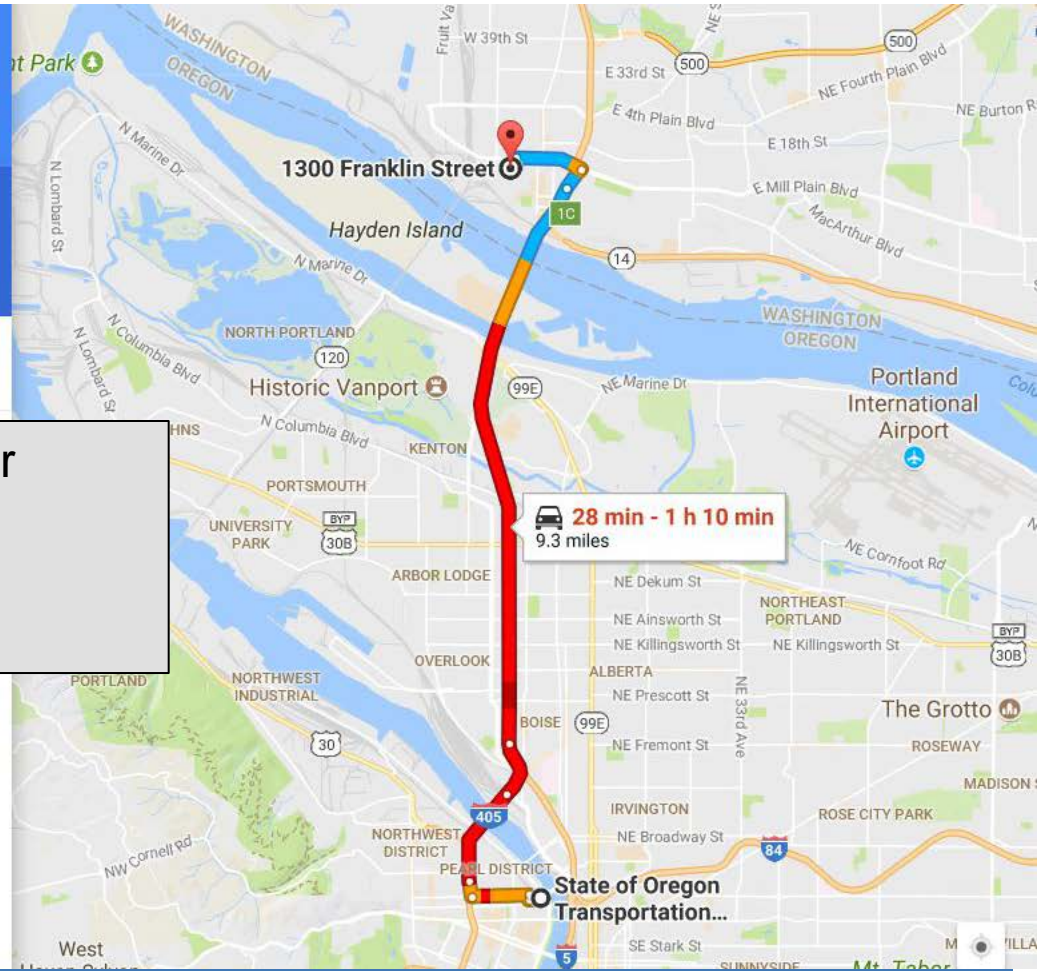
1300 Franklin St, Vancouver, WA 98660

Depart at 5:10 PM Tue, Mar 13

Send directions to your phone

Downtown Portland to Vancouver

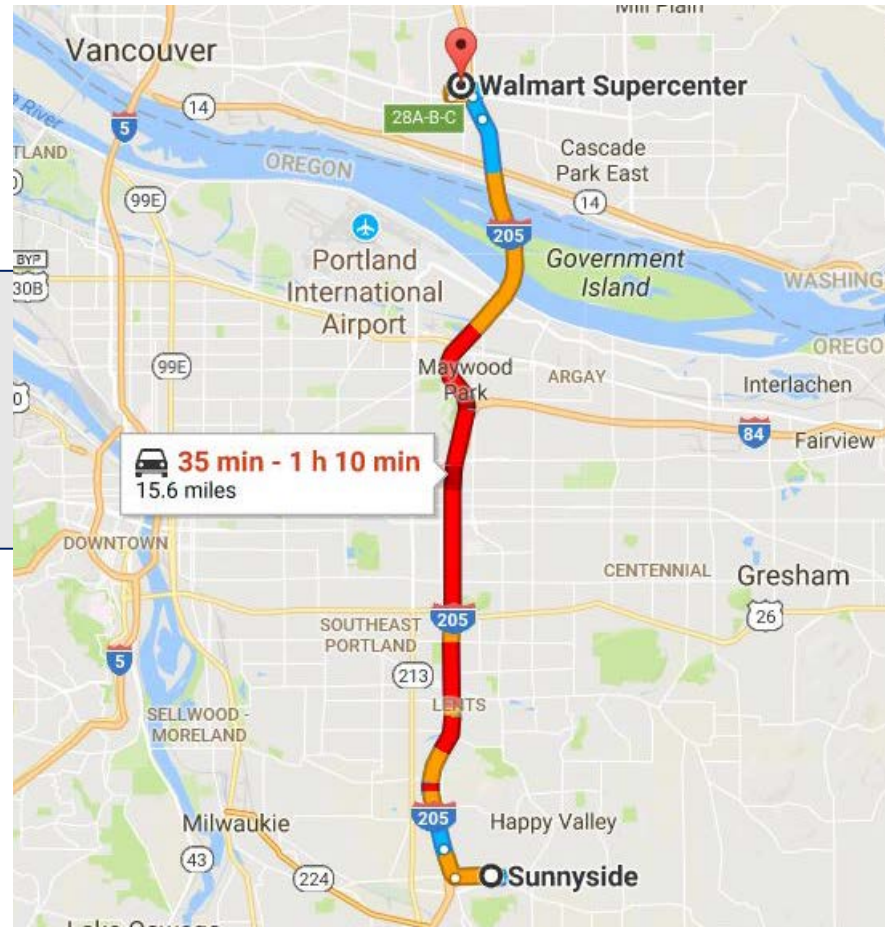
Estimated travel time:  
28 min to 1 hour 10 min



# What's the problem?

Sunnyside to Vancouver

Estimated travel time:  
35 min to 1 hour 10 minutes





# Comprehensive approach to congestion relief in HB 2017

Bottleneck relief



Transportation options



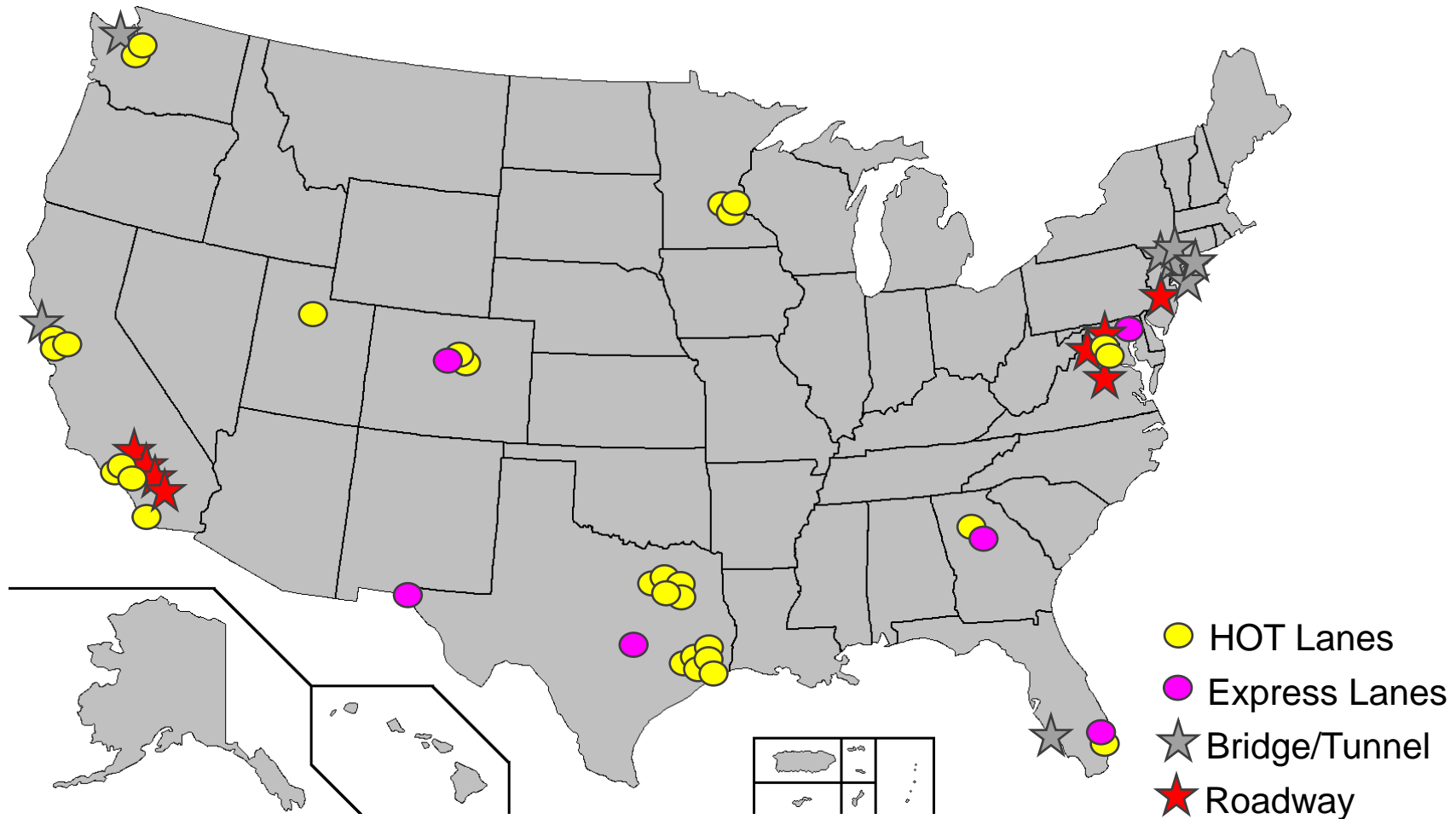
Freight rail



Value pricing



# Variably priced lanes and roadways



# Value Pricing Feasibility Analysis

## Policy Advisory Committee will recommend to OTC:

- Location(s) best suited for value pricing to reduce congestion
- The type(s) of value pricing to implement
- Mitigation strategies to evaluate further



# Value Pricing Policy Advisory Committee

## Oregon Transportation Commission

Clackamas County	Clark County	Multnomah County	Washington County
City of Portland	Port of Portland	Metro	City of Vancouver
TriMet	Ride Connection	Verde	Oregon Trucking Associations
Portland Business Alliance	Fred Meyer	OPAL Environmental Justice of Oregon	The Street Trust
Oregon Environmental Council	AAA Oregon	Westside Economic Alliance	Community Alliance of Tenants
ODOT	WSDOT	2 OTC members (Co-Chairs)	FHWA (ex officio)

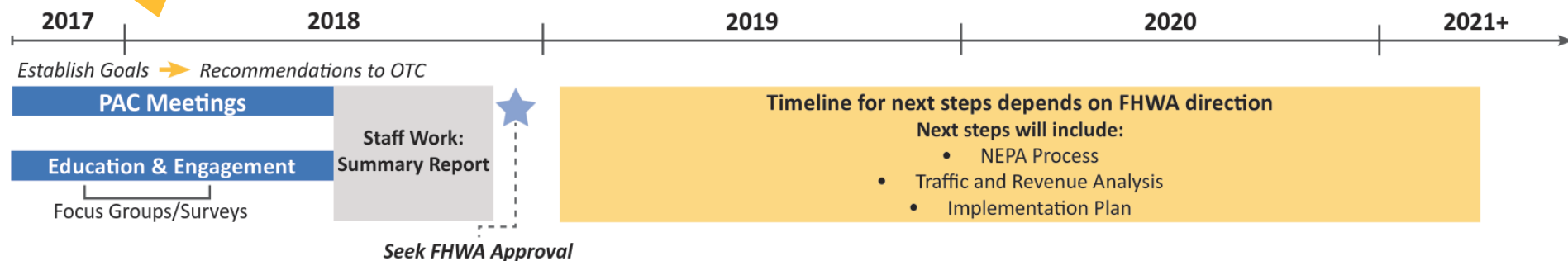
# Policy considerations for the PAC

- Traffic operations improvements
- Diversion of traffic
- Adequacy of transit service
- Equity impacts
- Impacts on the community, economy, and environment
- Revenue and cost
- Public input
- Consistency with state law/ policy and regional plans
- Feasibility under federal law
- Project delivery schedules



# Implementation timeline

We are here



# Public Outreach

# Getting the word out

- News releases
- Media coverage
- Toolkit emailed to stakeholder groups
- Emails to Value Pricing mailing list
- ODOT social media posts (Facebook and Twitter)
- Digital advertising



Oregon DOT @OregonDOT · Jan 23

#PDXtraffic: Join us at our first informal open house on the potential use of #congestionpricing to improve travel reliability on I- 5 & I-205. Drop by @ClackamasTC between 4:30-7:30PM tonight for a one-on-one conversation w/staff & to provide feedback: [ow.ly/Ow0X30hXhcJ](https://ow.ly/Ow0X30hXhcJ)



6

3

5



16

# High level of regional input

- **6,722** visitors to online open house
- **3,400** views of overview video on ODOT YouTube site
- **260** people at 3 open houses
- **1,810** completed questionnaires
- **1,400** email/ voice-mail comments



# What we are hearing

## Common themes in public comments

- Congestion is a problem and getting worse
- Negative effects of congestion:
  - Time spent in traffic
  - Increased stress, anxiety, and frustration
  - Unpredictable travel time
  - Unsafe driving conditions



# What we are hearing

## Questions and concerns about pricing implementation

- Impacts on low income communities
- Diversion of traffic onto surface streets & into neighborhoods
- Questions and ideas about how revenue should be used
- Range of perspectives:
  - Must add capacity / Must not add capacity
  - Don't want to pay another fee / Want a more reliable trip

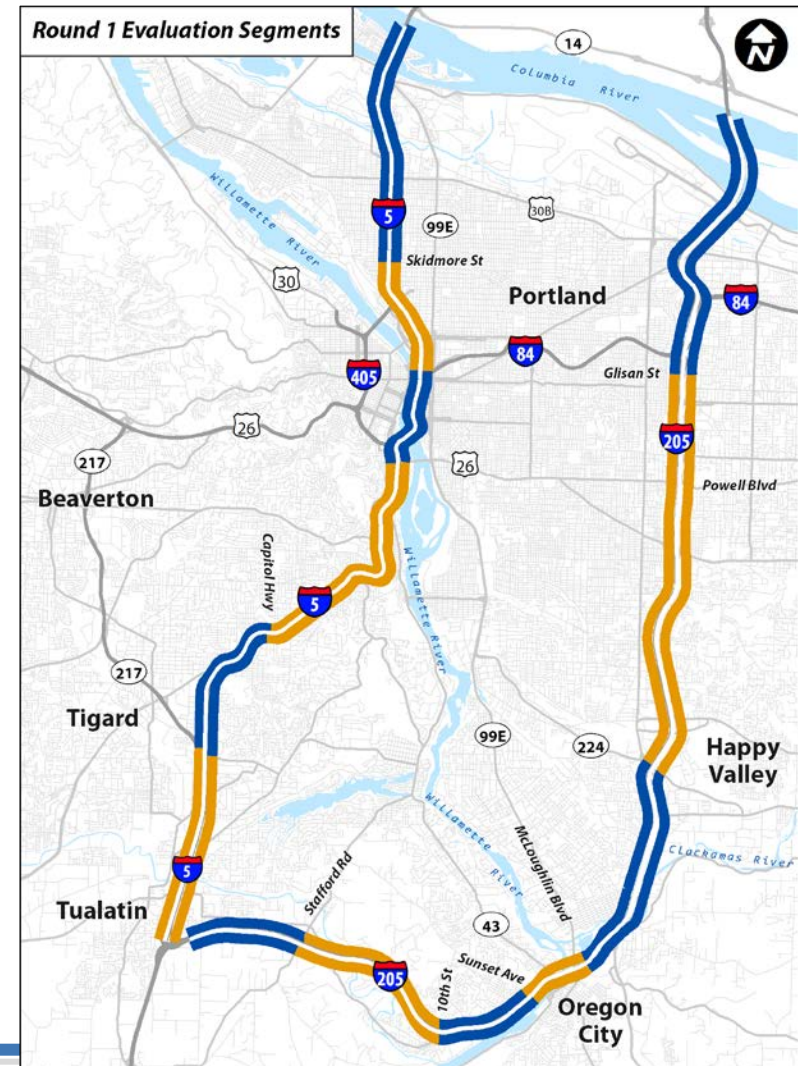
# Initial concept evaluation

# Round 1 evaluation: Overview

## Screening assessment

- Traffic operations
- Capital expenditure
- Physical constraints
- Equity and mitigation

## Corridor segmentation



# Concept 1: 2027 Baseline

## No tolls on any lanes or roadways along I-5 or I-205

- Traffic operations
  - Widespread hyper-congestion
  - 10 MPH peak period average speed
- Capital and operating costs
  - 2027 planned investment
- Geometric and physical constraints
  - 2027 planned investment
- Equity and mitigation
  - 2027 planned investment



# Freeway value pricing treatments

## Freeway Pricing

### Priced Roadways



### Priced Lanes





# Round 1 evaluation: Initial concepts

## Key



No Pricing



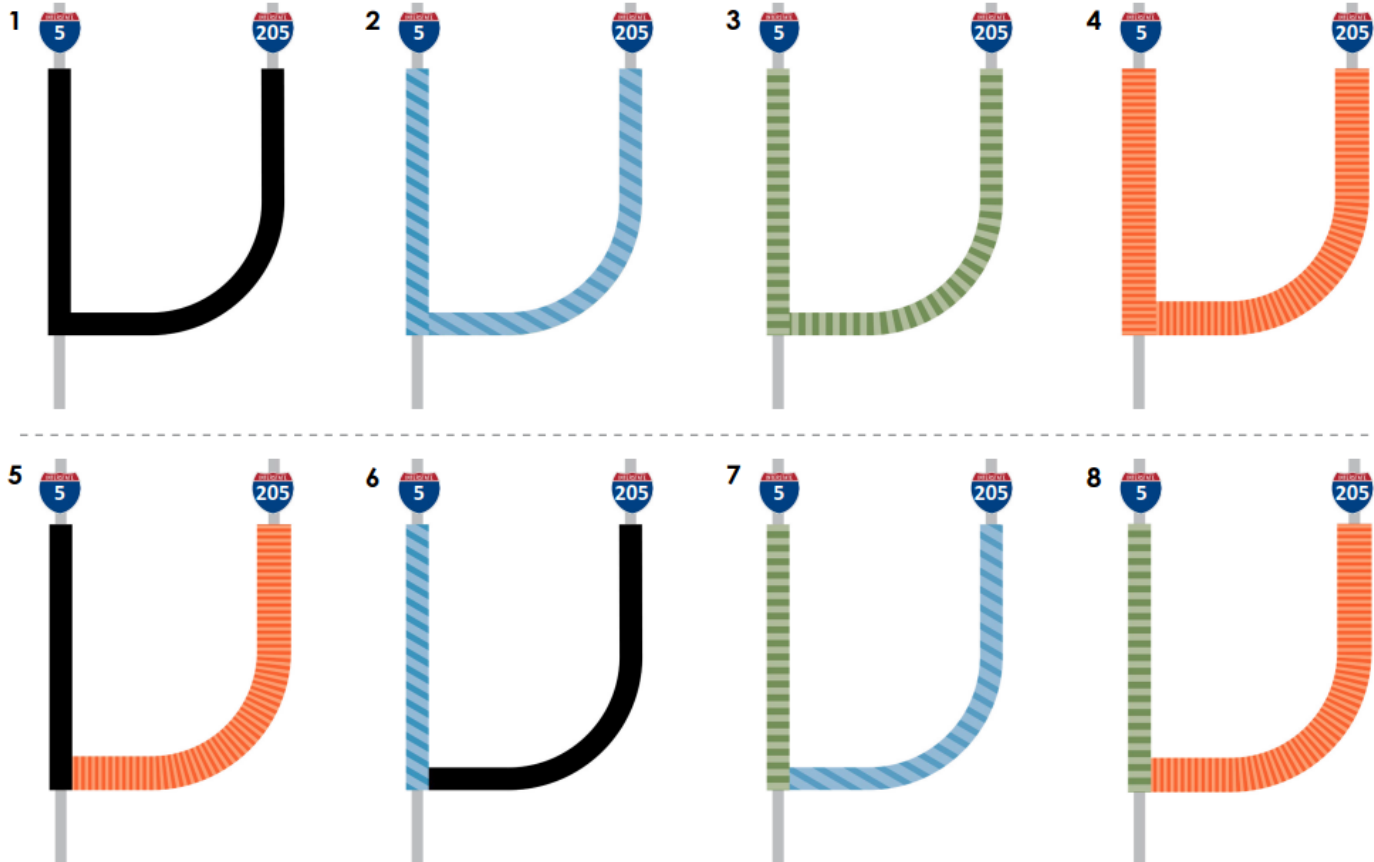
Priced roadways;  
toll all lanes



Priced lane:  
convert one existing general  
purpose lane in each direction



Priced lane:  
construct a new priced lane in each direction



# Key findings from Round 1

## **Priced Lane – Convert existing lane**

- Not operationally feasible in areas with only 2 lanes (e.g., Rose Quarter)
- Freight not typically allowed in left most lane
- Equity trade off: Maintains a “free” lane, but may not share benefits of pricing
- Single tolled lanes tend to generate limited revenue

# Key findings from Round 1

## Priced Lane – Construct a 4<sup>th</sup> lane

- Most expensive & impactful due to construction
- Improved traffic operations are largely due to added roadway capacity
- Equity trade off:
  - Maintains unpriced lane;
  - Impacts from construction & added traffic.
- The travel benefits would be limited by downstream bottlenecks
- Limited revenue from single-lane tolls

# Key findings from Round 1

## Priced Roadway

- Highest level of congestion relief
- Does not preclude freight (as do priced lanes)
- Equity trade-offs
  - No unpriced lane option
  - Can function with lower price, shared benefits
- Significantly less expensive to implement
- Highest revenue potential

# Recommended Round 2 Concepts



# Project team recommendation

## Round 2 Concepts for further evaluation

Based on:

- Technical evaluation
- Public and stakeholder outreach
- Professional experience around the country and internationally

# Round 2 Concept A: Priced Lane Conversion

## Northern I-5 priced lanes

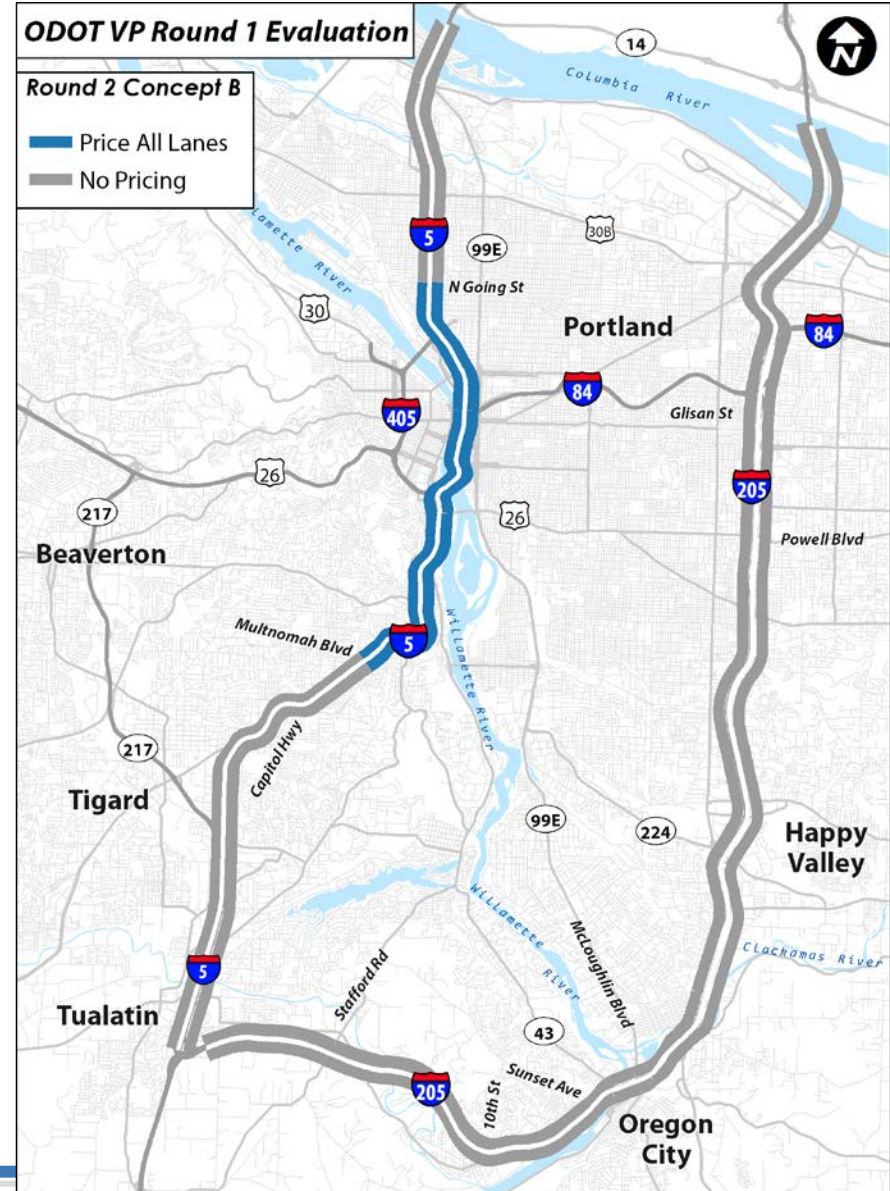
- Convert existing northbound HOV to priced lane
- Convert existing southbound GP to priced lane
- Key rationale
  - Relatively simple FHWA process
  - Significant existing congestion
  - Least expensive Round 2 Concept
- Key topics
  - Current HOV performance/compliance
  - Diversion
  - Federal and NEPA requirements



# Round 2 Concept B: Priced Roadway

## Toll all lanes on I-5

- Near downtown Portland
  - Multnomah Blvd to Going St
  - Both directions
- Key rationale
  - Few possible solutions without significant investment
  - Provides new revenue source
  - Most severe congestion in Portland metro area
- Key topics
  - Diversion
  - Tradeoffs for equity
  - Federal and NEPA requirements

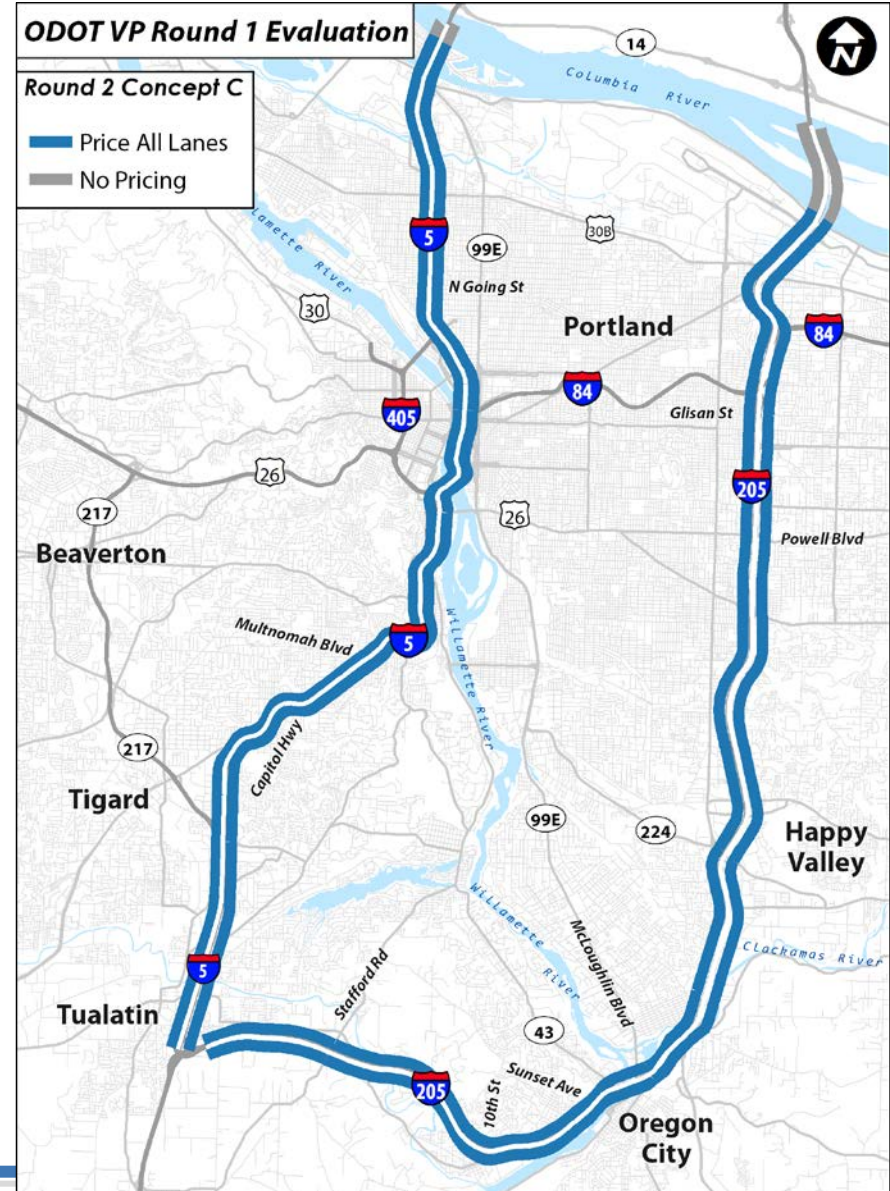




# Round 2 Concept C: Priced Roadway

## Toll all lanes on I-5 and I-205

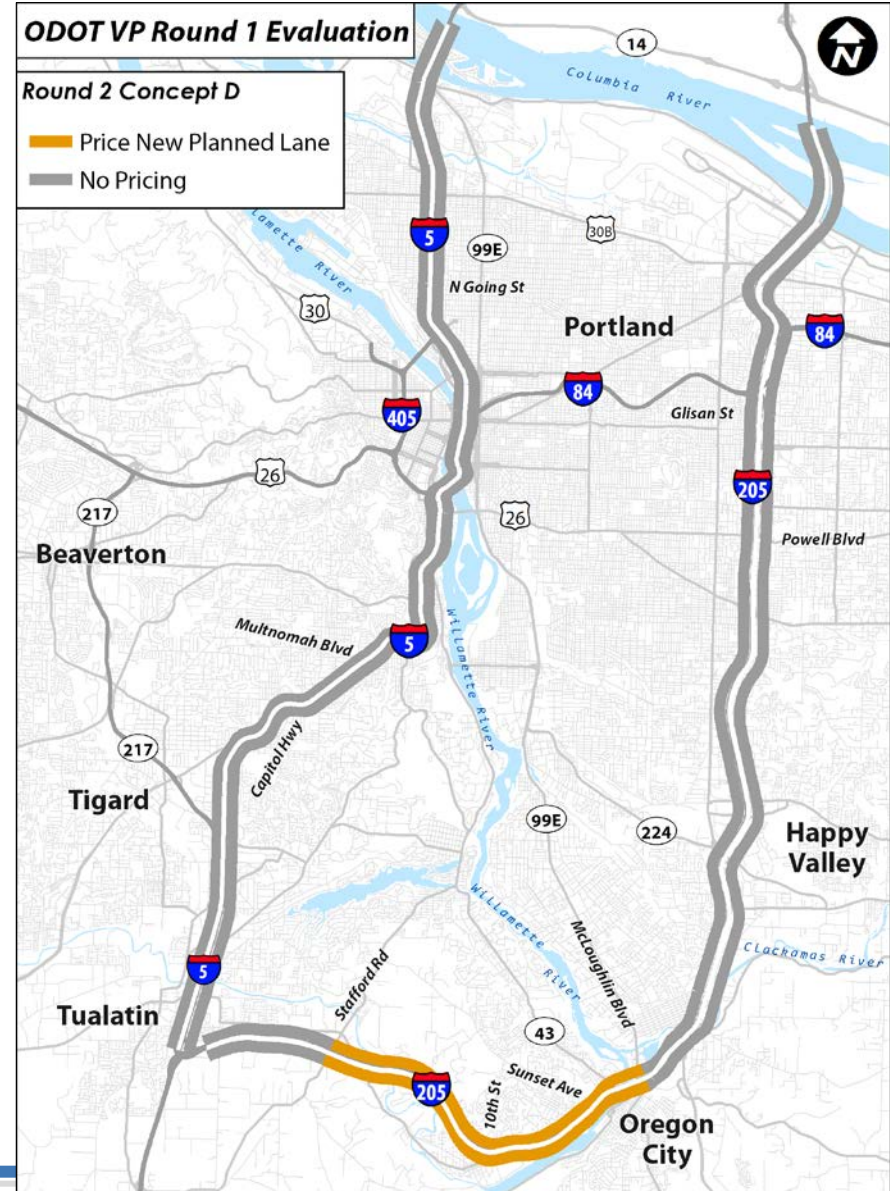
- Key rationale
  - Greatest congestion relief
  - Greatest revenue potential
    - Mitigation strategies
  - Relatively inexpensive
  - Opportunity for part-time operations
- Key topics
  - Diversion
  - Impacts on I-84, I-405 and Boone Bridge (Wilsonville, OR)
  - Equity impacts and mitigations
  - Federal and NEPA requirements



# Round 2 Concept D: New Priced Lane

## New priced lane on I-205

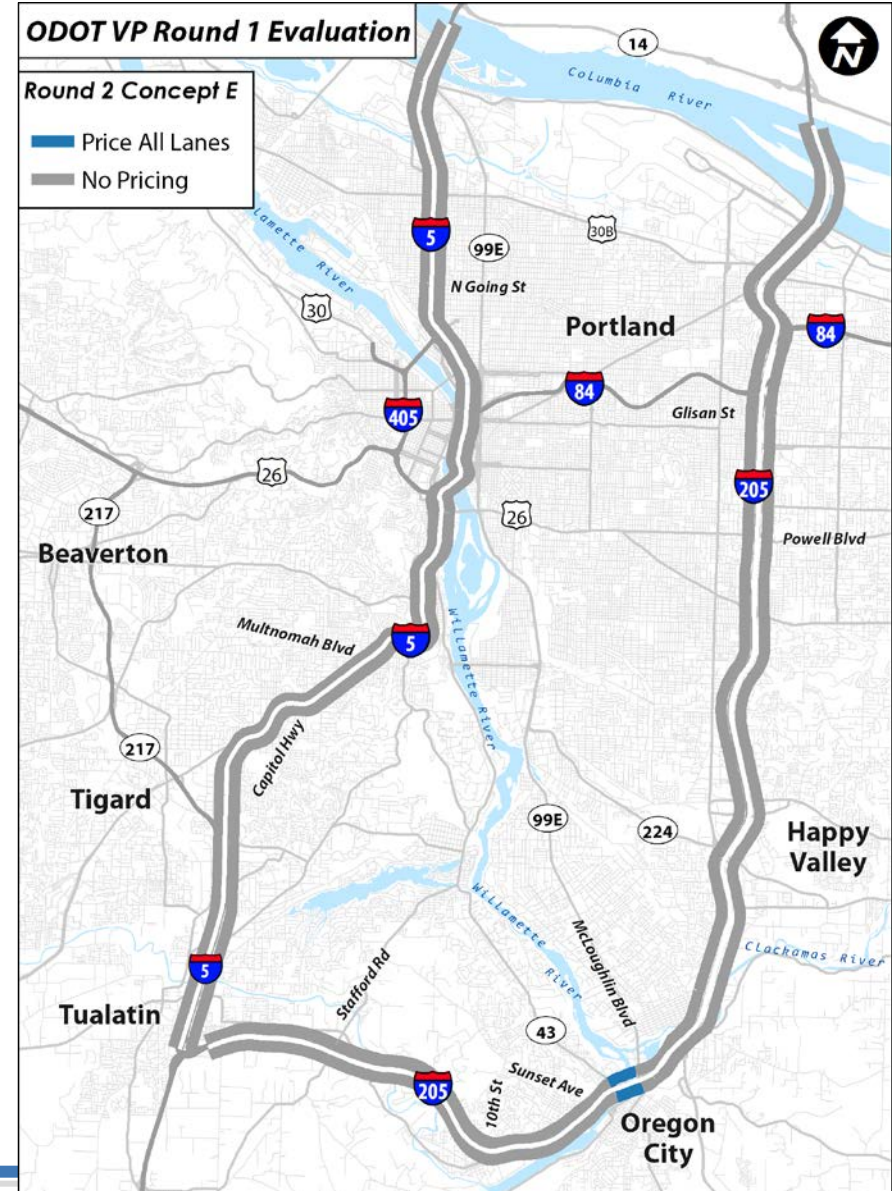
- In southern Portland metro area
  - Stafford Rd to OR 99E
  - Includes Abernethy Bridge
- Key rationale
  - Removes existing 2 lane bottleneck
  - Provides new revenue source
  - Potential to relieve congestion in southern I-205 corridor
- Key topics
  - Diversion
  - Operational effects on I-5
  - Federal and NEPA requirements





# Toll both directions on Abernethy Bridge

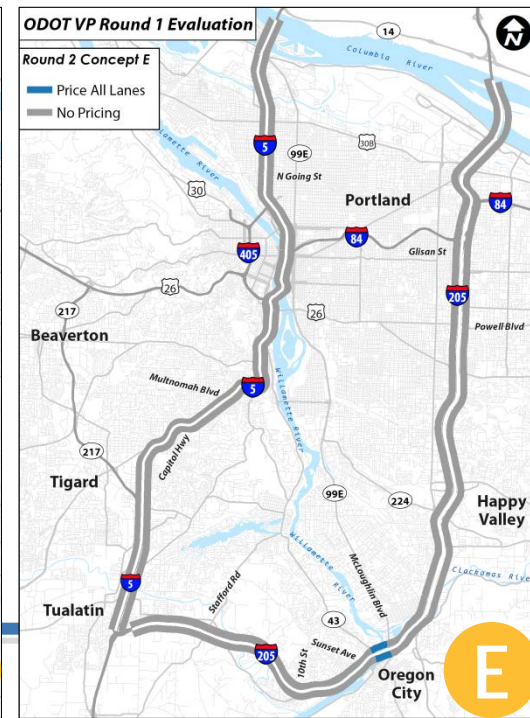
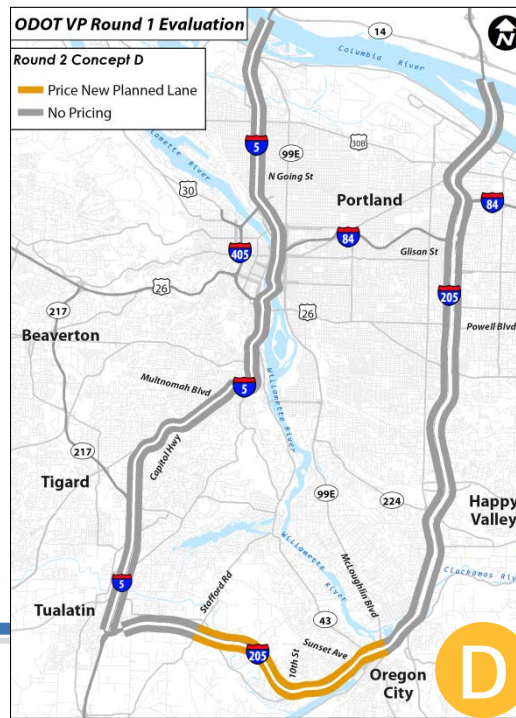
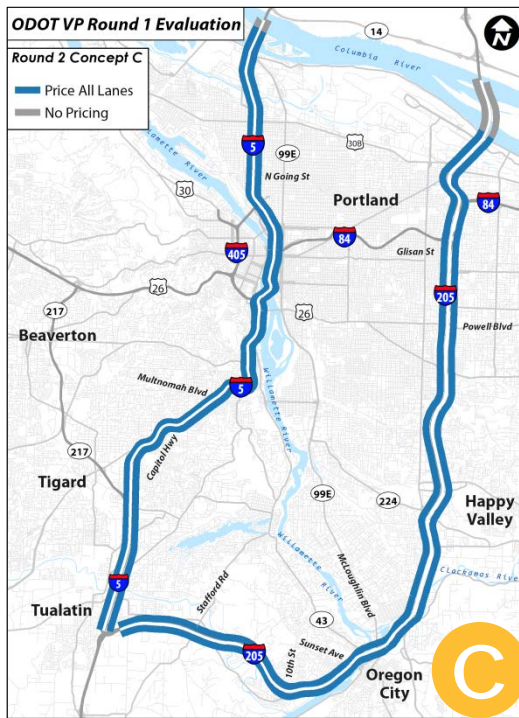
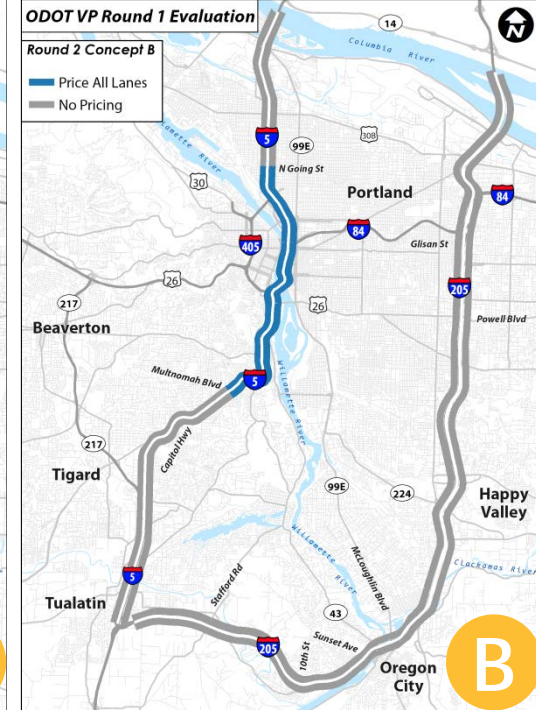
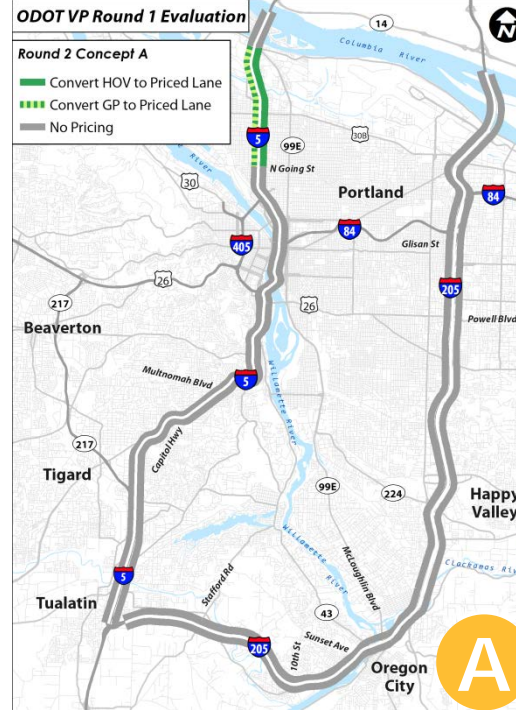
- Single toll location at bridge center
- Key rationale
  - Reduces impact on existing 2 lane bottleneck on bridge
  - New revenue source for seismic upgrades
  - Potential to relieve congestion within bridge vicinity
- Key topics
  - Diversion
  - Revenue potential
  - Operational effects on I-205
  - Federal and NEPA requirements





# Round 2 Concepts

- 5 concepts: A through E



# Equity considerations

# Key equity considerations

- What input do environmental justice communities have?
- How would benefits be distributed?
- What choices will exist and for whom?
- How would impacts be experienced?
- What can be done to better distribute benefits and mitigate impacts?

# Actions other states have taken

## Incentives and discounts



*HOV Toll-Free Use Signage, I-10 Express, Los Angeles, California*

- HOV use for free / discounted rates
  - Most express lanes
  - Some toll roads
- Subsidized toll rates
  - Los Angeles Low Income Assistance Plan for I-10 / I-110
- Toll credits for use of modal alternatives
  - Atlanta I-85 Express Lanes
  - Los Angeles I-10 / I-110 Express
- Toll credits by location
  - Ft. Worth Chisholm Trail Tollway

# Actions other states have taken

## Special access programs



*License Plate Tolling Signage, North Tarrant Express, Ft Worth, Texas*

- Cash accounts for unbanked populations
  - California
  - Washington
  - Texas
- License-plate tolling
  - Colorado
  - Washington
  - Texas
  - Florida



# Actions other states have taken

## Enhanced multi-modal investments



*In-line bus station on I-35W Express Lane, Minneapolis, Minnesota*

- Provide improved and expanded transit facilities and services to address accessibility
  - Washington
  - Minnesota
  - California



# Next Steps

# Next steps: Spring engagement

- 6 equity focused discussion groups
- open houses in April (3 in-person and 1 online)
- Updated tool kit for community groups
- Presentations, briefings, website, email/vm



# Open house locations across the region

## Portland Metro Area Value Pricing Feasibility Analysis Public Engagement Open Houses



# Spring Open Houses

**Thursday April 12<sup>th</sup>**  
5:30pm to 7:30pm

**Museum of Oregon Territory**  
**Oregon City**

**Saturday April 14<sup>th</sup>**  
10am to 12pm

**Ron Russell Middle School**  
**Southeast Portland**

**Wednesday April 18<sup>th</sup>**  
5:30pm to 7:30pm

**Public Works Auditorium**  
**Tigard**

**Saturday April 21<sup>st</sup>**  
9:30am to 12:30pm

**Embassy Suites Airport**  
**Northeast Portland**

**On-line open house planned for April 5 to 19**

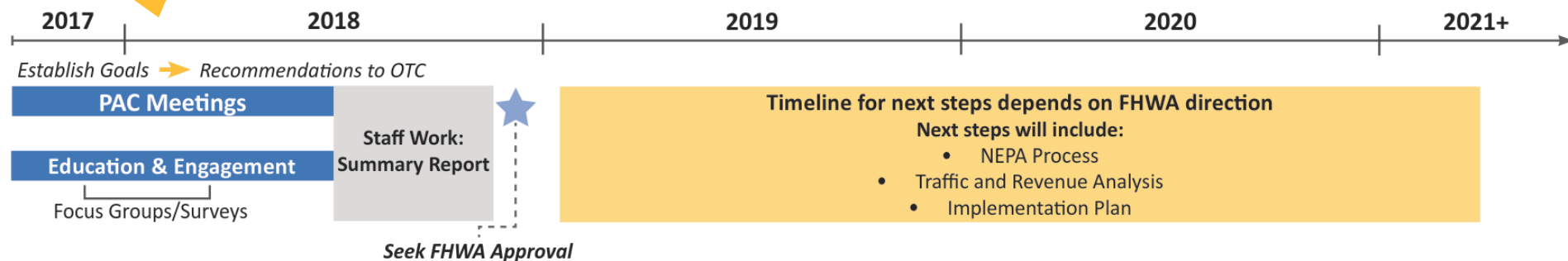
# PAC Recommendation Process

	<b>PAC4 April 11</b>	<b>PAC 5 May 14</b>	<b>PAC 6 June 25</b>
<b>Information/ Discussion</b>	Mitigation approaches / current policies	Round 2 concept analysis findings	Refinement of recommendations
<b>Outcome</b>	Identify mitigation opportunities & approaches	Preferred concept(s)	Final Recommendations - Location - Type - Mitigations

<b>OTC meeting July 12</b>	<b>Present the PAC recommendation(s) and hear public comment</b>
--------------------------------	--

# Implementation timeline

We are here



# For more information and to sign up for updates

## Project web site

- [www.ODOTvaluepricing.org](http://www.ODOTvaluepricing.org)

## Contact us

- [valuepricingINFO@odot.state.or.us](mailto:valuepricingINFO@odot.state.or.us) (project team)
- [valuepricingPAC@odot.state.or.us](mailto:valuepricingPAC@odot.state.or.us) (Advisory Committee)