

PLANNING COMMISSION WEDNESDAY, APRIL 11, 2018

II. LEGISLATIVE HEARING

 A. Southbound I—5 Boone Bridge Auxiliary Lane Study (aka Southbound I-5 Bone Bridge Auxiliary Lane Study) (Kraushaar) (60 minutes)

PLANNING COMMISSION RESOLUTION NO. LP18-0004

A RESOLUTION OF THE CITY OF WILSONVILLE PLANNING COMMISSION RECOMMENDING APPROVAL OF THE I-5 WILSONVILLE FACILITY PLAN TO THE CITY COUNCIL

WHEREAS, the Planning Commission of the City of Wilsonville ("City") has the authority to review and make recommendations to the City Council regarding plans that impact the City's infrastructure systems and may be later considered to amend the City's infrastructure system master plans; and

WHEREAS, the Oregon Department of Transportation ("ODOT") has prepared the I-5 Wilsonville Facility Plan ("Plan") which includes analysis, findings, and recommendations for transportation improvements that impact the users of southbound Interstate 5 ("I-5") between Exits 282A, 282B, and 283 (Canby/Hubbard, Charbonneau, and Wilsonville Road exits), many of whom live or work in the Wilsonville community; and

WHEREAS, the Plan was completed to evaluate operational problems on I-5 southbound from the Wilsonville on-ramp (Exit 283) to the Canby-Hubbard off-ramp (Exist 282A); and

WHEREAS, the Plan was initiated to address a bottleneck that has emerged on southbound I-5 in Wilsonville, slowing speeds and reducing travel reliability for people traveling southbound by car, by transit, or moving goods by truck; and

WHEREAS, failure to address this bottleneck will lead to slower travel, more costly goods movement, reduced livability, and higher safety risks for those who use I-5 and the surrounding local transportation network; and

WHEREAS, this segment of I-5 is the gateway between the Portland region and the rest of the state and is a key segment on the primary west coast route for regional, interstate, and international goods movement by truck; and

WHEREAS, I-5 is the state's critical seismic lifeline route, and the Boone Bridge (which is part of the study area) will require upgrades to withstand a major Cascadia Subduction Zone earthquake; and WHEREAS, the Plan establishes a long-term plan for managing this bottleneck with a mode-specific facility plan for motor vehicle, freight truck, and transit users of the interstate; and

WHEREAS, the Plan recommends constructing a "ramp-to-ramp" lane that provides a direct connection between the Wilsonville Road on-ramp to the Charbonneau and Canby-Hubbard exit ramps; and-

WHEREAS, the Oregon Transportation Commission will considered adopting the Plan as an amendment to the Oregon Highway Plan, which allows ODOT to submit the "ramp-to-ramp" lane project for the 2018 Regional Transportation Plan Financially Constrained Project List, for funding in the 2028-2040 time frame; and

WHEREAS, ODOT seeks the Wilsonville City Council approval of the Plan for which Planning Commission direction is sought; and

NOW, THEREFORE, BE IT RESOLVED that the Wilsonville Planning Commission does hereby:

- Adopt Resolution No. LP18-0004, the Staff Report and its attachments (attached hereto as Attachment 1 and incorporated herein), as presented at its April 11, 2018 meeting, and further recommends the Wilsonville City Council approve the I-5 Wilsonville Facility Plan; and
- 2. Note that this Resolution shall be effective upon adoption.

ADOPTED by the Wilsonville Planning Commission at a regular meeting thereof this 11th day of April 2018, and filed with the Wilsonville City Recorder this date.

Wilsonville Planning Commission

ATTEST:

Tami Bergeron, Planning Administrative Assistant

SUMMARY OF VOTES:

Commissioner Greenfield	
Commissioner Postma	
Commissioner Hurley	
Commissioner Mesbah	
Commissioner Millan	
Commissioner Springall	
Commissioner Heberlein	

Attachments:

Attachment 1 – Staff Report

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PLANNING COMMISSION WORK SESSION STAFF REPORT

Meeting Date: April 11, 2018	ng Date: April 11, 2018Subject: Resolution LP18-0004 - Recommending Approval of the ODOT I-5 Wilsonville Facility Plan to the City Council Staff Members: Nancy Kraushaar, PE, Community Development Director Department: Community Development			
Action Required			isory Board/Com	
		Rec	ommendation	
□ Motion			Approval	
Public Hearing Date: April 2018	11,		Denial	
\Box Ordinance 1 st Reading Date	:		None Forwarded	
\Box Ordinance 2 nd Reading Date	e:		Not Applicable	
⊠ Resolution	•	Com	nments: N/A	
□ Information or Direction				
□ Information Only				
□ Council Direction				
□ Consent Agenda				
Staff Recommendation: Staff recommends the Planning Commission conduct a public				
hearing on the proposed ODOT I-5 Wilsonville Facility Plan and adopt Resolution LP18-0004				
recommending approval of the ODOT I-5 Wilsonville Facility Plan to the City Council.				
Recommended Language for Motion: I move to adopt Resolution LP18-0004,				
recommending the approval of the ODOT I-5 Wilsonville Facility Plan to the City Council.				
Project / Issue Relates To:				
⊠Council Goals/Priorities		oted 1	Master Plan(s)	□Not Applicable

ISSUE BEFORE COMMISSION:

The Planning Commission will consider recommending approval of the ODOT I-5 Wilsonville Facility Plan to the City Council. The hearing provides the Planning Commission an opportunity to hear draft recommendations, review feedback from an online open-house survey held in March, and listen to public comment on the proposed I-5 Wilsonville Facility Plan.

EXECUTIVE SUMMARY:

The Oregon Department of Transportation ("ODOT") has prepared the I-5 Wilsonville Facility Plan ("Plan") Public Review Draft – see **Exhibit A**. The I-5 Wilsonville Facility Plan is based upon results of the Southbound I-5 Boone Bridge Congestion Study, completed jointly by the City of Wilsonville and ODOT. ODOT has conducted the technical analysis and the City of Wilsonville is conducting the public involvement for the project.

ATTACHMENT 1

The study was initiated to address a bottleneck that has emerged on I-5 in Wilsonville, slowing speeds and reducing travel reliability for people traveling southbound by car, by transit, or moving goods by truck. The study results are important because this I-5 segment serves as:

- The gateway between the Portland region and the rest of the state;
- A key segment on the primary west coast route for regional, interstate, and international goods movement by truck
- A key component of the state's critical seismic lifeline route, and the Boone Bridge (which is part of the study area) will require upgrades to withstand a major Cascadia Subduction Zone earthquake.

The study evaluated operational problems on I-5 southbound from the Wilsonville on-ramp (Exit 283) to the Canby-Hubbard off-ramp (Exit 282A) and determines the benefits of adding a ramp-to-ramp lane to address the bottleneck that has emerged in this area. Technical analyses show that ignoring this bottleneck will lead to slower travel, more costly goods movement, reduced livability, and higher safety risks for those who use I-5 and the surrounding local transportation network.

Data analyses found that 60 percent of all traffic getting on I-5 at Wilsonville Road exits at either the Charbonneau or Canby/Hubbard exits. This condition lends itself well to a ramp-to-ramp solution that is intended to primarily serve short freeway trips. Ramp-to-ramp lanes improve safety and operation at closely-spaced interchanges, like those in the study area. According to ODOT, similar projects in the Portland region have reduced crashes by 30 to 50 percent.

The study analyzed three solutions (Options A, B, and C) for ramp-to-ramp configurations to address the bottleneck. The Plan recommends Option C, a congestion-mitigation solution that adds a ramp-to-ramp lane extending southbound on I-5 from the Wilsonville Road on-ramp across the Willamette River Boone Bridge past Charbonneau/Miley Road exit to the Canby/Hubbard Highway 551 off-ramp.

The Technical Advisory Committee (TAC) for the study included ODOT, the City, Clackamas County, Washington County, DKS Associates, and Angelo Planning Group. (Marion County chose not to participate in the TAC but received updates at project milestones. After reviewing the technical analysis results, the TAC unanimously recommended Option C as the preferred solution.

COMMUNITY INVOLVEMENT PROCESS:

A primary goal established by ODOT Region 1 and the City of Wilsonville for the project was to promote public involvement and participation by local governments. The project team focused outreach efforts on gathering feedback about traveler experiences with the operational problems on I-5, presenting the ramp-to-ramp options, and asking for input on the recommendation that Option C should be constructed as part of a seismic retrofit project in the future.

Public and stakeholder involvement activities began in December of 2017, with Wilsonville area outreach efforts led by city staff and consultants and regional outreach efforts coordinated by ODOT. The City created a website for the congestion study, shared regular monthly articles in The Boones Ferry Messenger, sent media releases to The Spokesman Newspaper, and provided information via email.

ATTACHMENT 1

An Open House was held on March 14, 2018 at Wilsonville City Hall. It drew 30 to 40 attendees, who discussed the results of the technical analysis with project team staff, received a presentation of major findings, and participated in a question and answer session. The same materials were shared in an Online Open House and survey hosted by the City during the second half of March. See below for additional information on results from the on-line survey.

The project team met with or is scheduled to meet with the following stakeholder groups in March and April to share congestion study findings, answer questions, and gather input:

- Wilsonville Chamber of Commerce
- Wilsonville Rotary Club
- Charbonneau Homeowners' Association
- Washington County Coordinating Committee Transportation Advisory Committee (scheduled)
- Oregon Freight Advisory Committee (scheduled)
- ODOT Region 1 Mobility Advisory Committee (scheduled)
- French Prairie Forum (scheduled)
- Metro's Transportation Policy Alternatives Committee (scheduled)
- Clackamas County Coordinating Committee C4 Metro Subcommittee (scheduled)

Based on meetings with the Chamber, Rotary Club, Charbonneau Homeowner's Association, and Planning Commission the team put together a Questions and Answers document that describes common questions and answers. Please see **Exhibit B**.

As noted above, the March 14th Open House was complemented by an "On-line Open House" survey. The survey ran from March 14 to March 31. It included key information that was available at the physical Open House, with questions posed regarding traveler experiences, the working recommendations, and participant demographics. The following is a brief summary of feedback received as of noon on March 29th. Please see **Exhibit C** for a more extensive summary, including verbatim comments received.

- There were about 280 respondents (not all participants answered all questions).
- Most survey respondents used I-5 to cross the Boone Bridge going south at least several times per week (41% at least once per day; 22% several times per week). Nearly 80% said they were likely to use the Wilsonville Road on-ramp on a typical trip, and over half said they were likely to use the Charbonneau District off-ramp. 43% said they were likely to use the Canby-Hubbard off-ramp. (All of which is to say this survey appears to have reached those that use/would be affected by the proposal).
- Respondents generally experienced unpredictable travel times, frequent congestion, and spillback. A lower percentage (though still the majority) experienced dangerous weaving behavior.
- Given the information presented, 75% of respondents chose Option C as their preferred build. Option B was the second most preferred, with about 10% of respondents choosing it.
- About 7% of respondents checked "Other" regarding their preferred option see the Comments for explanation of those ideas.

- Almost all respondents said that ODOT should invest in operational improvements in this part of I-5.
- The average level of support for the recommended alternative is 92/100.
- Asked to list primary reasons, people provided many separate comments. Congestion, safety and commuting times were among the most common issues.

The Wilsonville Planning Commission received five presentations from the project team between November 2017 and April 2018, including hosting the Open House followed by a work session in March and the public hearing on the draft facility plan in April (scheduled to coincide

The final local action will be taken by the City Council in June when they will determine whether to approve the facility plan by resolution in preparation for an adoption decision by the Oregon Transportation Commission in July.

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY (businesses, neighborhoods, protected and other groups):

A southbound ramp-to-ramp lane on I-5 at this location has the potential to reduce merging conflicts and relieve the traffic bottleneck between the Wilsonville Road and Canby/Hubbard interchanges. Expected outcomes include improved safety and reliability for motorists on the I-5 mainline and those using these interchanges to enter or leave Wilsonville. Improved traffic conditions would benefit residents, businesses, and visitors to Wilsonville, as well as travelers or freight making regional or interstate trips.

TIMELINE:

- ODOT will share the draft facility plan for a 45-day public comment period beginning in April with links to public review materials available on the City's website.
- The Plan will be presented to the Oregon Transportation Commission in July when they will consider its adoption as an amendment to the Oregon Highway Plan.
- If adopted, ODOT intends to propose the ramp-to-ramp configuration in the adopted plan as a project for the 2018 update of the Metro Regional Transportation Plan (to be completed in December 2018).
- Due to a large backlog of transportation projects and limited funds, ODOT anticipates available funding for this project in the 2028-2040 timeframe. The state would seek to combine the ramp-to-ramp lane project with a seismic upgrade of the Boone Bridge.

ATTACHMENTS:

Attachment 1 – Resolution LP18-0004

EXHIBITS:

Exhibit A – I-5 Wilsonville Facility Plan Public Review Draft

Exhibit B – Southbound I-5 Boone Bridge Congestion Study, Questions and Answers as of March 29, 2018

Exhibit C - On-Line Open House Survey Results from March 14 to March 29



I-5 WILSONVILLE FACILITY PLAN

PUBLIC REVIEW DRAFT APRIL 2018



I-5 WILSONVILLE FACILITY PLAN

Prepared by

Oregon Department of Transportation, Region 1 123 NW Flanders Portland, OR 97214

ACKNOWLEDGEMENTS

ODOT Region 1

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Purpose Policy context Existing conditions, needs, and deficiencies Future conditions Plan alternatives and comparison of long-term operations Public involvement and local government participation Planned improvements Financial feasibility assessment Implementation recommendations

APPENDICES

Technical memos

Public involvement: summary of themes and project team responses

LIST OF ACRONYMS

CIP	Capital Improvement Plan		ODOT	Oregon Department of Tra	nsportation
FHWA	Federal Highway Administra	ation	ОНР	Oregon Highway Plan	
нсм	Highway Capacity Manual		RTP	Regional Transportation Pla	an
IAMP	Interchange Area Managem	nent Plan	SB	Southbound	
LOS	Level of Service		V/C	Volume-to-capacity ratio	
NB	Northbound	Planning Commission	Monting	April 11, 2018	Page 10 of 67

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FIGURE 1. Vicinity map.

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INTRODUCTION

The I-5 Wilsonville Facility Plan evaluates and addresses operational problems on I-5 southbound (SB) from the Wilsonville Road on-ramp (Exit 283) to the Canby-Hubbard off-ramp (Exit 282A) (FIGURE 1). A new bottleneck has emerged on I-5 in Wilsonville, slowing speeds and reducing travel reliability for people travelling southbound by car, by transit, or moving goods by truck. Failure to address this bottleneck will lead to slower travel, more costly goods movement, reduced livability, and higher safety risks for those who use I-5 and the surrounding local transportation network.

This segment of I-5 is the gateway between the Portland metro region and the rest of the state and is a key segment on the primary west coast route for regional, interstate, and international goods movement by truck. I-5 is the state's critical seismic lifeline route, and the Boone Bridge (which is part of the study area) will require upgrades to withstand a major Cascadia Subduction Zone quake.

This plan represents ODOT's latest effort to manage safety and mobility on I-5 in the Wilsonville area, building on several recent successful projects. In 2009, ODOT and the City collaborated to plan the reconstruction of the I-5: Wilsonville Road interchange, identifying infrastructure improvements and management strategies to better serve planned growth in the area. Nine years have passed since the adoption of the interchange area management plan (IAMP). In that time ODOT completed interchange reconstruction, and ODOT and the City implemented the bulk of the IAMP's other recommendations. More recent projects include the addition of a lane to the Wilsonville Road SB onramp to safely manage vehicle queues at the ramp meter; and improvements at the Elligsen Road northbound (NB) on-ramp enhanced safety and reliability for I-5 travel north through the plan area. These projects have improved conditions on Wilsonville Road and I-5 northbound (NB), but most were conceived before growing traffic volumes led to the emergence of the SB bottleneck. If congestion at this bottleneck continues to increase, I-5 will imminently fail to meet the mobility targets the state has set to define whether the highway is performing acceptably.

The I-5 Wilsonville Facility Plan establishes a long-term plan for managing this bottleneck. It is a modespecific facility plan for motor vehicle, freight truck, and transit users of the interstate, and implements the Oregon Highway Plan without amending the highway's classifications or changing the alignment of I-5.

POLICY CONTEXT

<u>The function of I-5 in the study area.</u> The Federal Highway Administration (FHWA) classifies I-5 in the study area as an urban interstate on the National Highway System, and as part of the national freight network. The Oregon Highway Plan (OHP), which establishes the function each highway serves in the state-owned transportation network, affirms these classifications. It also adds I-5's function as a Tier I seismic lifeline, a high clearance route that serves large freight vehicles, and a reduction review route that requires a formal process before ODOT may construct projects that reduce overhead clearance or roadway width.

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Together, these classifications define I-5 as a facility of national significance that provides connections to major cities, interregional, and interstate destinations. Its primary function is to provide safe, reliable, higher-speed operations for longer distance travel and goods movement, as well as emergency services. To fill this function, I-5 needs limited, well-spaced connections to the local system, sufficient clearance for over-dimensional freight, higher travel speeds, reliable travel times, and the structural stability to remain functional after a major quake or other disaster.

<u>Guiding statewide goals and policies.</u> The OHP supplies the major goals and policies that will guide decisions ODOT makes in this plan. The goals that most closely relate to the purpose of this facility plan are:

Goal 1. System Definition: To maintain and improve the safe and efficient movement of people and goods, and contribute to the health of Oregon's local, regional, and statewide economies and livability of its communities.

To meet this goal, this plan will need to:

- Remain consistent with I-5's functional classifications (Policy 1A).
- Support goods movement by improving I-5's performance and balancing needs of freight users with other travelers (1C).
- Maintain or improve the ability of I-5 to serve as a secure lifeline route for emergency services and recovery efforts after a disaster (1E).
- Maintain or improve I-5's performance relative to OHP mobility targets (1F).
- Maintain highway performance and improve safety by protecting the existing system and making minor improvements before considering expanding road capacity I-1G).

Goal 2. System Management: To work with local jurisdictions and federal agencies to create an increasingly seamless transportation system with respect to the development, operation, and maintenance of the highway and road system that:

Safeguards the state highway system by maintaining functionality and integrity; Ensures that local mobility and accessibility needs are met; and Enhances system efficiency and safety.

To meet this goal, this plan will need to:

- Balance state, regional, and local needs, drawing on partnerships with the City of Wilsonville, Clackamas County, and Washington County (2A).
- Ensure that citizens, businesses, regional and local governments, state agencies, and tribal governments have opportunities to participate in the planning process (2D).
- Manage and operate I-5 efficiently through the use of strategies like transportation system management and operations, intelligent transportation systems, and transportation demand management (2E).
- Maintain or improve safe travel in the study area, with a focus on preventing fatal and severe crashes (2F).

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In the past two federal surface transportation authorizations, Congress emphasized the importance of bottleneck identification and addressing bottlenecks on the multimodal transportation system. To respond to this topic of national concern, ODOT completed a 2017 Freight Delay Area Plan. The final report identified this segment of I-5 SB as part of a Tier 2 Freight Delay Corridor (I-5 from the Columbia River to I-205 is the state's only Tier 1 Corridor). The plan area's inclusion in Tier 2 indicates it is a critical location for investment if the state wishes to reduce the high costs of freight delay and unreliability to Oregon's economy.

<u>Regional plans, policies, and regulations.</u> The most recent Regional Transportation Plan (RTP) was adopted in 2014. It provides guidance for managing transportation in the Portland metropolitan region to best serve the 2040 growth concept. Its goals and objectives are consistent with the OHP and other statewide policy plans. The RTP classifies I-5 as a throughway, which are mobility routes with little or no property access and an emphasis with connecting major destinations across the region. Throughways are planned as six lane facilities, not including auxiliary lanes, with grade-separated interchanges or intersections. The RTP recognizes that the Tigard to Wilsonville mobility corridor (including I-5 in the study area) is a critical gateway for regional travel and commerce, where transportation decisions carry statewide significance.

This facility plan seeks to move our region closer to attaining 2014 RTP performance targets including reducing severe and fatal crashes, and reducing vehicle hours of delay per person and per truck trip. It is consistent with interim regional mobility policy (see RTP Table 2.4), which echoes OHP mobility standards, and with the recommended cross-section for throughways (see RTP Table 2.6). This plan will respond to the RTP's concern with how peak period congestion in this corridor impacts regional freight reliability, mobility, and travel patterns; as well its recommendation to consider providing auxiliary lanes between Wilsonville on – and off-ramps.

Local plans, policies, and regulations.

The City of Wilsonville's Comprehensive Plan (2013) and Transportation System Plan (2016) set the local policy context for this plan. Relevant goals and policies seek to:

- Support the state and regional policies described above;
- Increase safe and reliable multimodal access and circulation;
- Reduce reliance on single occupancy vehicles;
- Work with ODOT and regional partners to maintain I-5's capacity using techniques including auxiliary lanes and targeted interchange improvements; and
- Ensure that development proceeds in balance with the transportation capacity and services needed to accommodate additional trips.

Taken together, these policies work to serve local transportation needs on the local system, reduce the burden of single occupancy vehicle travel on I-5, ensure the transportation system can adequately bear the burdens of new development, and support ODOT's efforts to maintain I-5's capacity within the cross-section defined by regional policy.

These two local plans create strong links between transportation planning and development. They direct the Planning Commission Meeting -- April 11, 2018 Page 14 of 67 Southbound Aux. Lane Study /Southbound I-5 Boone Bridge Aux



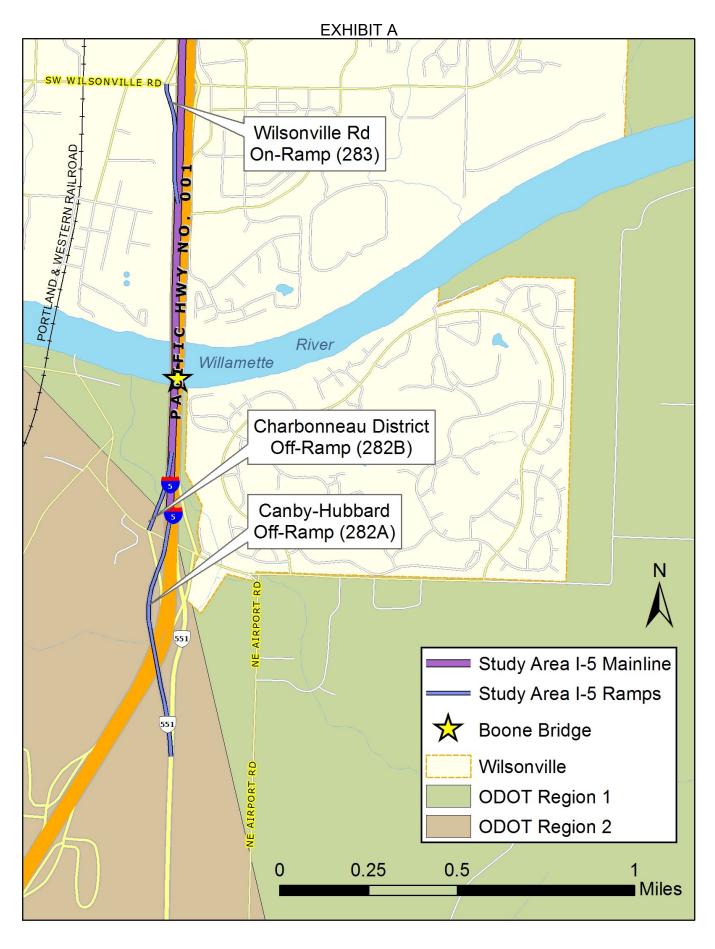


FIGURE 2. Study area map.

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City to reduce the level of development or delay it if the transportation system will be inadequate to support it (Policy 3.2.3). They define the RTP's Financially Constrained List and the city's Capital Improvement Plan (CIP) as the only sources of improvements that can be considered in determining the transportation system's planned capacity, function, and level of service.

This facility plan also considers the influence that operational improvements would have on the intersection of I-5 southbound and Wilsonville Road, a key link in the local transportation network. The City has designated this segment of Wilsonville Road as a major arterial, freight route, and transit route.

EXISTING CONDITIONS, NEEDS, AND DEFICIENCIES

<u>Description of the study area.</u> The facility plan encompasses 0.9 miles of the I-5 southbound mainline (MP 283.54-282.64), a three-lane section of the highway from the Wilsonville Road on-ramp to the Canby-Hubbard off-ramp (FIGURE 2). The two-lane Wilsonville Road on-ramp originates at a four-way signalized intersection on Wilsonville Road, merges into one lane at a ramp meter, and is 0.3 miles long. There is a project underway to add a third lane to the on-ramp to provide additional vehicle storage when the ramp meter is operating. After the ramp reaches the mainline, a 100-foot long merge lane extends to the south of the ramp's gore point.

The Boone Bridge is a 0.2 mile steel structure crossing the Willamette River, constructed in 1953 and widened in 1967. The bridge serves as the primary link between the Portland metropolitan area and Marion County, as well as between Wilsonville and the communities of Aurora, Canby, Donald, Hubbard, Mollala, and Woodburn. The nearest alternate motor vehicle crossings over the river are OR-219 south of Newberg and OR-43 between West Linn and Oregon City, with a minimum detour length of nearly 13 miles. The bridge is one continuous deck supported by two side-by-side structures. It has a sufficiency rating of 80.1, indicating it meets desirable criteria. However, its construction took place before modern seismic standards and the bridge has been found to be seismically vulnerable.

The Charbonneau District off-ramp exits the highway 0.7 miles south of the Wilsonville Road on-ramp. Its single lane extends a quarter mile before coming to a stop-controlled intersection with NE Miley Road.

The Canby-Hubbard off-ramp begins 0.2 miles south of the Charbonneau off-ramp. Also a single lane facility, it extends three-quarters of a mile south before merging with SR-551 Wilsonville-Hubbard Highway.

<u>I-5 traffic patterns and operations.</u> For analysis purposes 4:00-5:00 pm represents the peak hour when the greatest volumes move through the study area, but I-5 SB and the three ramps experiences congested peak conditions from 2:30-5:00 on the I-5 mainline across the bridge. Volumes at some locations within the study area remain at peak levels until after 5:30.

Annual average daily traffic of 63,590 SB on Boone Bridge. Freight trucks represent approximately 14% of daily volumes, higher than is typical for Portland metro area freeway segments. Multiple transit agencies route buses along this segment of I-5, including Amtrak (6 SB buses per weekday), Greyhound (4 SB buses per weekday), POINT Intercity Transit, (7 SB buses per weekday), and Wilsonville SMART (14 SB buses per

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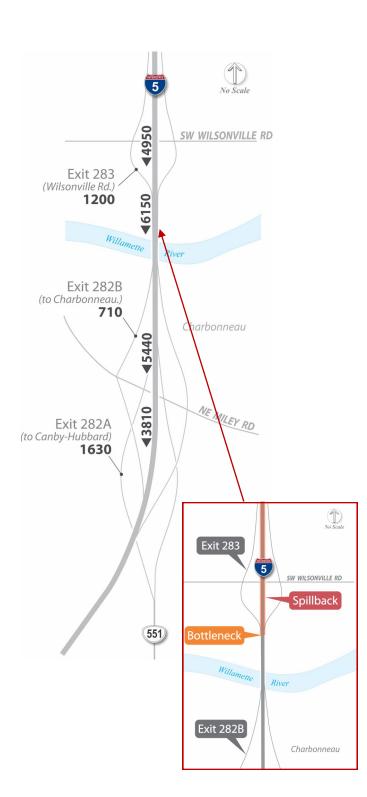


FIGURE 3. Traffic volumes measured during the PM peak hour, with inset showing the bottleneck location and spillback area.

weekday, some jointly operated with Salem Cherriots). A variety of organizations and operators also route airport and commuter shuttles through the study area.

During the PM peak hour, approximately 6,150 vehicles cross the Boone Bridge (FIGURE 3). 20% of those vehicles enter at the Wilsonville Road on -ramp, with the majority continuing a southbound journey on the I-5 mainline. 12% of the SB vehicles crossing the bridge exit at the Charbonneau District off-ramp, 26% exit at Canby -Hubbard, and the remaining 2,400 (52%) continue south on I-5.

Average travel speeds slow considerably over the course of the extended peak period and do not increase until after 6 pm. Traffic data show the slowest speeds and greatest unreliability are observed at I-5 SB over Wilsonville Road, just north of the merge with the Wilsonville Road onramp. Average speeds at this bottleneck location drop to a low of 30 mph for close to an hour during the peak, and have been gradually decreasing for at least three years (FIGURE 4).

This bottleneck is part of a freight delay area on I-5 southbound that extends from I-205 to the Boone Bridge. ODOT's 2017 *Freight Delay Area Plan* determined that delays to freight movements in this segment result in an annual economic cost of \$746,000 per mile of I-5.

As FIGURE 5 shows, travel through the bottleneck area (the I-5 mainline north of the Wilsonville Road on-ramp merge) is highly unreliable as well as highly congested during the PM peak. . On the most congested days each month, travel through the bottleneck area will take three times as long as it does on the least congested days. Travelers and freight movers making regular trips in a corridor with unreliable travel times must plan

Planning Commission Meeting -- April 11, 2018 for their trip to ensure they will not be Southbound Aux. Lane Study /Southbound I-5 Boone Bridge Aux

EXHIBIT A Average Speed (mph)

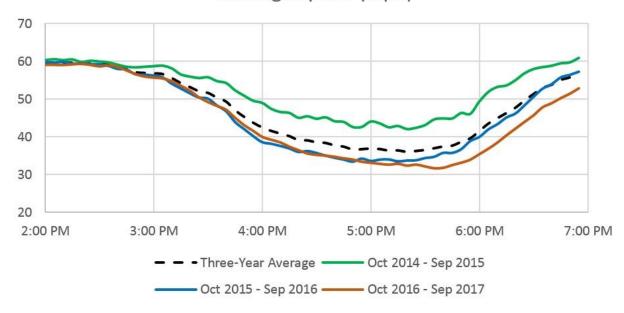


FIGURE 4. Change in average travel speeds from 2014 to 2017.

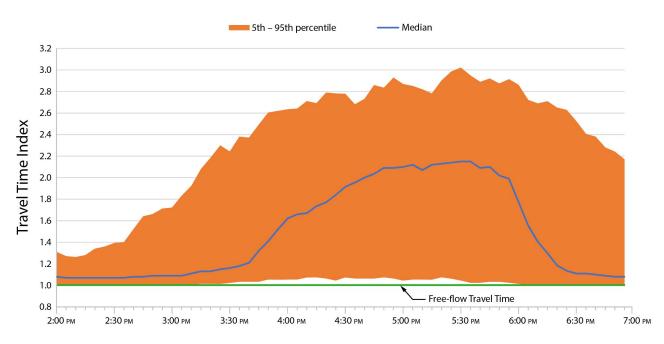


FIGURE 5. Travel time reliability on the I-5 mainline in the bottleneck area during the weekday PM peak. The free-flow travel time is how long it takes to drive this segment when there is no congestion. The median travel time is how long it takes to drive this segment at a particular time on a day with average congestion. For this section of I-5, the median travel time is twice the free-flow travel time during the peak hour (4-5 PM). The orange area represents the variation in travel times that are observed in the bottleneck area (equivalent to the difference between the second these that are observed in the second worst).Page 18 of 67 Southbound Aux. Lane Study /Southbound I-5 Boone Bridge Aux

late. This unpredictability can be more frustrating and costly for users than consistent and predictable congestion.

The Wilsonville Road on-ramp merge onto the I-5 mainline is the point of origin for the bottleneck. With no local access bridge or no nearby alternative means of crossing the Willamette River, local travelers use the Wilsonville Road on-ramp to cross the river via the Boone Bridge. Six out of ten vehicles entering at the Wilsonville Road on-ramp, along with three out of ten vehicles already on the I-5 mainline, take the first two exits south of the river (FIGURE 6). Meanwhile, the other vehicles entering at Wilsonville Road attempt to merge left to reach a less congested lane, and the through travelers also merge left to avoid the slowest conditions. These movements lead to much higher vehicle volumes in the right-hand lane than in the inner lanes as traffic moves across the Boone Bridge. This imbalance in vehicle volumes across lanes contributes to slow and unreliable travel conditions on the I-5 mainline extending north toward the Elligsen exit.



FIGURE 6. Destinations for southbound vehicles entering I-5 at the Wilsonville Road on-ramp (left), traveling into the study area on the I-5 mainline (middle), and all SB vehicles crossing the Boone Bridge (*right*). Planning Commission Meeting -- April 11, 2018

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ODOT measures highway mobility using the volume-tocapacity (v/c) ratio, which assesses theoretical demand to use the facility compared to the actual vehicle capacity (based on number of lanes, road geometry, traffic control, and travel speeds). Higher v/c ratios indicate greater levels of congestion, The bottleneck area has a v/c ratio of 0.98, which shows congestion threatens to exceed statewide mobility target the 0.99 (the point where there is no remaining capacity on a roadway).

The City of Wilsonville uses level of service (LOS), another mobility measure that assesses operational efficiency and delay, then assigns an A-F score. This measure shows LOS E through most of the study area and confirms that the congested conditions in the study area do not fully clear until after the Canby-Hubbard off-ramp (FIGURE 7).

<u>Crash history.</u> Analysis of the most recent available crash data (2011-2015) found above-average crash rates on the I-5 SB mainline between the Wilsonville Road off-ramp and on-ramp, with rear-end and sideswipe crashes indicating that the collisions are due to speed differences by lane and merging attempts taking place in congested conditions. Sections of the study area south of the bottleneck location had crash rates at or below average rates. No fatal crashes have occurred in the study area in the time period analyzed, and it does not contain any locations that ODOT's Safety Priority Index System ranks in the top 10% (which would indicate combination of high crash frequency and severity compared to other similar highways around the state).

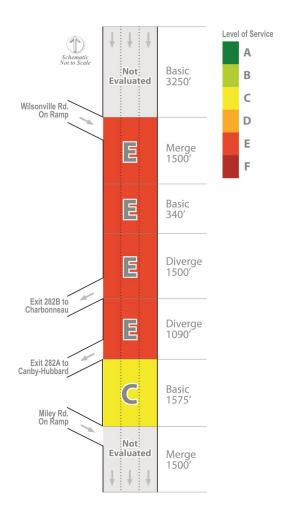


FIGURE 7. Current levels of service on I-5 in the study area.

Land use context and local traffic conditions. Wilsonville is a regional employment destination with more than 20,000 workers, and I-5 provides critical access to area employers. The majority of the city's large employers are industrial businesses, with commercial development as a secondary sector. The area along Wilsonville Road to the west of I-5 is zoned commercial with surrounding industrial development, and to the east of I-5 is zoned commercial development and public park lands (FIGURE 8). The Wilsonville Town Center sits in the northeast quadrant of the I-5 Wilsonville Road interchange and is planned for commercial development. This zoning was established to allow businesses to take advantage of direct freight access to and from the freeway interchanges, avoiding undesirable truck traffic in residential neighborhoods.

The City of Wilsonville has data showing that upwards of 90% of Wilsonville employees come from outside the city limits, with significant draw from the coatellisten covering unities 1, oothe south (such as Canbyg Woodburn, Southbound Aux. Lane Study /Southbound I-5 Boone Bridge Aux



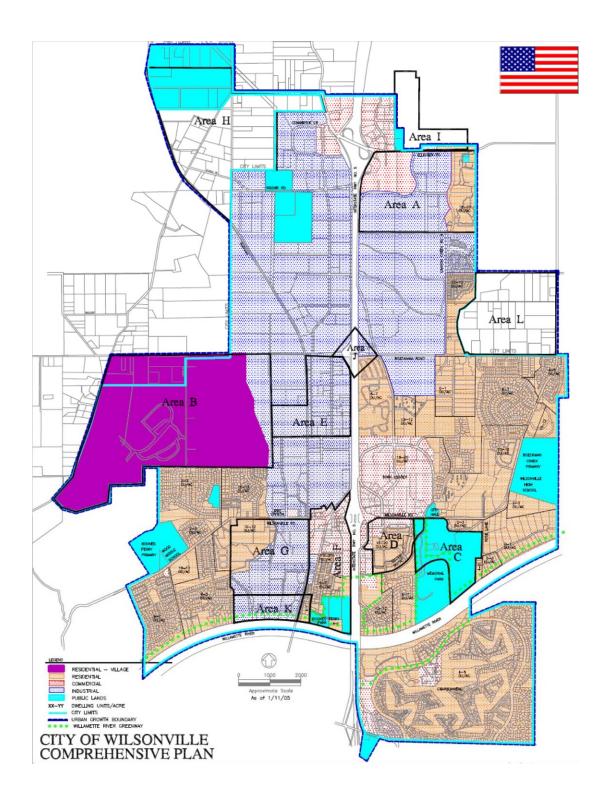


FIGURE 8. City of Wilsonville comprehensive plan map (from the 2013 update, page D-2).

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and Salem). For these commuters, the Boone Bridge provides the only direct crossing of the Willamette River. Since the early 2000s, the region has added several hundred future employment acres to the UGB on the north end of the city (Coffee Creek Industrial Area and Basalt Creek Employment Area). Wilsonville has adopted the Concept Plan and Master Plan for Coffee Creek and is developing the Concept Plan for Basalt Creek.

I-5 bisects Wilsonville, with only three east-west crossings of the highway within city limits. Wilsonville Road, the southernmost of the these crossings, supports multimodal accessibility between the city's eastern and western sides with elevated bike/pedestrian pathways on both sides of the street, and an eight lane cross-section underneath I-5. Despite recent improvements to the interchange area and on-ramps, Wilsonville Road experiences peak period congestion, delay, and unreliability due to high demand at the Wilsonville Road SB onramp. City staff and stakeholders report that during the extended PM peak when the ramp meter is in operation, queues from cars waiting to turn onto the onramp can disrupt the flow of through-traffic in both directions on Wilsonville Road. Local travelers may take a variety of detours to avoid this intersection, creating congestion on other local roads and increasing demand at the city's other two I-5 crossings and at upstream I-5 interchanges. These delayed and unreliable conditions have led to Planning Commission and City Council concerns regarding whether the planned transportation system can adequately support additional trips from proposed development that is otherwise desirable and in line with the city's Comprehensive Plan.

<u>Seismic concerns.</u> I-5 is in the seismic hazard area of the Cascadia Subduction Zone, which has historically experienced earthquakes of magnitude 9.0 or greater every 400-600 years. Many of I-5's 348 bridges were built before modern seismic design specifications. In the event of a Cascadia Subduction Zone earthquake, which based on the historical record is expected in the next 50 years, five I-5 bridges would be expected to collapse and 19 more expected to suffer heavy damage.

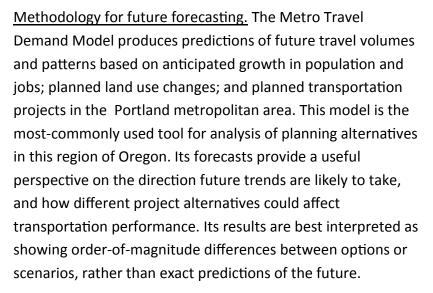
I-5 is a Tier 1 Seismic Lifeline route, and is the most critical route in the state for Oregon's emergency response and recovery efforts. In 1998, ODOT performed a Phase I retrofit to prevent the bridge's superstructure from falling off the piers in an earthquake. The Boone Bridge will require a Phase II seismic retrofit to meet modern seismic standards and remain serviceable in the event of a severe earthquake.

<u>Environmental resources.</u> The Willamette River introduces a range of environmental resources to the study area. Impacts to these resources would need to be avoided, minimized, or mitigated should a capital project move forward as a result of this plan. Chinook salmon and steelhead fish species rely on the Willamette River for habit, and are subject to Endangered Species Act regulations. Locations along rivers and streams are typically areas where there may be a high probability for encountering archaeological resources, and streamside and upland areas may contain wetlands. The north side of the river in this area is part of the Willamette River Greenway and may be subject to Section 4(f) restrictions on the use of public parks and recreational lands for transportation projects. The areas south and west of the Willamette River are adjacent to land designated as rural reserve lands in Clackamas County; these reserves may contain farmland, forests, natural preserves, or streamside lands beyond the Urban Growth Boundary where development is prohibited.

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The outputs the Travel Demand Model produces serve as the basis for more detailed analysis using technical procedures from the Highway Capacity Manual (HCM), which sets out widely used and industry-standard approaches to modeling traffic operations at specific roadway segments or intersections.

The project team used existing conditions data to calibrate model outputs, in order to better reflect what current travel patterns suggest may occur the future.

Anticipated traffic volumes and operations in 2040. The model predicts a 15% increase in PM peak hour traffic volumes on I-5 southbound over the Boone Bridge, from 6150 in 2017 to 7055 in 2040 (FIGURE 9). Modeled origin and destination patterns for the future are similar to those gathered via GPS data from 2017, with some minor variations. When considered together, the two sources suggest that in the future roughly 60-70% of vehicles entering on the Wilsonville on-ramp and 35% of vehicles coming from farther north on the I-5 mainline will take one of the first two off-ramps south of the Willamette River. For every ten vehicles heading south over the Boone Bridge, one will be expected to take the Charbonneau exit and two to three will be expected to take the Canby-Hubbard exit.

If no improvements or operational changes are made to this

Study area, traffic congestion will worsen significantly on I-5 in Planning Commission Meeting -- April 11, 2018 Page 23 of 67 Southbound Aux. Lane Study /Southbound I-5 Boone Bridge Aux

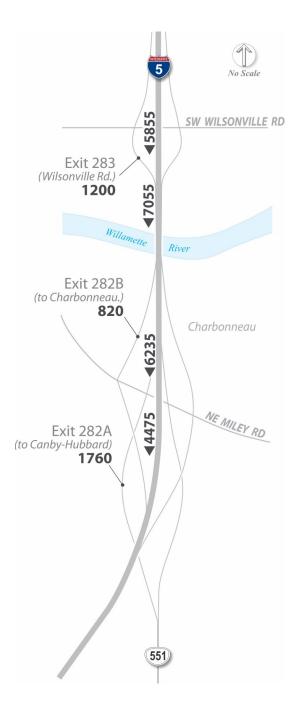


FIGURE 9. Traffic volumes measured during the PM peak hour, with inset showing the bottleneck location and spillback area.

this segment (FIGURE 10). From the Wilsonville on-ramp to the Charbonneau offramp, the highway will fail to meet state mobility standards (with v/c ratios above 0.99). Speeds in these segments drop as low as 22 mph during the average evening commute. These conditions will make travel through this section on I-5 significantly less reliable and increase the hours per day that travelers would experience congested conditions. Such degradation in performance would be expected to lead to more frequent rear-end and sideswipe collisions.

Forecasts suggest a 40% increase in the number of vehicles seeking to enter I-5 southbound from Wilsonville Road, some coming from nearby locations, others from areas further east, west, or north. With increased congestion on the I-5 mainline, ODOT might need to decrease the ramp meter rate and/or increase the hours of operations to protect the freeway's operations. During the peak hour, queues to enter the on-ramp at the Wilsonville Road intersection would grow longer,

	Segment	Volume/ Capacity	LOS
1	North of Wilsonville Road On-Ramp (Basic)	0.88	F
2	Wilsonville Road On-Ramp (Merge)	1.09 (Fwy) 0.61 (Ramp)	F
3	Boone Bridge (Basic)	1.06	F
4	Charbonneau Off- Ramp (Diverge)	1.08 (Fwy) 0.42 (Ramp)	F
5	Canby/Hubbard Off-Ramp (Diverge)	0.95 (Fwy) 0.89 (Ramp)	D
6	South of Canby/Hubbard Off-Ramp (Basic)	0.67	в

FIGURE 10. Anticipated 2040 levels of service on I-5 in the study area.

with vehicles waiting more than 80 seconds to move through the intersection. Of the 1,700 drivers who would prefer to use this on-ramp during the peak hour, 30% would not be able to enter if ramp meter rates remain the same. These travelers would have to choose other routes, shift trips to other times, or choose other modes. Travel along Wilsonville Road would become more challenging during the afternoon and evening. Overall, the local system will experience more hours of congestion on more routes as these vehicles seek alternate ways to make their trips.

PLAN ALTERNATIVES AND COMPARISON OF LONG-TERM OPERATIONS

<u>Conceptual design of plan alternatives.</u> ODOT and the City of Wilsonville have identified three alternatives for study, each of which adds a ramp-to-ramp lane from the Wilsonville Road on-ramp across the Boone Bridge. As ODOT's 2012 Highway Design Manual explains, ramp-to-ramp (or auxiliary) lanes "are introduced adjacent to through lanes for limited distances for specific operational or capacity reasons. They are used to provide lane balance, facilitate weaving maneuvers, and help smooth out flow in through lanes. A typical application is to provide an added lane on the mainline between closely spaced interchanges" (p. 9-18). FIGURE 11

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provides an example of a ramp-to-ramp lane on I-5 NB in North Portland. In the study area, there are three interchanges in a one mile segment of I-5. ODOT has established spacing standards of 3 miles between interchanges for interstates in urban areas.

The operational problems in the study area stem from the lack of capacity in right-hand lane to accommodate the volume of vehicles using the closely-spaced interchanges. Therefore, a ramp-to-ramp lane is a targeted, lower-cost improvement that may improve traffic flow and add safe merging and weaving space. Use of ramp-to-ramp lanes alongside through lanes is consistent with RTP policy regarding throughway (interstate) cross-sections of three travel lanes per direction plus ramp-to-ramp lanes.

In all three build alternatives, the ramp-to-ramp lane would be constructed with the Boone Bridge seismic



FIGURE 10. A ramp-to-ramp lane on I-5 NB between the N Rosa Parks Way on-ramp (304) and the N Lombard St East off-ramp (305A). *This ramp to ramp lane is 0.2 miles long, comparable to the distance between the Charbonneau and Canby-Hubbard off-ramps.*

retrofit as one project.

Option A (FIGURE 11) adds a ramp-to-ramp lane at the Wilsonville Road on-ramp merge that drops at an exit-only lane to the Charbonneau off-ramp.

Option B extends the ramp-to-ramp lane to terminate as an exit-only lane at the Canby-Hubbard off-ramp.

Option C (is similar to Option B but expands the Canby-Hubbard off-ramp to become a two -lane exit. Travelers may access the on-ramp either from the ramp-to-ramp lane, which becomes an exit-only to the outer off-ramp lane, or from the right-hand through lane, which offers an optional exit to the inner offramp lane.

In all of the build alternatives, the three-lane Wilsonville Road on-ramp merges into one lane as it passes the ramp meter, before vehicles enter the ramp-to-ramp lane. This is due to safety concerns with multi-lane merges onto the highway, which have led ODOT to stop using those designs for new projects.

The project team used HCM methodologies to compare how the three build alternatives would operate in 2040, and contrasted their performance with the no-build (existing) configuration of I-5.

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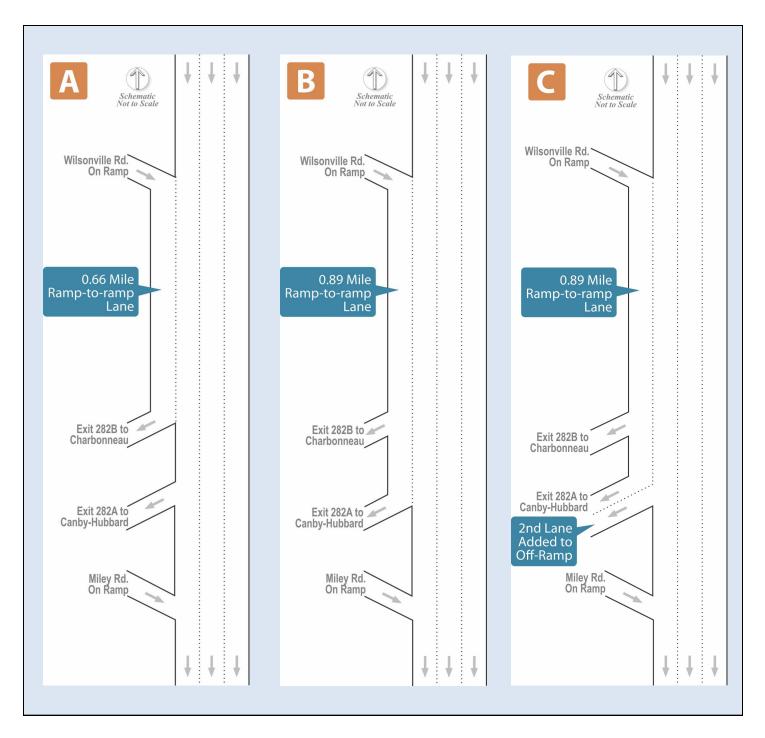


FIGURE 11. The three ramp-to-ramp lane concepts studied.

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Performance, benefits, impacts, and planning-level costs of build alternatives.

To assess how each option compared to the no-build during the PM Peak hour, the project team analyzed them using four performance measures:

- Volume-to-capacity ratios, compared to the state mobility target of v/c at or below 0.99
- Level of Service, compared to City of Wilsonville targets of E or above
- Worst observed speed for the typical day
- Vehicle density, which evaluates how many vehicles are in each lane per mile

There are limitations to technical approaches for directly predicting future safety without more engineering detail that had been performed at this stage. However, the measures above can provide indirect information about potential changes in crash risk, which is discussed below.

All three options improve I-5's performance compared to the no-build (TABLE 1). Each reduced congestion on I-5 to below state mobility targets and achieved LOS E or better on all segments of I-5 within the project area. All three options provided more space between vehicles. This allows drivers more time to react to changing conditions and reduces the risk of crashes. In each of the build alternatives, I-5 speeds during the PM peak hour are predicted to remain at or above 44 mph on the typical weekday, compared to no-build speeds of below 25 mph. In all cases, reducing congestion and separating weaving and merging movements from through traffic would be expected to reduce crash rates compared to the no-build. Preventing crashes offers the secondary benefit of improving reliability (by reducing the frequency of incidents that create unexpected delays).

Of the three build alternatives, Option C (FIGURE 12) provides the greatest improvements to I-5's performance. It would reduce congestion well below the levels experienced today and increase peak hour

TABLE 1. 2040 performance of the I-5 mainline — three ramp-to-ramp lane options compared to a no-build scenario.

Performance measures (2040 PM peak	Baseline	Option A	Option B	Option C
hour)	(No Build)			
Worst volume-to-capacity ratio	1.09	0.95	0.89	0.88
Worst level of service	F	E	E	D
Lowest speed	22	45	44	52
Highest vehicle density	79	40	37	35
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speeds to above 50 mph throughout the project area. The addition of a second off-ramp lane at Canby-Hubbard (the busier of the study area's two exits) creates greater separation of the traffic entering I-5 at Wilsonville Road from the traffic already on the mainline. Vehicles on I-5 could merge directly into the second exit lane from the outer I-5 travel lane, without merging into the ramp-to-ramp lane first. Because of the improved traffic flow and increased separation of merging/weaving from through traffic, Option C would be expected to offer the greatest reduction in crash rates for the longest period of time.

All three options are likely to have similar potential for environmental impacts. The greatest potential impacts come from the modification to the Boone Bridge itself, because the Willamette River contains the most significant cultural and natural resources in the project area. Because the ramp-to-ramp lane is the same over the Boone Bridge structure in all three options, the three options would have substantially similar potential impacts to the river and its banks. The nature of these impacts will depend on how the ramp-to-ramp lane and seismic retrofit are designed, and will be assessed during project delivery. The potential for private property impacts appears to be low, with no structures currently identified in the area where a ramp-to-ramp lane would be built.

Because the greatest costs of the project stem from modifying the Boone Bridge to accommodate an additional lane, planninglevel cost estimates suggest there will be less than a 10% cost difference between the three ramp-to-ramp lane options. Costs of extending the lane beyond the structure or adding a second lane to the Canby-Hubbard off-ramp appear relatively low, and early analysis suggests that ODOT likely owns sufficient right-ofway to accommodate added roadway width in all options. Current planning-level cost estimates for the ramp-to-ramp lane project (not including the seismic work) are in the \$80M range.

<u>Impacts of a ramp-to-ramp lane on Wilsonville Road and local</u> <u>system operations.</u> Any ramp-to-ramp lane option would offer indirect benefits to local system performance. The Wilsonville Road on-ramp meter activates in response to congestion on the I -5 mainline. With all ramp-to-ramp options reducing congestion

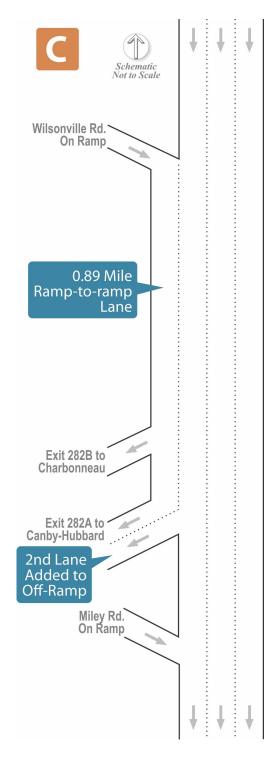


FIGURE 12. Option C, which offers the greatest performance benefits.

on I-5, the ramp meter might be activated for fewer hours a day Planning Commission Meeting -- April 11, 2018 Southbound Aux. Lane Study /Southbound I-5 Boone Bridge Aux

This would increase the total period of time when vehicles would be able to flow freely onto I-5 from the Wilsonville Road on-ramp, and reduce the impacts of queues at the ramp meter on the local system **MORE INFO TO BE ADDED WHEN RAMP METER ANALYSIS RESULTS AVAILABLE**.

PUBLIC INVOLVEMENT AND LOCAL GOVERNMENT PARTICIPATION

ODOT Region 1 and the City of Wilsonville partnered on the Southbound I-5 Boone Bridge Congestion Study (September 2017 to May 2018). This facility plan is the final product of that study. The Technical Advisory Committee (TAC) for the study included ODOT, the City, Clackamas County, Washington County, DKS Associates, and Angelo Planning Group. (Marion County chose not to participate in the TAC but received updates at project milestones.) After reviewing the technical analysis results, the TAC unanimously recommended Option C as the preferred solution.

Public and stakeholder involvement activities began in January of 2018, with Wilsonville area outreach efforts led by city staff and consultants and regional outreach efforts coordinated by ODOT. The City created a website on the congestion study and shared regular monthly articles in the *Boones Ferry Messenger* and via



 FIGURE 13. City of Wilsonville Mayor Tim Knapp introduces the project team to community

 members attending the March 14thmi@penml=toubleeting -- April 11, 2018

 Southbound Aux. Lane Study /Southbound I-5 Boone Bridge Aux



email. The city's Planning Commission received five presentations from the project team between November 2017 and April 20 18, including at a work session in March and a public hearing on the draft facility plan in April (*scheduled as of the release of public review draft*). The final local action will be taken by the City Council in May (*scheduled*), when they will determine whether to approve the facility plan by resolution in preparation for an adoption decision by the Oregon Transportation Commission in July (*scheduled*).

The project team focused outreach efforts on gathering feedback about traveler experiences with the operational problems on I-5, confirming that the project team studied the right solutions, and asking for input on the recommendation that Option C should be constructed as part of a seismic retrofit project in the future. A March open house held at Wilsonville City Hall drew 30-40 attendees (FIGURE 13), who discussed the results of technical analysis with project team staff, received a presentation of major findings, and participated in a question and answer session. The same materials were shared in an online open house and survey hosted by the City during the second half of March. ODOT shared the draft facility plan for a 45 day public comment period beginning in April, with links to public review materials available on the city's website.

In addition, the project team met with the following stakeholder groups in March and April to share congestion study findings, answer questions, and gather input:

- Wilsonville Chamber of Commerce
- Wilsonville Rotary Club
- Charbonneau Homeowners' Association
- Washington County Coordinating Committee Transportation Advisory Committee (scheduled)
- Oregon Freight Advisory Committee (scheduled)
- ODOT Region 1 Mobility Advisory Committee (scheduled)
- French Prairie Forum (scheduled)
- Metro's Transportation Policy Alternatives Committee (scheduled)
- Clackamas County Coordinating Committee C4 Metro Subcommittee (scheduled)

As of the release of this public review draft, public and stakeholder outreach efforts are still ongoing. The final plan will include a list of all outreach events and a summary of the input received, including comments on the public review draft.

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PLANNED IMPROVEMENTS

This facility plan recommends Option C as the best operational concept for this location for the 20-year planning horizon. This recommendation reflects the TAC 's consensus that this option is the most cost-effective long-term solution for the bottleneck that forms on I-5 at the Wilsonville Road on-ramp. It presents only minor differences in costs and environmental impacts compared to Options A and B.

Option C is consistent with the state, regional, and local policies outlined earlier in this plan. A ramp-to-ramp lane is a targeted, lower-cost improvement that will protect I-5's operations for decades to come, while maintaining the regionally-approved cross-section of six through lanes. It improves safety and reliability for longer-distance travel, goods movement, and emergency services. Option C responds to RTP direction to address the impacts of peak period congestion on freight reliability, mobility, and travel patterns in this part of the I-5 corridor. It also supports desired development in the City of Wilsonville by managing the impacts of I-5 congestion on Wilsonville Road and the local transportation system.

FINANCIAL FEASIBILITY ASSESSMENT

Based on revenue forecasts prepared for the 2018 RTP, resources exist within ODOT's financially-constrained budget for the 2028-2040 period to design and construct a southbound auxiliary lane serving I-5 southbound from exits 283 to 282A. These resources are expected to be combined with additional funding from the ODOT bridge program to complete the seismic rehabilitation components of the Boone Bridge improvements. Completing the operation and seismic components as one project will allow ODOT to achieve economies of scale, reducing total costs.

IMPLEMENTATION RECOMMENDATIONS

Adoption of this plan is the first of several steps needed to improve the operations of I-5 SB in the Boone Bridge area. Once this plan is adopted, ODOT will submit Option C as a project for the 2018 RTP Financially Constrained Project List, for funding in the 2028-2040 time frame. The next step will be to secure funding for project development, which will include analysis of engineering alternatives and their potential environmental impacts.

In the same time frame, ODOT's Bridge Section will analyze the Boone Bridge seismic needs to determine what improvements the structure needs to remain standing in the event of a seismic retrofit. Once those engineering recommendations are available, the operational and seismic work will be combined into one project.

ODOT will continue to collaborate with project partners to fund construction of this project, and to identify other ways to increase safety, efficiency, and reliability in the I-5 corridor.

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APPENDICES WILL BE INCLUDED IN FINAL DRAFT.

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EXHIBIT B

Southbound I-5 Boone Bridge Congestion Study Questions and Answers March 29, 2018

What is the timeline for construction?

 Based on revenue forecasts prepared for the 2018 Regional Transportation Plan, resources exist within ODOT's financially-constrained budget for the 2028-2040 period to design and construct a southbound ramp-to-ramp lane serving I-5 southbound from exits 283 to 282A. These resources are expected to be combined with additional funding from the ODOT bridge program to complete the seismic rehabilitation components of the Boone Bridge improvements. Completing the operation and seismic components as one project will allow ODOT to achieve economies of scale, reducing total costs.

What are the next steps?

 We are finishing up technical analysis and will be collecting public input and comment this spring, with the plan (the "I-5 Wilsonville Facility Plan") going to the Oregon Transportation Commission for adoption in July. ODOT intends to propose the ramp-to-ramp lane project for the Financially Constrained project list in the 2018 Regional Transportation Plan. The next phase of work, project development, does not yet have assigned funding or a set timeframe.

Could I-5 Southbound be restriped now to include a ramp-to-ramp lane?

• No, the Boone Bridge is too narrow to be restriped for an additional lane. This would result in 2foot shoulders on both sides of the bridge. Very narrow shoulders on freeway increase the likelihood of fatal and severe crashes and make it more difficult for emergency responders to reach locations where incidents occur.

Will the project include bike/ped facilities?

• This study focuses on motor vehicle operations (including private vehicles, transit, and freight), as those are the modes directly affected by the bottleneck on I-5.

Would a ramp-to-ramp lane affect local roads like Boeckman?

No, Boeckman is north of the area where a ramp-to-ramp lane is recommended. In general, we
do not expect a ramp-to-ramp lane to directly affect local roads. Indirectly, a reduction of I-5
congestion might reduce delays or detours on the local system related to queuing at the
Wilsonville Road southbound on-ramp.

EXHIBIT B

Would we need to widen the bridge?

• The study didn't explore bridge design or reconstruction options; it focused on identifying the right operational solution for I-5 southbound. In project development (a future process), more detailed engineering will identify what changes to the bridge structure might be needed to accommodate an added ramp-to-ramp lane.

What are the seismic improvements? When?

• The Boone Bridge has already received one seismic retrofit in 1998 to keep the bridge from falling off the piers in the event of a quake. We know the bridge will need more improvements to survive a major quake, but more analysis is needed to determine exactly what that project will be. ODOT does not have a set timeline for when that analysis will be finished or a seismic project will enter construction.

How is this coordinating with French Prairie?

The French Prairie Bridge project is in project development and design, farther along than this study and plan. ODOT and Wilsonville staffs working on the two projects are coordinating, and the French Prairie Forum receive a presentation on the Southbound I-5 Boone Bridge Congestion Study this spring. We do not expect the two projects to conflict or directly impact each other.

How fast are people exiting at Canby?

• We don't have that data. Since this interchange provides a connection between higher-speed highways, it was designed for 50 mph where the Canby-Hubbard off-ramp departs the freeway, and higher speeds as the ramp crosses under I-5 to join OR-551.

Can we eliminate the Charbonneau exit and make travelers use the Canby-Hubbard exit instead?

 We don't expect this would fix the bottleneck on I-5 north of the Boone Bridge. The Wilsonville Road on-ramp and Canby-Hubbard off-ramp are within a mile of each other, offering only a short opportunity for drivers to merge into or out of the right-hand lane. (For comparison, ODOT standards are for freeway interchanges to be three miles apart in urban areas.) Removing the Charbonneau District off-ramp would not increase this distance. Providing connections back to Miley Road from Canby-Hubbard would require a costly federal review process, and the long ramps needed would have a significant footprint on the area around I-5. This design would not offer the opportunity to combine operational improvements with the Boone Bridge seismic project, and would therefore be more difficult to fund.

Can we raise highway speeds everywhere to 65 mph?

• This kind of major change would take a decision by the Oregon Transportation Commission and possibly the Oregon Legislature, and is beyond the scope of this plan. In addition, raising speed

EXHIBIT B

limits in the study area would not fix the bottleneck, which results from too many vehicles trying to use the outermost lane over the Boone Bridge.

How would a ramp-to-ramp lane affect emergency response times?

• By reducing congestion, improving travel time reliability, and reducing the risk of crashes, this project would make it easier for emergency response vehicles to move swiftly through the study area in the evening peak.

Would signing the outermost lane as "exit only" resolve the bottleneck?

This would effectively reduce I-5 from three travel lanes to two in the study area. This could increase interruptions to through travel, instead of improving it as a ramp-to-ramp lane would.

Could ODOT place signs on I-5 southbound north of the study area advising through traffic to merge left?

ODOT is considering whether these signs would improve traffic flow as an interim measure and will share information after studying the suggestion.

Would a flyover ramp be a potential solution here?

• It would be a significantly higher cost project with higher environmental impacts, and it would not relate to the seismic retrofit needed on the Boone Bridge.

EXHIBIT C



MEMORANDUM

Online Open House Summary Southbound I-5 Boone Bridge Congestion Study

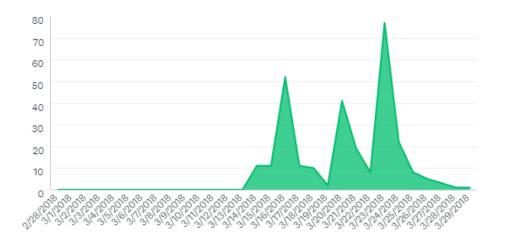
DATE	4/2/2018
ТО	Southbound I-5 Boone Bridge Congestion Study Project Team
FROM	Andrew Parish, AICP, Angelo Planning Group
СС	

INTRODUCTION & SUMMARY

This memorandum briefly describes the results of the Online Open House for the Southbound I-5 Boone Bridge Congestion Study. The purpose of the open house was to gather input from the public to determine community preferences regarding solutions to southbound congestion on Interstate 5 near Boone Bridge.

Total Responses

There were a total of 282 respondents to who provided at least some information in the survey. Responses came in three distinct spikes, associated with specific outreach efforts.



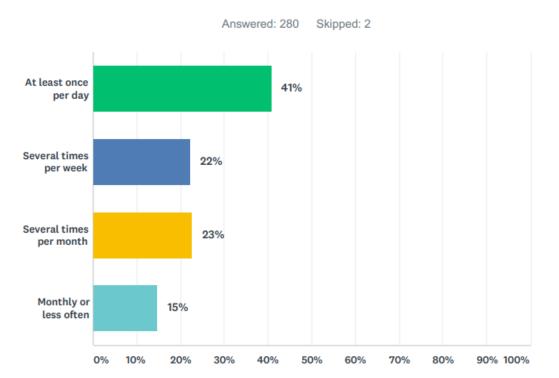
Key Takeaways

The following were the key takeaways from the online open house responses. Detailed information is provided on the following pages.

- Most survey respondents used I-5 to cross the Boone Bridge going south at least several times per week (41% at least once per day; 22% several times per week). Nearly 80% said they were likely to use the Wilsonville Road on-ramp on a typical trip, and over half said they were likely to use the Charbonneau District off-ramp. 43% said they were likely to use the Charbonneau District off-ramp. 43% said they were likely to use the the Charbonneau District off-ramp. 43% said they were likely to use the Charbonneau District off-ramp. 43% said they were likely to use the Charbonneau District off-ramp. 43% said they were likely to use the Canby-Hubbard off-ramp. (All of which is to say this survey appears to have reached those that use/would be affected by the proposal)
- Respondents generally experienced unpredictable travel times, frequent congestion, and spillback. A lower percentage (though still the majority) experienced dangerous weaving behavior.
- Given the information presented, **75% of respondents chose Option C** as their preferred build. Option B was the second most preferred.
- Almost all respondents said that ODOT should invest in operational improvements in this part of I-5.
- The average level of support for the recommended alternative is very high: 92/100.
- Asked to list primary reasons for their level of support, people provided many separate comments. Congestion, safety, and commuting times were among the most common issues identified.

DETAILED SURVEY RESPONSES

The following pages include detailed information for each question asked in the survey.



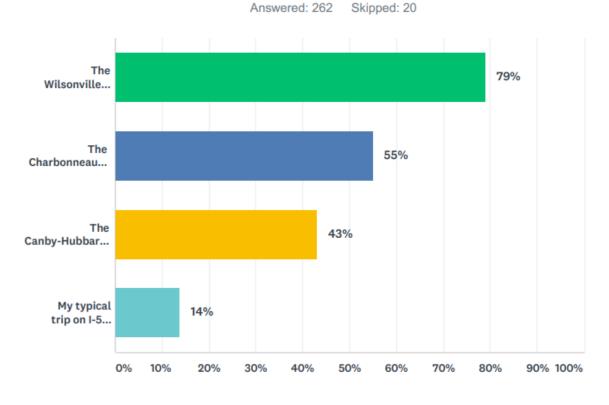
Q1: How often do you personally use I-5 to cross the Boone Bridge going South?

ANSWER CHOICES	RESPONSES	
At least once per day	41%	114
Several times per week	22%	62
Several times per month	23%	63
Monthly or less often	15%	41
TOTAL		280

#	ADDITIONAL COMMENTS	DATE
1	Daily Monday through Friday	3/28/2018 7:53 PM
2	Avoid it at all costs due to traffic. I gladly use the north Wilsonville exit.	3/25/2018 2:18 PM
3	Two to 3 times per day common	3/24/2018 10:35 AM
4	This is a real bottleneck, esp. when there is a traffic incident nearby. And as it is the only link across the river to the south, kind of scary.	3/23/2018 5:26 PM
5	Would use it more but try to avoid the traffic.	3/23/2018 4:31 PM
6	I commute from Canby to Wilsoville for work	3/23/2018 4:12 PM
7	Usually take the 1st Wilsonville exit when coming from Portland	3/23/2018 12:17 PM
8	never!	3/21/2018 7:42 AM
9	I'm retired and plan my trips to avoid driving during the peak time. I live in Canby and have family in Wilsonville. If we are visiting we either leave before 4:30 or wait until after 6:30 to drive home.	3/21/2018 7:38 AM
10	i live in salem so i use it 2 times a day to get to work	3/20/2018 3:17 PM
11	At 415pm	3/20/2018 2:43 PM

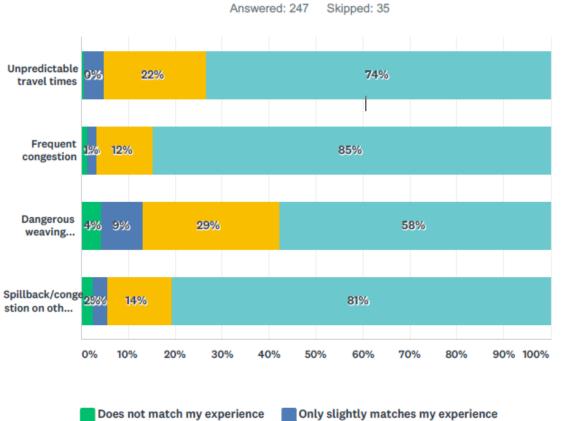
12	Wilsonville to the Canby-Aurora Exit 5 days/week	3/20/2018 2:39 PM
13	It is a dangerous area and would definitely help to relieve congestion and increase safety.	3/18/2018 7:28 PM
14	4x a day	3/18/2018 9:27 AM
15	I get off I5 at Thebes Wilsonville Road exit, this congestion effects me every day even though I don't cross the bridge	3/16/2018 7:18 PM
16	However, I'm still affected by traffic anytime I go to Fred Meyer	3/16/2018 6:49 PM
17	The impacts to the Boone Bridge don't start in Wilsonville, they start further North highlighting the need for a true regional option	3/16/2018 12:23 PM
18	RETIRED, LIVING IN CHARBONNEAU	3/16/2018 11:51 AM
19	While I do not cross the bridge daily, I am caught in the congestion every weekday. Depending on the traffic, the congestion can begin at the 217 interchange, but usually at the I-205 interchange.	3/16/2018 10:54 AM
20	Depending on time of day the merge can be challenging	3/16/2018 10:42 AM
21	I travel from Charbonneau to Wilsonville and back everyday. Even going to pick up groceries is a huge, time consuming ordeal.	3/16/2018 9:50 AM
22	My commute does not include the Boone bridge, but this bottleneck causes backups throughout Wilsonville roads that impact my commute. Occasionally these are severe, causing 30-60 min delays in my commute from Tualatin to Wilsonville.	3/16/2018 9:38 AM
23	I travel from Charbonneau to Wilsonville and back daily. If I want to just go shopping it takes extra time to merge on the freeway southbound just to go a short distance to Charbonneau exit.	3/16/2018 9:28 AM
24	Commute use it 2 times per day	3/15/2018 12:00 AM

Q2 On the typical trip that takes you across the Boone Bridge going south, please mark all of the entrances/exits you are likely to use:



ANSWER CHOICES	RESPONSES	
The Wilsonville Road on-ramp (Exit 283)	79%	207
The Charbonneau District off-ramp (Exit 282B)	55%	144
The Canby-Hubbard off-ramp (Exit 282A)	43%	113
My typical trip on I-5 starts farther north and ends farther south than these entrances/exits	14%	36
Total Respondents: 262		

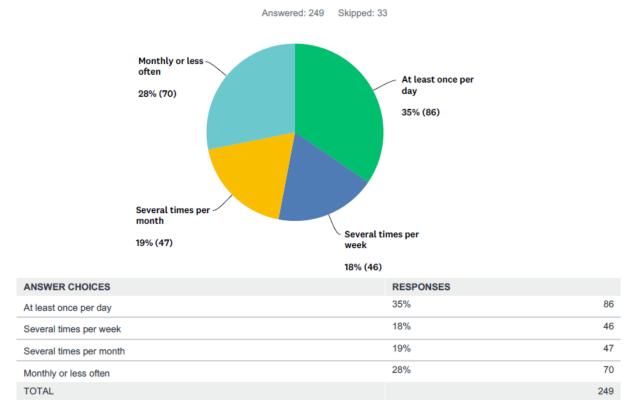
Q3 To what extent does your personal experience on this part of I-5 match our analysis?



Somewhat matches my experience Strongly matches my experience

	DOES NOT MATCH MY EXPERIENCE	ONLY SLIGHTLY MATCHES MY EXPERIENCE	SOMEWHAT MATCHES MY EXPERIENCE	STRONGLY MATCHES MY EXPERIENCE	TOTAL	WEIGHTED AVERAGE
Unpredictable travel times	0% 1	4% 11	22% 53	74% 181	246	2.73
Frequent congestion	1% 3	2% 5	12% 29	85% 207	244	2.84
Dangerous weaving behavior	4% 10	9% 21	29% 69	58% 137	237	2.54
Spillback/congestion on other roads in Wilsonville	2% 6	3% 7	14% 34	81% 197	244	2.78

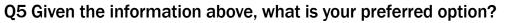
Q4 How often do you personally use I-5 to the Charbonneau District (Exit 282B) or the Canby-Hubbard (Exit 282A) off ramp?

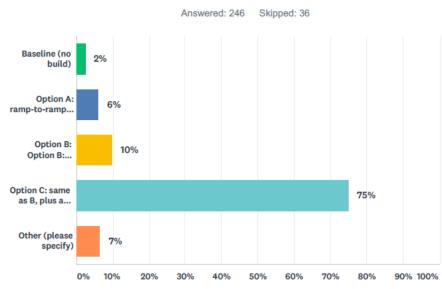


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#	ADDITIONAL COMMENTS	DATE
1	4-6 times per week	3/23/2018 3:04 PM
2	Monday through Friday on my way home from work	3/23/2018 2:32 PM
3	I continue traveling to Salem	3/23/2018 2:18 PM
4	No use of Exit 282B or Exit 282A.	3/23/2018 1:59 PM
5	We live in charbonneau and most trips we travel north on I5, thus when we return we are impacted by the backup. Even taking alternate routes, the backup is unacceptable. When traveling from the 217 south to charbonneau the 11 mike trip which usually takes us 13minutes takes over an hour during peak traffic. Average speed about 10 mph !!!	3/23/2018 12:56 PM
6	I work in town at the Library 9-5	3/20/2018 2:51 PM
7	only as a bypass route to avoid I-5 backup onto 99E	3/20/2018 2:45 PM
8	Ramp light is a joke	3/18/2018 9:28 AM
9	I get off at 283, I rarely go over the bridge during rush hour	3/16/2018 7:21 PM
10	Congestion & delays stretch North beyond Ellingson Rd Exit.	3/16/2018 12:44 PM
11	Boone Bridge travel issues impact me in 2 ways: 1) live in Wilsonville and visit parents in Woodburn and (2) work downtown Portland and live in Wilsonville. Without mid-day mass transit options direct to Wilsonville (train or express bus) the issue is compounded.	3/16/2018 12:25 PM
12	Having the "only" lane on the NB section of the bridge has helped tremendously!	3/16/2018 11:25 AM
13	I live in Wilsonville.	3/16/2018 10:56 AM
14	I'm so happy you're proposing this. It's so needed	3/16/2018 10:46 AM
15	Congestion & slower typical speed of travel poignant much further	3/16/2018 10:35 AM
16	The spillback/congestion on other wilsonville roads is severe at times, as there's no good alternative to the Boone Bridge for south-bound traffic across the Willamette. Any traffic avoiding I- 5 due to congestion is forced on at Wilsonville, or must go far out to Oregon City or Newberg to cross the river.	3/16/2018 9:43 AM

17	About half the time I am on I-5 north of 283 and try to remain in the left lane to ease congestion from all of the traffic entering on 283. It is challenging and dangerous trying to merge right to exit at 282B.	3/16/2018 9:36 AM
18	These 2 exits are crucial for commuters not only going into Canby and Aurora but all cities South and east of Canby. The other options are unacceptable in order to cross the Willamette.	3/16/2018 9:36 AM
19	I don't use these exits, I'm traveling further down.	3/14/2018 4:31 PM



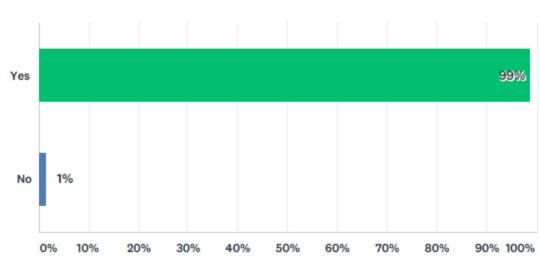


ANSWER CHOICES	RESPONSES	
Baseline (no build)	2%	6
Option A: ramp-to-ramp lane from Wilsonville Rd to Charbonneau exit	6%	15
Option B: Option B: ramp-to-ramp lane extends south to Canby-Hubbard exit	10%	24
Option C: same as B, plus a second turn lane added to the Canby-Hubbard off-ramp	75%	185
Other (please specify)	7%	16
TOTAL		246

#	OTHER (PLEASE SPECIFY)	DATE
1	Option C, but the extra lane extends north to connect to the SW Elligsen Rd. (Exit 286) exit-only lane.	3/25/2018 6:01 PM
2	If development was allowed south of the river it would take pressure off the Boone Bridge during peak times as the flow caused by development south of the river would run against the normal traffic flow. It will even be a more disastrous condition when industrial coffee creek is built out and trucks need to go south.	3/25/2018 5:44 PM
3	You need another bridge or bypass to get from WV to Canby	3/23/2018 2:20 PM
4	It is quite apparent that this is the solution that would reduce the congestion most significantly.	3/18/2018 6:05 PM
5	Option A is most relevant to me, but I support B as well if traffic supports that option.	3/18/2018 9:48 AM
6	add 3 or 4 lanes and be done with the problem	3/18/2018 9:29 AM
7	This needs to start at Elligsen Road ramp or will still be a bottleneck from the I 205 influx. Thanks for looking at this. We were thinking of moving from the area because of this nightmare. Tired of dealing with it.	3/17/2018 10:03 AM
8	I also think that adding signs indicating that the on-ramp merged would fix current problems.	3/17/2018 7:26 AM

9	I am in full agreement that something should be done and am happy to put money towards a project to relieve this issue. I like what option C proposes, but am disappointed that it essentially only brings us to a "D" grade. If we're investing in this, I want to see more of an improvement than that. There must be more options available.	3/16/2018 1:32 PM
10	The cross over traffic alone will cause congestion (those starting North of Wilsonville and exiting via Charbonneau or Canby-Hubbard or those leaving Wisonville traveling beyond Canby-Hubbard on I5)	3/16/2018 12:28 PM
11	Scrap the bike/ped bridge and use those funds to do C with a special crossing attachment for bikes/peds under the bridge.	3/16/2018 10:59 AM
12	When will southbound traffic congestion from Tualatin to Charbonneau exit be addressed? It's just as bad.	3/16/2018 9:51 AM
3	Not an expert. Will this just move the bottleneck further south?	3/16/2018 9:40 AM
4	If we are going to do the project, do it correctly according to the engineering.	3/16/2018 9:38 AM
15	Although Option C performs the best, it is also the most costly. Some of the money should be put towards providing safe pedestrian and bicycle access across the bridge. Why isn't this part of your analysis? Doesn't ODOT realize that many people choose to ride their bike or walk across this bridge on the shoulders? If not room will be provided to peds and bikes, a separate bridge near the P&W railroad bridge should be built (as planned by the City) instead.	3/15/2018 10:41 AM
16	Build it ASAP in 10 years you will need a second bridge !! This is the main highway route from CA to WA	3/15/2018 12:12 AM

Q6 Do you believe that ODOT should invest in operational improvements in this part of I-5?



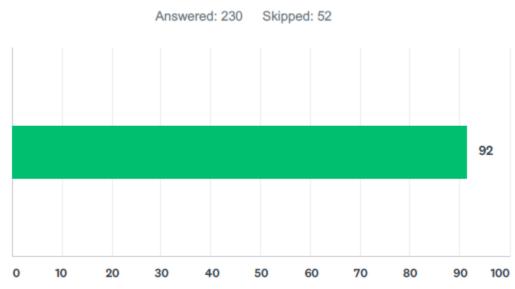
Answered:	236	Skipped:	46

ANSWER CHOICES	RESPONSES	
Yes	99%	233
No	1%	3
TOTAL		236

EXHIBIT C

#	ADDITIONAL COMMENTS	DATE
1	Must look at long term master plan for region. Region is out of employment lands. Development south not river is inevitable (even though political environment says "NO") The proper long term planning should ask "What are best options assuming development south of river."	3/25/2018 6:02 PM
2	a fourth lane should extend past the Miley road entrance for one mile	3/25/2018 12:06 PM
3	Please Incorporate any feasible noise barriers to new additions to freeway	3/24/2018 2:04 PM
4	Hurry!!!	3/23/2018 4:53 PM
5	ODOT Should be pouring resources into carpool lanes and effective light rail systems.	3/23/2018 2:58 PM
6	Also use signag southbound I-5 for through traffic stay right	3/23/2018 1:13 PM
7	When odot changed the n/b lane configuration for the Miley Road on ramp to the Wilsonville off ramp by adding a "through traffic lane" the results were dramatic. HOWEVER, traffic stopping for the off ramp signal at Wilsonville Road caused backups. If you develop the proposed plan, you need to consider what backup wil occur for traffic getting off for charbonneau. Currently there is a boulevard stop sign which even now causes some ramp backup.	3/23/2018 1:10 PM
8	Seems like a short term solutionwill we just keep building out as our pop. grows?	3/22/2018 8:32 AM
9	This should have started roughly 10 years ago.	3/21/2018 11:12 PM
10	This evaluation should have happened at least 10 years ago.	3/21/2018 11:04 PM
11	As the only crossing on the Willamette River for miles in either direction this is problem spot with few alternatives available.	3/21/2018 8:57 AM
12	save lives, time, money	3/20/2018 2:49 PM
13	Already running late.	3/20/2018 2:24 PM
14	This problem has wide ranging impacts throughout the I-5 corridor and the solution should be implemented as soon as possible.	3/18/2018 6:08 PM
15	Increased DMV rental fees will assist greatly with this project.	3/16/2018 1:00 PM
16	And they need to see what then can do further North or invest in a Max train to go from south of Wilsonville, possible Salem w/a stop at a park & ride in the vicinity of Canby-Hubbard, direct to downtown PDX	3/16/2018 12:32 PM
17	Consider system management measures first, including pricing and transit improvements. Consider including HOV lanes, and potentially a dedicated transit ramp in the Barber St. vicinity.	3/16/2018 12:06 PM
18	Work must be done at night or weekends. There shouldn't be any construction during peak rush hour or commutes will be unbearable.	3/16/2018 9:57 AM
19	It is also worrisome that when so many cars are sitting on the bridge at once how much stress is on the bridge itself. This is a major artery bridge.	3/16/2018 9:47 AM
	What about the bike lanes?	3/16/2018 9:41 AM
20		
20 21	As a planner at Cherriots, we partner with SMART to provide bus service between Wilsonville and Salem, taking many cars off the road that would otherwise be contributing to the congestion. Improvements would help our buses keep their schedules and also help with reliability of the schedules, which people rely on to get to work or other appointments in Salem.	3/15/2018 10:50 AM

Q7 What is your level of support for the recommended alternative?



Q8 What are your primary reasons for this level of support?

203 responses, listed below.

Responses to Q8: Primary reasons for this level of support.

I have to deal with this situation on a daily basis. I have lived in other areas of the country with horrendous traffic, and there significant investment was made to expand the roadways to ease congestion.

My first choice is none of A-C, but instead "D", to build a bridge across the Willamette to serve local Wilsonville traffic between the north and south parts of the city and its immediate hinterlands. Include walking and cycling routes. Look to the Sellwood Bridge as a model. Why widen I-5, a regional and interstate expressway, to solve a local bottleneck? The problem isn't I-5, it's that there are too few crossings of the Willamette in the south metro area.

A site to consider would include a route connecting SW Boones Ferry Road and Boones Ferry Crossing NE at NE Butteville Road, or vicinity. A second is farther west connecting SW Kinsman Road and NE Butteville Road. Get legislative approval of an urban growth boundary (UGB) exception if necessary to site the bridge and connecting roads outside the metro UGB. Looking east of I-5, a third site is connecting SW Metolius Loop with SW French Prairie Road near the Charbonneau Golf Club. A fourth site is connecting SW Rose Lane with either SW French Prairie (near SW Lakeside Loop) or east to NE Eilers Road.

The advantage is that land on the east bank and west of I-5 is rural and so has less market value and is less expensive to buy or seize by eminent domain.

Also, because the bottleneck is a local problem, a special assessment can be levied on Wilsonville landowners for some proportionate share of the costs of the bridge over some time, say 20-30 years, based on the 60% or so that Wilsonville traffic constitutes of the I-5 congestion along the Boones Bridge.

A similar example of the local bridge line of thinking is seen for the Columbia River Crossing in the video, "A Common Sense Alternative to the CRC"

(6 min., 14 sec.) View it to further understand what I'm getting at.

My second choice would be baseline (no build).

As a first reason, my first choice is actually none of A-C, but instead "D", to build a bridge across the Willamette to serve local Wilsonville traffic between the north and south parts of the city and its immediate hinterlands. Include walking and cycling routes. Look to the Sellwood Bridge as a model. Why widen I-5, a regional and interstate expressway, to solve a local bottleneck that is caused locally? The problem isn't I-5; it's that there are too few crossings of the Willamette River in the south metro area.

A site to consider would include a route connecting SW Boones Ferry Road and Boones Ferry Crossing NE at NE Butteville Road, or vicinity. A second is farther west connecting SW Kinsman Road and NE Butteville Road. Get legislative approval of an urban growth boundary (UGB) exception if necessary to site the bridge and connecting roads outside the metro UGB. Looking east of I-5, a third site is connecting SW Metolius Loop with SW French Prairie Road near the Charbonneau Golf Club. A fourth site is connecting SW Rose Lane with either SW French Prairie (near SW Lakeside Loop) or east to NE Eilers Road.

The advantage is that land on the east bank and west of I-5 or east of Charbonneau is rural and so has less market value and is less expensive to buy or seize by eminent domain.

Also, because the bottleneck is a local problem, a special assessment can be levied on Wilsonville landowners for some proportionate share of the costs of the bridge over some time, say 20-30 years, based on the 60% or so that Wilsonville traffic constitutes of the I-5 congestion along the Boones Bridge. Why should taxpayers across the metro area shoulder the full burden?

A similar example of the local bridge line of thinking is seen for the Columbia River Crossing in the video, "A Common Sense Alternative to the CRC"

(6 min., 14 sec.) View it to further understand what I'm getting at.

My second choice would be baseline (no build).

As a second reason, it seems automated vehicles (AVs) would increase capacity and reduce or eliminate the problem anyway in the 20-30 years it'll take for them to mainstream.

Third, Oregon has a climate action plan, and a de facto highway widening is clearly is not in support of that.

Fourth, has attempting to build our way out of automotive congestion for the last eighty-plus years taught DOTs nothing? The increased capacity would disappear because driving will become easier and faster, so there'll be more vehicle trips and more often.

Fifth, the legislature continues to kvetch about lacking money while not tackling tax reform,

13 of 32

Responses to Q8: Primary reasons for this level of support.

and I'd be loath if a project that ostensibly is limited to transportation funding through Metro might not become involved in a legislative session. I believe when the Portland city council considered cutting a much smaller capital project - Capitol Highway in Portland - the legislature in 2017 session found state money to fund it. I don't object against that project; my point is that regional projects have a way of having their proponents discover one pot of money isn't enough, and more is needed from a larger pool of taxpayers.

Sixth, as a Portland resident, I have no desire to improve the commutes of Wilsonville residents when the streets in my neighborhood in Southwest are crumbling -- literally -- with potholes and gravel growing by the week. And don't tell me it's institutional protocol that state projects get state and Metro money. It's political will. Aren't we supposed to pave unpaved streets, get crumbled streets resurface, and get sidewalks and bike paths to get us all to drive less? Why isn't the region blanketed with rail and frequent bus lines so I can travel to and from Portland and the 'burbs and beyond with little worry about service hours, frequency, travel times, and transfers? Spend the money on these things. And don't tell me it's institutional protocol that TriMet and ODOT (and SMART) are separate collections of pots of money.

Seventh, if there were fewer than 13 miles between the Boones Bridge and the next nearest road crossing, I-5 wouldn't be quite so bad, same as if there was a bridge near Lake Oswego between the Sellwood and I-205 bridges, that would do wonders for out-of-direction travel on the Ross Island and I-205 bridges. Now there are two projects that merit Metro funding!

Eighth, the bad publicity over the past several months (particularly in the Portland Tribune) of lack of ODOT oversight of its contractors with millions of dollars lost and a major bridge needing to be rebuilt doesn't instill confidence in the proposed project.

Ninth, in the scheme of things, I'd rather spend tax money on more important things, socialist goods such as universal health care, a universal basic income, housing as a right, and environmental remediation. Traffic congestion is a mere nuisance by comparison. I add that with the threat of excessive automation in the near future in the on-going class war if trends continue, I don't foresee thousands of jobless Metro residents (freight drivers, retail workers, even swaths of white collar workers) commuting across the Boones Bridge to jobs they no longer have because robots have replaced them. BTW, with more public housing, community land trusts, co-housing, and rent control, more people could afford live in closer proximity to work and wouldn't commute as much and as far; now there's a congestion mitigation measure!

Tenth, because capital has all but fully co-opted the federal government, leading to abandonment of the American people by Congress and the President, with some embattled progressive agency heads remaining, I expect no money from Washington. This means greater burden on and discretion with our state and Metro funds. The Boones Bridge doesn't make my list of priorities.

Reduce traffic on I-5 Southbound coming from further up towards Portland.

It makes the most sense, and seems to be the best option for handling future traffic increases. There is no reason for this congestion. The biggest bother is the fact that it congests Wilsonville Rd. back to the high school.

Time of travel. Safety of vehicles. Quicker response times of emergency vehicles. Lower pollutant effect of cars taking an extra 30 or more minutes to get from the Hwy 217 interchange to past the Boone Bridge.

Traveling it every day it gets so frustrating and alot of wasted time waiting in traffic.

Most cost effective alternative -let's solve for the future.

Safety during the movement of personnel and products.

I travel I5 southbound to Wilsonville Rd at least twice every weekday and experience extreme traffic delays more than twice per week which affects traffic flow as far north on I5 as hwy 217 (I rarely enter I5 southbound farther north than hwy 217). My arrival times to destinations on Wilsonville Rd often vary between 10-45 minutes! I imagine anyone traveling farther south on I5 experience even greater delays often.

The government is spending tax payer money but depriving the taxpayers from obtaining additional tax revenue from south of the river. Government is spending money for improvements for south of the river but receiving no revenue from south of the river. All groups knowledgeable of the regions shortfall of employment lands know that, but for the political position of anti-development groups, south of the river development is the ideal place for future employment land development.

Reduction in spillback congestion in southbound lanes north of Wilsonville road, and both east & west bound spillback traffic on Wilsonville queuing on to SB I-5 on ramp. Current 3-lane queuing will help, but only moderately. An additional question lane can't accommodate backups that on occasion extend as much as a mile to the west for eastbound Wilsonville road traffic in the afternoons.

I-5 southbound traffic flow would improve and reduce congestion seen south of Hwy 217. Traffic on Wilsonville Rd is greatly impacted during rush hour which affects travelers that have no intention of utilizing I-5.

Traffic will only get more congested over the years. There also needs to be more rail alternatives between Portland and Salem. Many people commute from Salem and a rail line that runs more frequently, and with earlier and later trains would help. adding a commuter lane, (2 or more occupants) for peak congestion times might help.

Only bridge over Willamette in the area, so it is often an absolute necessity to travel across it.

I would strongly support any of the suggested improvements!

Safety, Illuminate congestion

These traffic issues impact our family daily as well as thousands of other people as is obvious. If at all possible please bump this ahead of other (possibly) less important or impactful projects. Is it possible to do a temporary ramp to ramp lane by rearranging the current traffic lanes - or even extending the first Wilsonville exit only lane as a drive through lane for as long as possible to ease the congestion at an earlier point on I5? Please find some temporary solution until you can put a permanent solution in place. To do nothing for several more years is not a viable option as far as I'm concerned.

safety and reliable transit times

Traffic congestion on I-5 and surface streets in Wilsonville

I drive this section every day. The people taking the Canby/Hubbard exit often wait until the last moment to cut in front of cars in the right lane to take their exit. Two lanes for the exit will hopefully alleviate that.

Congestion - making this portion nearly unusable during certain time periods. I worry about the ability of emergency vehicles to utilize the corridor during heavy traffic or blockage due to accidents.

It does impact the quality of life/access to Wilsonville

Best for all I-5 users, freight, tourists, transit

Needed for those who take this to commute

Only way to prevent disaster on local Wilsonville Road use

Poor traffic flow, bottle-necking and issues effecting Wilsonville Rd.

I live off of Brown Rd and Wilsonville Rd as well as other side/back streets are getting increasingly congested during peak traffic hours. We feel trapped at home if we need to run what should be a 10-15 minute errand (such as to Fred Meyer) because it will/can take significantly longer than it should. I also drive home every evening (from the north) and often take a variety of other routes because of the heavy congestion on I-5 through Wilsonville.

Area growth will only continue and increase the problems that are currently observed. Major congestion through i5 as well as the main roads of Wilsonville that lead to the on ramp for 283

something has to get done

Driving it every day for work

It's already not working. 10 yrs from now when a solution is finally implemented the area will be more crowded then it is now. We need to get this going now.

Safety for all traveling this stretch and beyond

Most likely of the three to improve traffic. Need bike infrastructure

Something must be done. Traffic in this area is horrible!

Safety

Sick of traffic, this has taken too long to correct

Not certain it will work

It is the most logical to improve the traffic flow with the greatest impact.

To improve traffic congestion and decrease risk of accidents.

Improving I-5 congestion will reduce the impact on wilsonville surface streets.

Option C provides LOS D, which is greatly needed, and should allow the Wilsonvile Rd S ramp meter to offer increased flow, reducing local congestion in and around Wilsonville Road.

traffic is not getting better--it will only get worse

Live in Charbonneau. Anything that moves traffic along is safer for all.

This is an obvious improvement for all traffic traveling on I-5 south from Wilsonville. It will only get worse if not changed.

The problem is real, and getting worse. Something must be done!

I am affected by the Boone Bridge bottleneck every day during peak commute times in that it affects track slowdown far before one even reaches Wilsonville. It is my hope that this improvement will also help with the traffic that starts accumulating when driving south out of Tualatin during the commute work-week.

I live in Wilsonville and we need relief traveling from east side to west side and visa versa. Also, we need relief in effort to get home to Wilsonville while traveling south on I-5!! All summer long the commute is horrible on Fridays, and nearly horrible at any other time or day!

We have considered moving from Wilsonville for our upcoming retirement, and we have lived here since 1990.

Will solve my waiting time to get home

daily useage

The ramp is needed to help alleviate the city congestion at peak hours. The poor planning in lights and roads in the city near I-5 is the major cause. Rude drivers weaving into on-ramp lanes and not waiting adds to the problem, yet law enforcement does not have a presence to deter the behavior.

This area has deteriorated at a surprisingly fast pace over the last several years. If we don't start on a solution quickly, it will be a significant constraint on travel before a solution is in place.

The candy ferry will soon by faster the I 5 southbound if we don't do something...

Safety in getting on and off the freeway

The lack of adequate traffic design throughout the city as well as poor redesign when the worked on the I-5 a few years ago has led to this massive problem. It has greatly decreased the quality of life in Wilsonville

Traffic

This is a problem that has been ignored until now, for inexplicable reasons.

Living in Charbonneau my husband and I use this section at least once a day, if not more.

Safety getting on and off I-5 plus timely travel.

I feel trapped in my home south of the river - there is less and less reliable "windows" (midday) that I can make round trips into W'ville or the city. Getting caught in congestion is awful, and drivers get impatient, behaving recklessly.

1. Facilitate access to/from Wilsonville and points South.

2. Relieve congestion on Wilsonville Road.

3. Improve through traffic safety and travel times on I-5.

safety

I feel the second lane for the Hubbard exit isn't necessary because by then the congestion is mostly gone. I use that exit all the time.

A major project of this nature should over designed for current volume and great magin for growth and growth will come as the metropolitan area moves south to find less expensive housing

Traffic is not just dangerous. It leads to wasted fuel. It worsens air quality. Save lives, save fuel, and air quality. Do it.

Tired of having to avoid driving through Wilsonville at certain times or having to leave considerably earlier to places because all side roads are backed up as a result of the terrible freeway congestion. The congestion is so bad on side roads in Wilsonville that people end up blocking intersections in a frustrated attempt to make any progress in their commute.

There is no reason to pursue this based on the current situation and the forcasted data

I work in Wilsonville and live in Canby - in current state commute home is terrible. Commute to work with ramp to ramp lane is fine majority of the time.

Having lived in Wilsonville for well over 40 years I have seen I-5 access constantly deteriorating. Considering how long it takes for any of the alternatives we will see not relief for at least 10 years. I shudder to think how bad it will be by then.

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Traffic around Wilsonville is terrible. It's frustrating and very limiting. No one from Portland wants to come and visit during peak hours.

I already have a 45 minute commute on a good day. I work in WV. Sometimes it can take me 45 min just to get on to the freeway because the in town traffic is backed up so bad due to the freeway.

Better function for I-5 and for Wilsonville streets.

less congestion now and in the future

Prevention of increased congestion on Wilsonville Rd. Right now Wilsonville Rd typically is congested to the extent of 20-30 minutes during peak hours to just enter the on-ramp to I-5.

I see the delays and know that the volume of traffic entering the freeway from Wilsonville is to blame. I also think that people going north and south through Wilsonville for some inexplicable reason slow down without traffic issues.

Driving this route daily increases the potential of an accident and wastes a great deal of time.

Ease in getting to area across the bridge

I5 needs lots of improvements and this is 1 of them. 4-5 Lanes in each direction would be ideal

I'm currently caught up in the discussed comgestion!

Lack of frequent use. We are retired, and to some extent, can stay away from the congestion. We do recognize the problem, and agree that this solution has merit.

I live in Charbonneau, and my closest services are across the Boone bridge. Sometimes it may take 30 minutes to run an errand that should take no more than 10.

Safety and efficiency

Congestion

Inability to travel across I-5/Willamette River durning rush hour times.

Traffic congestion backing up far past the 217 is terrible. If there were an emergency, emergency vehicles and personnel would be substantially delayed. THIS MUST BE RESOLVED

Traffic backed up on Wilsonville Rd and there being no other way to easily access south I-5 Safe and traffic flow

ANYTHING THAT HELPS RELIEVE CONGESTION OVER THE BRIDGE

Traffic is really bad. Need to widen all of I 5

safety and relief congestion on Wilsonville Road first, then I-5

Congestion is ridiculous and horribly unsafe!

We drive it everyday and it is a safety hazard now

Traffic is terrible, I5 needs to be improved.

The congestion on I-5 South at Boone Bridge is becoming more and more constant - not just at PM peak. Moreover, the PM peak congestion heavily impacts the Wilsonville road network, making it difficult for those not getting on I-5 South to easily move throughout the City.

This may temporarily relieve some congestion, but I would rather the state focus that funding on getting folks out of vehicles and into buses, vanpools, etc. by improving those services and making those the preferred choice.

When coming from the north to Wilsonville, I can't plan on getting home until around 7 pm. All bets are off for getting home earlier.

When I have to leave Wilsonville during the week, I can never count on getting home in a timely manner. All the alternative routes to Wilsonville are also backed. It would be awesome to be able to get home before 7 pm.

Traffic seldom, if ever, gets better if ignored.

good solution to frequent problem

It would create less congestion

I think we need to look towards the future and predicted growth. I believe this option is the best to accommodate growth in the long-term.

Even though I only take this route a few times a month I always check my smart phone to see how bad traffic is before I leave work to see how much extra time I may need to take to cross the Boone Bridge.

Travel times. Emergency vehicals

Ease congestion, move around with more predictability in travel time.

The need to get this problem fixed for now and for future use.

Congestion is ridiculous. Only getting worse as Wilsonville expands. Soon I'll have to get off at 289 to get to my home in south Wilsonville.

Commuting times need to be improved for public safety and quality of life reasons.

Traffic is only going to get worse. This should have been addressed years ago when the traffic started getting so bad.

Traffic in this area will lead to fatality's

Southbound I5 traffic has become horrible, and the Boone Bridge seems to be a reason for it. Time

Traffic is always backed up in Wilsonville. It could easily impact emergency vehicles. This area is growing so we should be solving current issues as well as plan for the future

Unless another bridge over the Willamette is built, the Boone bridge is the only North-South access for miles. Traffic gets worse every year and will not get better anytime soon. This seems to be the option that I have heard of.

Traffic safety and travel time reduction

anything to make traveling the state better and less frustrating is a plus. I am more likely to play "tourist" when the traffic isn't a major issue.

I use the bridge daily, coming and going to Wilsonville from the South. The dedicated lane from Charbonneau to Wilsonville was a great improvement with traffic and merging when put in and I believe this will have a huge beneficial impact as well. I believe we also need more turning lanes from Wilsonville Rd(from the West) entering the I5 South onramp.

less time on the road

There are no other options to get south of the river and it can frequently take 20-30 minutes to get on the Freeway and block traffic throughout Wilsonville. Wilsonville will be crippled with the predicted future traffic on this Bridge. This should help keep speeds higher over the bridge and reduce the back-up on I-5 S as well as on Wilsonville Road.

Dealing with this congestion everyday on my way home from work is frustrating. Option C would alleviate people needing to get over from regular traffic flow (causing further congestion) to exit at the Canby/Hubbard exit.

I'd like to see traffic flowing on I-5. I dislike hearing complaints about how bad traffic is in this location. There tend to be lots of accidents from congestion.

with this there may not be as many accidents from cars merging onto the freeway and totally stopping traffic when that is the only way over the river

Responses to Q8: Primary reasons for this level of support.
traffic jams, increased hostility road rage, potential for accidents. I want to get home in a timely manner.
Pro: better traffic flow for I5 AND throughout Wilsonville. Cons: More Cars on the road=environmental impact, and the high cost.
Safety
It would improve traffic conditions, safety, and increase productivity time by reducing travel time. Additionally, I think it would be wise to choose Option C, as this seems to be the most forward thinking and would serve as a better solution for a longer period of time, rather than having to make additional improvements sooner.
Less time spent on Wilsonville Rd or Town Center Loop W. waiting just to get to the on ramp and the congestion that becomes apparent as everyone is trying to make the light to make the South bound ramp. Also it should alleviate people from lane jumping at the base of the underpass where the first straight lane next to the turning lane will race up under the bridge and barge in and force less cars to be able to move through the turning lanes to the under bridge lanes as they block those up. The additional lane to Miley Rd will alleviate those having to jump over and drivers will have more time to get over to their exit ramp.
Safety and feelings of unhappiness with this area
Due to me and everyone else having to wait in traffic to get where we need to go. I live in Woodburn and work in Wilsonville. It would help so much getting home every day, getting to work every day and even on weekends, when I need to make a trip to Tualatin.
This area is a death trap. There is always an accident or almost an accident daily. There is traffic congestion spillage into Wilsonville, preventing people from shopping/stopping here. They just want out.
Ease congestion, improve reliability
Traffic is terrible NOW !!!!!
Conditions are currently very unreliable so to hear that they could become worse as years go on, it is very unsettling. It would cause me to look elsewhere to live and work.
Safety
Safety
Heavy congestion increasing travel times, decreaseing reliability and impacting freight movement and commuters who move via SOV or transit.
Daily commute from North Marion County to Portland and back is bad at the Terwilliger Curves and Wilsonville. Traffic on/off from 551 always slows the freeway and the solution of auxilliary lane is relatively inexpensive solution
The traffic is terrible. Obviously this needs to be fixed.
Improving traffic speeds and safety.
If we don't do something soon, the next 20 years will be unbearable.
Most positive impact on congestion. Congestion impact should be manageable. This would be a very beneficial project with very little downsides.
Travel safely
The idea seems obvious or at least has come of its time.
Most important bridge between CA and WA
Travel over the bridge daily.
Safety, environmental and economic.
I commuted south to Albany every day for work for two years and had to factor in nearly half an hour to get from my home in South Wilsonville to I5 beyond the mentioned exits because

of the congestion related to Wilsonville road and these exits. A trip that would typically only take me 5-10 minutes. The unreliability meant I often sat in my car for 30 minutes, either at work because I was early or in my car in Wilsonville simply trying to leave the traffic.

Safety, livability

By 2040 this might not be sufficient. I have heard growth in the valley is supposed to be much higher.

As a resident of Wilsonville I feel trapped in town during large portions of the day due to the congestion.

This is a daily time waster for so many people. It is affecting the livability of the whole area.

I am often affected by the back ups on this stretch of the highway whether I am traveling on I5 or just trying to get around town. I have even been stranded at Fred Meyer several times due to highway traffic backing up into the parking lot. It is very frustrating and concerning that I can't even get around when I'm not even trying to use the highway. So much so that if it continues to get worse we will likely move out if Wilsonville. While I definitely support ODOT investing in improvements here, I am concerned amd disappointed that the recommended improvement is only bringing us from an "E" rating to a "D" rating. If we're going to invest time and money into improvements, I believe it should bring us up to an A or B level. Otherwise we'll be right back in the same situation in a couple years and spending even more money and time to do yet another upgrade again. In the end likely spending twice as much than if we had just done something better the first time.

This congestion affects not only that specific area of I-5, but Wilsonville road and congestion often spreads much further north.

There are so many people moving to the greater Wilsonville area that road conditions will worsen quickly on I-5, and the traffic is already terrible.

Difficulty getting home from Wilsonville and areas North due to extreme traffic backup.

We have lived in Wilsonville for 10 years, and the recent increase in congestion is affecting our daily living and preventing people from coming to our area to invest in our economy. Wilsonville is losing its appeal.

Horrible congestion on Wilsonville Rd. Frequent accidents in bottleneck area.

The traffic is horrible. In the summer on Sundays it is horrible as well! From noon to 5 pm it is terrible.

offers the greatest improvement in traffic flow

The need is clear.

Newly moved to area; try to avoid heavy traffic times in driving schedule.

Fear of accident without the improvement

Traffic & commute time is getting exponentially worse with the massive influx of new population in Oregon. This (and similar) projects will help mitigate an already frustrating daily experience.

Traffic has increased dramatically causing long travel times on I-5 south, with backups even prior to the North Wilsonville exit off ramp.

As previously noted, the cross over traffic will create issues, much like the 205/Tualatin interchange. I can't believe that fixes like these will do much to ease the issue as I've already stated, it is a regional issue with Wilsonville bearing the brunt of it due to location at the "funnel end" of the problem.

I live in charbonneu

Need options to manage the existing capacity better before adding additional freeway capacity.

AGREE WITH WHAT YOU'VE LISTED ABOVE

Id rather not be stuck in traffic almost daily, beginning in Tualatin and thru Wilsonville

I live on Butteville Road (Charbonneau exit) and 99% of my travel is between points north, Wilsonville and exit 282B.

Something has to be done to maintain the sanity and safety of those of us who use Boones Bridge.

Ease congestion.

Reduced traffic/bottleneck and increased safety.

Option a and b will only Bandaid the problem and option C is forward thinking.

Something must be done NOW. We cannot wait 10+ years unless the state wants to be responsible for creating the most insane congestion problems in the history of I-5.

I live off Wilsonville Rd to the west of I-5, and sometimes traffic can be backed up on Wilsonville Rd beyond the railroad tracks, and getting onto I-5 can take a long time. During times like this it is practically impossible to exit the Fred Meyer Parking lot. Even when traffic is not terrible on Wilsonville Rd, merging onto I-5 south can be scary. I drive an SUV, but still feel vulnerable when I first get onto I-5 going south and I'm trapped between semi-trailers, or in front of one. Traffic can slow down so quickly right before the bridge that it gets scary, and often there is no other lane to escape to. Things don't speed up until after the Canby exit.

Since 2004 I've lived in Charbonneau & watched traffic on the i-5 corridor between just south of Miley Road to just north of Elligten Rd. become a parking lot several times a day. It effects traffic both north and south of that corridor so much that I join many in doing off freeway driving at high traffic house. This looks like a good first step toward a solution.

We need a solution. If the research shows this is the best alternative, lets get it done.

liviability, safety.

It appears that Option C will not only provide a good solution to the congestion over the Boone bridge but also the best opportunity to reduce the backups further north on I-5 that occur as a result.

The additional auxiliary lane is badly needed - Right now there are 4 north-bound lanes, but only 3 south-bound lanes on the bridge, causing much worse south-bound traffic. Extending the auxiliary lane to Exit 282A and adding a 2nd exit lane for minor cost difference seems like the obvious best case.

Living in Wilsonville is challenging due to these traffic issues. Not only does it make it more difficult to get home from the North but any travel within the city on any roads leading to the I-5 is extremely difficult. We often have to change or cancel plans during those hours.

Ability to travel from Charbonneau to Wilsonville and back, potential for accidents, reliability for transits to keep a consistent schedule, and stress/strain on bridge.

Travel from Charbonneau and back, inability for transit to keep a timely schedule that people can rely on, potential for traffic accidents, and stress on bridge itself.

Safety

This project, particularly Alternative C, makes sense. It's too bad it will take so long for study and implementation.

Help clear congestion on Wilsonville road by improving I-5 flow.

I think adding an exit only when you get onin Wilsonville will add to congestion most people want to go further and will have to immediately merge plus people will use lane to try to get around traffic adding to the problem

Lets help solve the high traffic and dangerous caused by the conditions on this bridge Relieve traffic congestion

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Congestion spilling back onto Wilsonville Road means slower travel times for Cherriots and SMART buses going to Salem. I can't support it "strongly" because there are no provisions for bicycles and pedestrians going across the river. Some of the funding needs to support a bike/ped bridge across the river, even if it is a mile away from the Boone Bridge.

Spending 1/2 hour trying to get on 1-5 from Wilsonville Road

Provides the most relief from traffic congestion

Commute

Even getting TO Wilsonville from Points North in the aft/eve is a waste of time and a hassle.

to reduce congetion

to improve overall traffic flow south

Congestion is getting worse and the traffic is spilling over into the city streets already. It will

only get worse in the future

congestion has worsened to the point where it has significantly impacted quality of life, and without transit options that could get commuters to and from downtown in a reasonable amount of time, it is only going to get much worse as the population of Wilsonville expands.

Wilsonville Rd congestion every weekday

Very much needed for this traffic problem

Students coming to campus are greatly affected by the traffic backing up I-5 past Wilsonville. It often looks like a parking lot. This may help their commutes to campus.

Not only does this make my commute easier but it makes people more likely to consider our business viable in the late afternoon hours of the day. I think people avoid Wilsonville businesses after 3 pm during the week.

frequent personal use. reduce frequent accidents in this area

I take it daily and it's so frustrating how long it takes to get onto I-5 SB. When there's an accident it's even worst.

Q9 If a ramp-to-ramp lane moves forward for more detailed engineering and project development, what questions or concerns would you want ODOT and the City to address before constructing the improvements?

140 responses, listed below.

Responses to Q9: additional questions or concerns

Would this entail widening the Boone Bridge? What would be the time estimate for completion? How much would construction impact the current traffic pattern?

1. What alternatives besides Options A-C have the parties seriously developed and considered before selecting one of those options?

2. Who has political authority to stop the project?

3. How much would the project cost and who'd pay for it, by which I mean which bucket of tax money (any of federal, state, Metro, City of Wilsonville)?

4. What's likely to go wrong (cost overruns, shoddy contractor work), who's responsible, and what's the contingency plan?

N/A

Signage so that drivers understand they don't have to immediately change lanes for further southbound travel.

Construction congestion

I feel a short term solution would be to move the I-5 South on-ramp metering lights further north to allow vehicles entering the freeway a greater distance to get up to speed before needing to merge. I understand the reason the metering lights are so far south is to allow for more cars to be staged in the on-ramp and keep them from creating congestion on surface streets.

But, I believe two things can be done to solve this problem between now and 2028 when the Boone Bridge improvements may start.

1. Widen the on-ramp staging area to allow for 3 lanes of cars behind the metering lights.

2. Convert the center island on Wilsonville road between Town Center Loop and Parkway Avenue on the east side of I-5 from a flower/tree bed into a Left Turn Only lane for entrance into the Southbound I-5 on-ramp.

While those trees and flowers contribute to the charm of Wilsonville, they are unfortunately wasted space that could be used to ease traffic flow.

Hopefully the work will be done during the night or from 9-2 during the day. Not during rush hour!!

Option "C" provides that those coming for north of exit 383 do not ave to change to the far right lane to exit. Requires less "weaving".

The impact future truck traffic caused by the development of Coffee Creek Industrial lands will have on this short strip of I-5 in the future

Get it done! This should have been done a decade ago!!!

Reducing the impact on southbound I-5 traffic during any improvements is very important so that the situation that is currently bad is not made worse.

Can the bridge carry the extra load?

How construction would impact current traffic and how additional construction on the bridge would impact bridge safety. Also, if during construction, upgrades could be made to bridge to ensure safety.

Adding any kind of noise barriers to protect the surrounding neighborhoods from the freeway noise.

cost

please keep Fir trees along the on ramp. Plant more trees along I-5 throughout the area and in the median

Traffic during construction

Make sure siesmic upgrade to bridge done at same time

Ensuring that construction is done on off peak hours, such as overnight between 8pm-5am, to prevent further back up and delays. Also ensuring that signage is clear near the exits as well as ahead of them so commuters can plan ahead on which lane they need to be in, avoiding the crazy last minute weaving and cutting in front of other cars to get into the correct lane

boone bridge width

How will the construction effect my daily travel?

Canby exit - currently when taking the Canby exit it splits into two lanes. Those 2 lanes will need to be extended to the stop light or will have tons of folks backed up onto the, freeway.

What, if any downsides would it have?

Bike infrastructure. There's no easy way south - all the way to Newberg, or the Canby ferry Find out why the entire Portland area has such bad traffic problems due to no new highways in 40 years. Our senators and representatives have done a very poor job getting Federal funding for our roads. When spending time on the East Coast, the highway systems are so much newer and better. Those states are getting much more money than Oregon for their roads.

Safety concerns on the Boone Bridge as it will likely not have a shoulder lane.

The back up starts at 2pm at 205 south onto it. I totally use back roads as the freeway is not reliable

How long before the project could begin.

Can't think of anything.

Commit to providing safety factors for all modes of vehicular traffic (i.e. including bicycles) in the design, including separation of the non-motorized vehicle lane from the motorized vehicle lanes.

How will they add lanes over the bridge? How much more narrow will lanes be? Concerned about oversized trucks.

Hurry!

Just get it done

cost covered by bonds?

How soon could it happen

None

How will you address the congestion during construction? How long will it take to build?

Do an adequate design and plan for the future.

Traffic lights off of Wilsonville Rd.

There are so many traveling across the river from Charbonneau... why not consider a new bridge that does not require everyone to travel on I-5?

Is there room on the Boone Bridge to create a SAFE extra lane SB?

The Feds need to take account of the importance of the bridge upgrade for West Coast commerce now and for national security, e.g. in the event of seismic disaster.

city should make internal improvements (frontage roads or other) to relieve I5

Congestion during construction. And I still think Wilsonville Road will have bad congestion by a Fred Meyer.

It is needed MOW!

How quickly could this be completed to alleviate a never ending current issue.

Analyze what the traffic will be after 10 years and plan accordingly. The current congestion was predictable over 10 years ago. What was done in the last 10 years? Nothing!

Address bad drivers. It doesn't matter which way you come at the on ramp to go South by Fred Meyer, the almost accidents (and a couple actual accidents) and reckless driving that occurs in this area due to everyone's frustration w/ the traffic situation is astounding.

Main caution would be not adding more development pressure on lands south of the Willamette, which would negate any advantages of the ramp-to-ramp improvements.

Future status of the Wilsonville-Hubbard Highway, i.e. when will it be widened to accept 2 lanes southbound?

Major spillage back onto Wilsonville road.

What can be done to minimize the impacts of the work on the bridge to allow another lane

how fast can you do it?! Will it cost Wilsonville residents?

How to coordinate the signals on Wilsonville road to better handle the comgestion

How to minimize traffic congestion during construction and how long would the disruption be None

Timeline, when and can the project be expedited.

Seismic upgrades to the bridge

Analyze the potential for further backup due to increased traffic speeds would have in the charbonneau off ramp, this causing off ramp backup. Possibly use a traffic regulated signal for charbonneau allowing faster movement of traffic for the I5 off ramp onto Miley Road. Traffic going WB on Miley accross the bridge is minimal but can cause problems

That you build a solution that will last...not the cheap one that fixes the problem short-term

Keep us informed

Seismic issues of the bridge.

How will this be a solution for the long term? If the project were built today, within 5-10 years, we will likely have the same problem because of pop growth.

How many years before construction can start on the additional lanes?

How many years in the future will it take for the construction to start?

Environmental impacts of the project.

cost

With a ramp to ramp, would the lights on the south bound ramp be needed anymore? They are the reason for congestion in Wilsonville.

Temporary 4-lane striping across Boone Bridge to Charbonneau I think would be very beneficial.

Will there also be bike lanes?

That the speed limit from I-205 past the Canby exit be reduced from 65 to 55. There are too many accidents in this area to support a speed limit of 65.

How fast they can implement

Look at the impact of moving more traffic from the arterials to the new lanes of the bridge. Traffic backs up quickly when the bridge backs up. I would be interested in a park and ride south of the river that ties into the future pedestrian bridge into Wilsonville.

planning construction timeline to balance the need to have the least amount of impact and the shortest amount of time. also do it right the first time, no short cuts on lowest bid.

More lanes from Wilsonville Rd (west) entering the freeway. I have been stuck trying to get on the freeway (as far back to almost Brown Rd) as long as 45 minutes with all the funneling from various streets to one onramp turning lane.

Honest opinion? Traffic flows better when the metered ramp (on-ramp) lights are OFF. Traffic has time to get up to speed before entering the freeway! I'm NOT in favor of the stacked on-ramp being discussed, but would rather the metered lights on the on-ramp stay OFF.

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Determine the impact on current traffic while construction is underway. Do research to make sure this is the best way to handle it. It seems like a separate bridge connecting Charbonneau/Canby to Wilsonville could remove congestion on I-5 & provide an alternate route if the current bridge was blocked or damaged.

proper studies and public feedback

What are the longer term expectations for transportation changes/improvments? What alternatives have been considered?

What is the expected timeline for this project? When would Oregonians (and visitors) see this become reality?

Try not to make it worse than it is. Do the work in the when the least traffic needs the area. Remember that the bridge is only way many people can get home

None. Ramp to ramp lane would be a great improvement

Is this the right long-term solution to the problem. Are there projects being proposed by the City that will reverse these benefits of lessened traffic.

Oversize the bridge because eventually it'll have to be widened again.

Be aggressive in planning I-5 is the heartbeat of the state. Extremely high growth in Wilsonville and sorounding area

What would be the traffic effects of the construction to make this happen and how long would those be.

What is the bike/ped solution for safely crossing the Willamette River?

cost efficiencies of completing project in conjunction with Boone Bridge earthquake retrofit

1. If a 4th lane is added across the Boone Bridge, how will this affect shoulder widths, and the ability for a vehicles to pull off in an emergency?

2. How will bike/ped access on the bridge be affected? Due to the lack of alternatives, people currently use the right shoulder.

3. This is a good temporary fix, but what steps are being taken to plan for the rehabilitation/replacement/widening of the Boone Bridge? It's current condition is poor, and at 65 years old, will soon reach the end of its original design life.

Impact on the environment? Project timeline? Impact on Wilsonville residents?

Cana you work as much as possible at night, to help freeway movement during the day? How long would the planning and construction process take? What would the impacts on surrounding properties during construction.

None.

Stop with the ramp light in Wilsonville. It is a joke. It delays inevitable build-up. The one day the power was out (no light) -NO PROBLEMS.

How will traffic over the bridge be affected during construction?

Add commuter rail to Woodburn and Salem.

As one of the 40% that is NOT traveling to the Charbonnau or Canby exits I'm still concerned that this will mean significant delays, despite the research. Attempting to cross lanes in order to get out of an exit only is often very frustrating during busy times. I fear that this won't solve many problems and will only create a scenario similar to that of the 217 to I5 south off ramp which immediately leads to two exit only lanes into Tualatin. This stretch is typically worse than the Wilsonville stretch in my experience. To spend all the time and money to create a similar scenario would be wasteful and frustrating.

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Seriously consider starting this project at Elligsen Road

How long do they expect this project to keep us at a "D" rating until it starts declining again? How will you manage possible additional congestion during construction?

Please allow for Tri-Met service (Max) or WES directly to downtown from Wilsonville. It's crazy that it only goes to Beaverton. So many people, including me, would use the service if it went directly downtown (Portland). I save 30-40 minutes a day by driving downtown instead of taking the WES to beaverton and then the Max to downtown. We could encourage more people to use public trans if we offered service to the downtown area directly from Wilsonville and Tualatin. Please provide all I-5 improvements at night and on the weekends.

Concerned about the traffic backup during construction of the ramp-to-ramp lane.

How would it impact us? Would you be smart enough to do work at night?

None.

Fiscal responsibility, feasible timelines for completion.

Don't create another 205/Tualatin interchange challenge, that is one dangerous place. Think regional!

Would construction delay existing commute

What system management measures will ODOT take prior to/in concert with the capacity increase?

Boone Bridge needs to be retrofitted to withstand a 9 earthquake

Would the ramp to ramp lane be built onto the existing bridge? If so, what measurements would take place to ensure it is safely built? What traffic impacts would happen during this project?

Information on how and when the traffic will be impacted with each stage of the project.

Will the bridge be wider or just adjusted by reducing emergency lane?

I want to make sure that a lane cannot be created with the existing set up (even if it means doing away with an emergency pull out on the bridge).

I would want them to extend the extra lane to the Canby exit and add another exit lane. A designated extra lane both north and south between the Wilsonville exits might help significantly as well

Quality construction that keeps in mind our weather conditions(slippery when wet)

Will the proposed improvements on I-5 beneficially improve the traffic volumes and backups that occur on Wilsonville city streets between 3:30PM and 6PM as workers leave work (from business on either side of I-5) and head south?

Much of the spillback and congestion throughout Wilsonville roads is due to congestion from this bottleneck. Slow traffic on I-5 sends traffic onto back-roads to avoid, but all south-bound traffic from back-roads must get on at Wilsonville Road due to the river crossing. There are no good river crossing alternatives - nearest options are Oregon City and Newberg. The City of Wilsonville has performed several extensive road upgrades on Wilsonville road in the past decade to try and band-aid this problem, but as long as there's a bottleneck on Boone Bridge the local traffic congestion will persist. I would encourage ODOT to consider the most extensive upgrades possible to alleviate the bridge bottleneck, to avoid future congestion issues.

Must do construction at night or way before/after 3-7 rush hour times or commutes will be unbearable.

Just get it DONE!

Get rid of the stupid lights at the onramps.

Work must be done at night, weekends or way after or before rush hour times or bottleneck will be unbearable.

Is the ramp to ramp lane going to be metered, increasing the backup onto Wilsonville Road?

If not, will it be separated to prevent scofflaws from jumping the meter queue?

None. Just do it!!

move on it asap

Although the numbers of bicycles and pedestrians crossing the Boone Bridge are small, it is the only link across the river for miles. This is a multi-modal crossing and needs to be treated as such. If adding a ramp to ramp lane would eliminate the shoulder on the bridge, this means bikes and pedestrians no longer have a safe way to cross the bridge unless the take the SMART bus, which only runs every half an hour. Some of the funds used to improve the crossing should be dedicated for the construction of a bike/ped bridge which is within a mile of I-5 along the river.

N/a

My major concern is this: Why did it take so long to recognize this problem and why will this project take so long to complete (anticipated start date: 2028!)? This project seems to be a "no-brainer" for reducing at least some of the congestion on I-5, and plans like this should have been in the works years ago.

I'm also concerned with the way ODOT appears to be handling the whole mobility and access issue for Portland and the surrounding area. How does this project fit into the overall scheme for moving people and goods in and out of Portland? I'm new to this area. It looks like the I-5 corridor is the major artery which, if an earthquake or a serious accident were to happen, would shut down people and commerce movement for days, weeks, months or perhaps years.

Do you folks understand how vulnerable the economy of the area is to a serious incident or event? Have you calculated the risk and cost? Where I came from (Colorado) CDOT had worked out and published the cost of congestion on I-70 to the state's economy. They have a different problem in that expanding I-70 many of the mountain areas is extremely costly. On the other hand, ODOT has more flexibility in terms of its options. What are they?

Why not build another bridge with 6 lanes ? That is what is needed . As soon cas you get done with the puny 1 lane addition it will be totally too small and 10 years behind what is needed . You need a new bridgeperiod .

Is the roadbed wide enough to include safe breakdown lanes?

to take further growth inaccount

Any delays will take a bad situation to only worse

After north WILSONVILLE I-5 EXIT try to direct south bound traffic to merge left at a sign at the Boeckman Rd.overpass.

How would this work given the space limitations o the Boone Bridge?

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How quickly can this be done?

Do it now, not in 10 years.

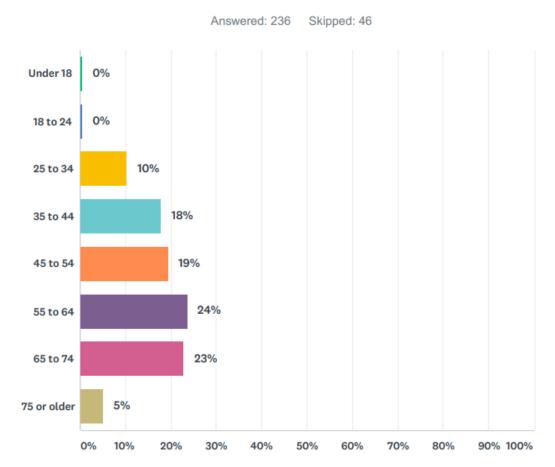
Traffic that is weaving from the on ramp to continue past the canby exit.

Is there sufficient street capacity and infrastructure to support the on-ramp traffic into the cities? If not, then the backups will continue.

Signage and enforcement to avoid late-merge incidents a la the 217S merge onto I-5 south. This would pertains to the traffic continuing south on I-5 past the 282 exits.

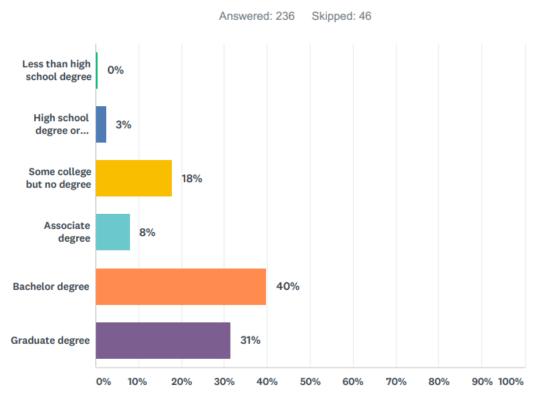
extent southbound from hwy 551 to the wilsonville exit also. the existing extension did little to reduce the morning traffic impact

Hopefully the main work will take place during evening hours.

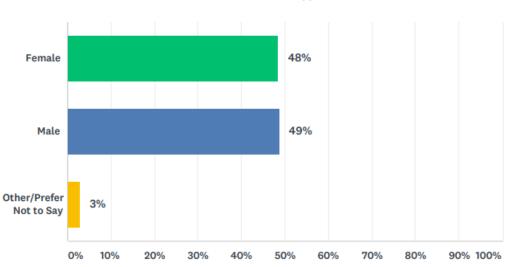


Q10: What is your age?

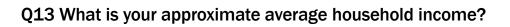
Q11 What is the highest level of school you have completed or the highest degree you have received?

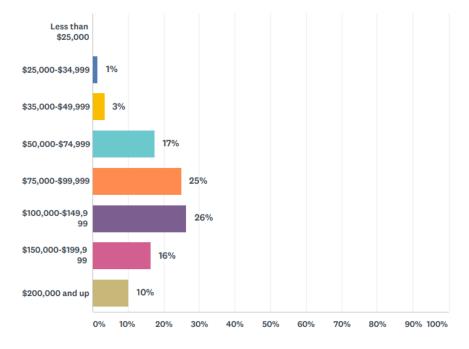


Q12 What is your gender?



Answered: 236 Skipped: 46





Q14 Please specify your race and ethnicity. (Check all that apply.)

