



Portland Metro Area Value Pricing Feasibility Analysis Winter 2017-2018 Community Engagement Summary Report





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Prepared for



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1 INTRODUCTION

1.1 Project context and purpose of this report

In 2017, the Oregon Legislature authorized substantial funding to improve highways, transit, biking and walking facilities, and use technology to make the state's transportation system work better. As part of this comprehensive transportation package, the Legislature also directed the Oregon Transportation Commission (OTC) to seek federal approval to implement value pricing on I-5 and I-205 in the Portland metro area to address congestion.

Value pricing, also called congestion pricing or variable rate tolling, uses fees or tolls to manage congestion. It has been successfully implemented in about 40 locations in 11 states in the U.S. and around the world, resulting in faster, more reliable and predictable trips.

The Oregon Department of Transportation (ODOT) initiated the Portland Metro Area Value Pricing Feasibility Analysis to: explore the options available; determine how and where value pricing could help improve congestion on I-5 or I-205 during peak travel times; and begin to understand potential benefits and impacts to travelers and adjacent communities.

This report summarizes public input received as part of the feasibility analysis between November 2017 and the culmination of the winter outreach period on February 5, 2018. This public input will be considered by the Policy Advisory Committee and the project technical team as they refine concepts for additional analysis. The project team will continue to collect public input over the course of the project, including through additional outreach events and opportunities in spring 2018. The Policy Advisory Committee is expected to provide its recommendations to the OTC by June 2018. The OTC will submit a report to the Federal Highway Administration (FHWA) by the end of December 2018. Ongoing opportunities for public input will continue during future phases of analysis.

1.2 Public input opportunities

Public review and input are essential components of the value pricing feasibility analysis. Members of the public have the opportunity to submit comments or questions to the project team and Policy Advisory Committee at any time during the project. In addition, ODOT conducted focused outreach between January 17 and February 5, 2018, to share information and collect feedback.

Throughout the winter 2018 public outreach period, the project team sought to:

- **Listen to community input** on current and growing congestion and understand needs, issues, concerns and opportunities presented by the potential implementation of value pricing
- **Promote awareness** among stakeholders and the public about the project process and schedule
- **Educate the public and stakeholders** about the congestion problem, value pricing and why ODOT is considering the tool and the initial range of value pricing concepts



ODOT provided several opportunities for members of the public to learn about the project and submit input:

In-person community conversations: ODOT hosted three, drop-in open-house style events at the following locations:

- Clackamas Town Center Community Room on January 23, 2018 (4:30 – 7:30 p.m.)
- Lloyd Center Mall on January 27, 2018 (10 a.m. – 1 p.m.)
- Vancouver Community Library on January 30, 2018 (4 p.m. – 7:30 p.m.)

Participants had the opportunity to view informational displays, have conversations with staff, watch educational videos, and share feedback via a mapping exercise, flip charts, and an outreach questionnaire.



Attendees view a display at the Vancouver community conversation event
Source: ODOT

Online open house and interactive map:

Between January 17 and February 5, 2018, ODOT hosted an online open house. This temporary, interactive website included seven virtual “stations” that presented the same information available at the in-person community conversations. Online visitors could provide feedback via an interactive map, the online outreach questionnaire (same as the in-person questionnaire), or through email links. ODOT publicized the online open house via social media, email updates, news releases, digital ads and at in-person events.

Policy Advisory Committee meetings and email address: The OTC established a Policy Advisory Committee to guide ODOT throughout the feasibility analysis. The committee includes representatives of local governments in Oregon and Washington, the business community, highway users, equity and environmental justice interests, and public transportation and environmental advocates. Members of the public are invited to attend and provide public comment at committee meetings and can also email the committee at ValuePricingPAC@odot.state.or.us. Meetings are also streamed live, and videos are archived on the project website.

Project website: The project website, www.ODOTValuePricing.org, provides information about the project and ways to get involved. Visitors can access key project documents, including materials presented to the Policy Advisory Committee, fact sheets (in multiple languages) and answers to frequently asked questions. The website also provides links to the project email and voicemail line.

Project email and voicemail line: Members of the public can submit questions or comments to the project team at any time by emailing ValuePricingInfo@odot.state.or.us or by leaving a voicemail at 503-610-8595.

Community group presentations: Project staff presented information and answered questions at approximately 20 meetings with community and business organizations, county coordinating committees and regional transportation committees, neighborhood associations, and public agency staff. Some of the organizations include:

- Southwest Washington Regional Transportation Council
- Metro Joint Policy Advisory Committee on Transportation (JPACT)

- Washington County Coordinating Committee
- Clackamas County Coordinating Committee (C-4) Metro Subcommittee
- East Multnomah County Transportation Committee
- Wilsonville Planning Commission
- North Clackamas Chamber of Commerce
- Westside Economic Alliance
- Portland Business Alliance Transportation Committee
- East Portland Action Plan Land Use and Transportation Committee
- Portland Freight Committee
- Institute of Transportation Engineers

1.3 Notification

In addition to the project website, public notification of winter 2018 outreach opportunities occurred through the following channels:

Email notification

- News release distributed statewide and to project email list
- Outreach toolkit with background materials, information on upcoming events and how to provide feedback emailed to community groups and neighborhood organizations
- Reminder e-update to project email list

Social media posts

- 1 ODOT Facebook post
- 3 ODOT Facebook events
- 4 ODOT Tweets
- Social media posts from partner agencies and PAC members

Paid digital advertising

- Facebook
- Instagram
- Twitter ads
- YouTube ad
- Google Display Ad Network



Example Twitter ad

Media and blog coverage

- News stories from several sources, including: KATU, KGW, KOIN, Fox12, *Portland Tribune*, *Oregonian*, *Columbian*, OPB, *Clark County Today*, *Lake Oswego Review*, *East Oregonian*, *Patch.com*, *The Longview Daily News*
- Stories on local blogs including *Bike Portland* and *No More Freeway Expansion*



1.4 By the numbers

Table 1-1. Number of people reached

| | |
|----------------|---|
| 260 | Community conversation attendees |
| 6,722 | Online open house unique users |
| 111 | People attended Policy Advisory Committee meetings 1 and/or 2 |
| 249,213 | People reached through digital ads |
| 9,500+ | People reached through unpaid social media posts |
| 95+ | People reached through community group presentations |
| 1,324 | Project email list |

Table 1-2. Number of comments received

| | |
|--------------|--|
| 1,810 | Completed questionnaires |
| 742 | Emailed comments |
| 30 | Voicemails |
| 573 | Comments on the online interactive map |

1.5 Analysis methodology

Thousands of public comments have been analyzed for the purpose of this feedback summary. The approach taken to collect and then synthesize the comments is shared in the following paragraphs.

Outreach questionnaire design

Members of the public were invited to complete an outreach questionnaire via the online open house and on laptops and iPads at the in-person community conversations. Paper copies were also available upon request. The questionnaire included 15 questions: four demographic questions; nine project-related closed-ended questions; and two open-ended questions. Closed-ended questions included multiple choice and ranking types. The questionnaire collected feedback on congestion experiences, community values related to traveling on I-5 and I-205, perceived benefits and burdens of implementing value pricing, and how value pricing might impact driver behavior.

Questionnaire reach and data integrity

Between January 17 and February 5, 2018, 2,175 people started the questionnaire. In total, 2,137 respondents answered at least one non-demographic question, and 1,810 completed the questionnaire to the end. Around 78 percent of those who started the questionnaire answered at least one open-ended question.

The goal of the questionnaire was to engage and learn from as many members of the broader public as possible. To encourage feedback from a large and diverse universe of residents, the questionnaire was accessible on mobile, desktop and tablet devices as well as in hard copy form upon request at in-person events. Responses were not limited by Internet Protocol (IP) address so that multiple members of the same household or workplace could submit feedback. The project team reviewed data by IP address, and no evidence of intentional multiple submissions was found.

Open-ended comment analysis

Open-ended comments received through the questionnaire and via email, voicemail and at in-person events were analyzed together for the purposes of this summary. The questionnaire asked two open-ended questions:

Question 8: How does traffic on I-5 or I-205 affect you personally?

Question 12: Do you have any additional thoughts you would like to share with the Portland Metro Area Value Pricing Feasibility Analysis project team?

The nature of the responses and themes covered did not differ significantly between these questions and the comments received via email and phone. Consequently, for reporting purposes, themes from all open-ended comments are summarized together.

For analysis, open-ended comments were coded based on thematic topic. Comments were coded by multiple themes if more than one topic was discussed. Most comments referred to multiple topics. The comment summary portion of this report describes the main themes and messages associated with the most common topics, as well as several sub-topics within these categories.



Community conversation attendees complete the online questionnaire
Source: ODOT

The questionnaire results are not statistically representative, meaning the respondent sample is not predictive of the opinions of the Portland metro area¹ population as a whole. Clark County residents are over represented in the questionnaire sample, while Clackamas County and Washington County residents are underrepresented.

Questionnaire respondents are more likely to be male, white and older than the metro area average. Specifically, metro residents under the age of 30, Hispanic/Latino(a) residents and Asian/Pacific Islander residents are underrepresented. Results for the closed-ended questions have been compared for different demographic groups (see Appendix B). However, some of these groups have low response numbers, and therefore these cross-tab results should be treated with caution.



2 KEY TAKEAWAYS AND THEMES

Commenters shared feedback on a variety of topics throughout the winter 2017-2018 outreach period. This section highlights key themes that emerged from this public input around travel patterns and behavior, congestion perceptions and impacts, and expectations of value pricing.

2.1 Travel patterns

Most questionnaire respondents use the highway frequently (30 percent every day and 31 percent several times a week). Recreational trips (62 percent) and visits to family and friends (54 percent) were the most common travel reasons, followed by commuting to work or school (51 percent).

- Clackamas County respondents are most likely to use the highways daily (43 percent) and for work commutes (65 percent), while Multnomah County respondents use I-5 and I-205 the least frequently (15 percent rarely or never).
- Although underrepresented in responses, respondents from communities of color are 12 percentage points more likely to travel on I-5 and I-205 every day and 10 percentage points more likely to commute to work or school via the interstates than white respondents.



More than 60 percent of questionnaire respondents travel on I-5 or I-205 several times a week or more
Source: ODOT

Around two-thirds (66 percent) of respondents travel alone.

- Multnomah County respondents are between 8 and 14 percentage points more likely to carpool than respondents from other counties.

Respondents are most likely to consider trip length, congestion, time of day and predictability of arrival time, in that order, before traveling on I-5 and I-205.

2.2 Key congestion impacts

Questionnaire respondents consider congestion on I-5 to be worse than on I-205, but a majority of respondents think congestion is problematic on both highways (88 percent on I-5 and 80 percent on I-205).

- Clark County and Washington County respondents are more likely to think congestion on I-5 is a very big problem than respondents from other counties (68 and 67 percent respectively compared to 49 percent of other respondents). Respondents from Clackamas County and Washington County are 10-18 percentage points more likely to think I-205 traffic is very problematic.
- Respondents who are commuters; rideshare, taxi, and transit operators; or over 65 are all more likely to think traffic is a very big problem.

Most respondents (87 percent) think congestion will get worse over the next few years.

- All demographic groups agree on this point.



In open-ended responses, most commenters said congestion has negative impacts on their lives.

- Key themes include loss of time that could be spent with friends, family or at work; increased levels of stress, anxiety and frustration; unpredictable trip length; unsafe driving conditions and encouragement of poor driving behavior (such as cell phone use, unsafe merging, using the HOV lane improperly and more).

2.3 Value pricing expectations and considerations

Questionnaire respondents indicate some flexibility in being able to adjust travel patterns if value pricing is introduced. Around 39 percent expect they would consider traveling a different route, 36 percent would pay the fee and expect a shorter trip, and 25 percent would try to change the time they travel.

- Multnomah County respondents are much more likely (22-26 percentage points) to consider using other modes like transit or biking than respondents from other counties.
- Almost two-thirds of Clackamas County respondents (65 percent) said they would drive another route that didn't require a fee—a much bigger proportion than respondents from other counties.
- Respondents who travel on I-5 and I-205 monthly or rarely are 8 percentage points more likely to consider changing the time they travel and 9 percentage points more likely to consider another transportation option, suggesting potential flexibility among less frequent metro area drivers.
- Respondents from ZIP codes with median household incomes lower than \$42,697 (68 percent of the metro area median income)¹ and those from communities of color are about 8-9 percentage points more likely to say they would drive a different route that didn't require a fee. Respondents from communities of color are also eight percentage points less likely to say they could change the time they travel, indicating potentially less schedule flexibility among these respondents.

Overall, respondents say the price of the fee and the amount of time saved are the top two considerations that would influence their decision to use I-5 or I-205 if value pricing is implemented.

- More Multnomah and Washington County respondents (52 and 55 percent) selected amount of time saved as a key consideration than Clackamas and Clark County respondents (44 and 43 percent).
- Price of the user fee was a bigger consideration for respondents under the age of 30 (66 percent) than those 45 or older (53 percent).
- Respondents that travel on I-5 and I-205 monthly or rarely said they would be more likely to consider whether transit options are available (33 percent compared to 23 percent), whether the fee was waived for carpools (47 percent to 31 percent), and whether they could change the time they travel (45 percent to 30 percent) than frequent users.

¹ This analysis used U.S. Census American Community Survey 2016 data on median household income by ZIP code. A "natural break" classification method was used to identify a subset of ZIP codes with lower median household incomes for further analysis.



2.4 Topics of greatest interest

Open-ended comments suggest several key topics and themes of interest that can inform future analysis and concept refinement, including:

- Experiences with congestion and potential of value pricing to relieve congestion and its related impacts
- How and where revenue will be spent
- Fairness of value pricing strategies, particularly for those with limited alternative options
- Transit accessibility and potential transit investments needed to make it a viable alternative to driving for some users
- Adequacy of existing highway capacity and the need for additional expansion and development of alternative routes
- Economic impacts of congestion and potential economic impacts of value pricing
- Disproportionate impacts to low-income residents and other groups
- Potential traffic diversion risks
- Environmental impacts of the project



Lloyd Center community conversation participants fill out the questionnaire
Source: ODOT

Commenters want more information about how and where revenue will be spent, and what mitigation options may be considered.

- Many comments suggested support for a value pricing proposal would be contingent on how and where revenue will be spent. Directly linking toll revenue to highway improvement projects was mentioned frequently.
- Mitigation is seen by many as necessary to address the potential for unequal distribution of benefits and negative impacts. Concerns exist around fairness and whether viable transportation alternatives exist for certain groups.

2.5 Process feedback

Commenters are engaged on this topic and desire further opportunities to provide public input and see how their input has been used.

Additional education could help reduce misinformation around the following topics:

- How fees may be collected through value pricing (i.e. not through toll booths)
- What other existing and proposed congestion mitigation strategies the state is considering
- How and when the price of the fee will be determined
- How and when the decision will be made about the implementation of value pricing



3 WHO WE HEARD FROM: DEMOGRAPHICS

This section summarizes the demographic characteristics of those who engaged with the project between January 17 and February 5, 2018.

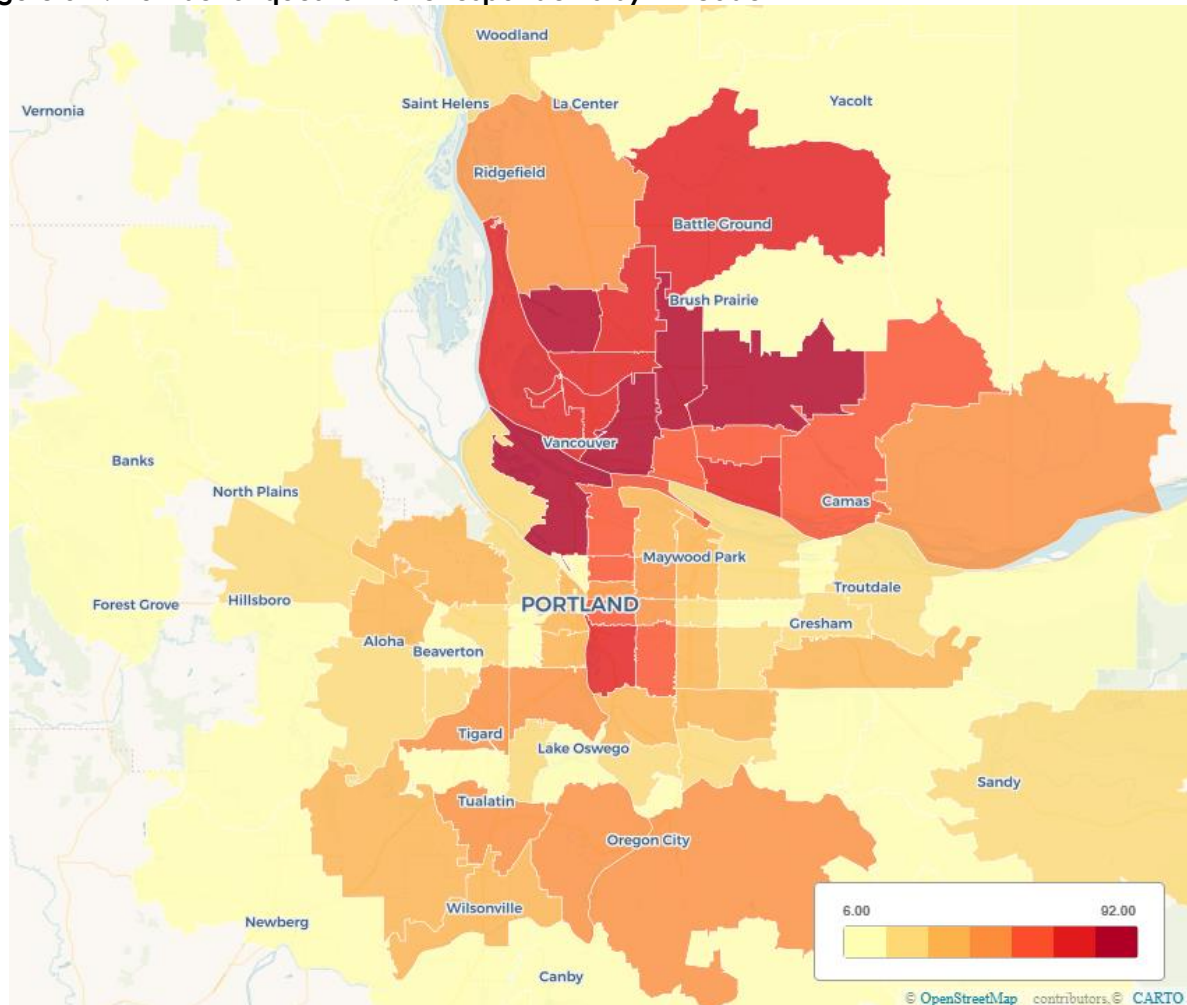
3.1 Questionnaire respondents:

Demographics of questionnaire responses were compared to U.S. Census Bureau American Community Survey data (2012-2016) for the Portland-Vancouver-Hillsboro Metropolitan Statistical Area. Overall, certain demographic groups are overrepresented in this sample. This is called out where applicable in the sections below.

Geography

Questionnaire respondents were asked to provide their ZIP code. Approximately 93 percent of all respondents live in the metro area.

Figure 3-1. Number of questionnaire respondents by ZIP code



Heatmap shows distribution of questionnaire responses by ZIP code. Darker areas had more questionnaire respondents



Within the metro area, responses from Clark County are disproportionately represented. While Clark County's population comprises 19 percent of the metro area population, nearly half (47 percent) of all questionnaires were submitted by Clark County residents. In turn, Clackamas and Washington County residents were underrepresented. Skamania, Yamhill and Columbia County residents comprise 7 percent of the metro area's population, but only 1 percent of questionnaire responses.

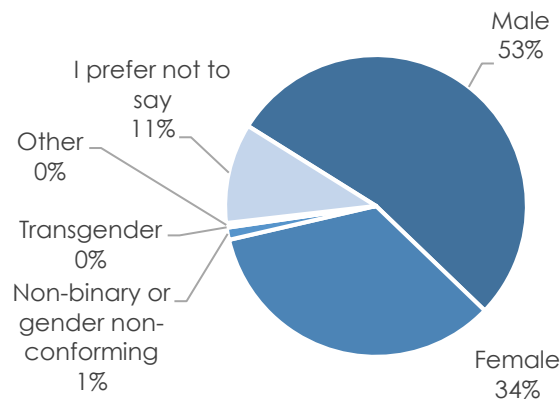
Table 3-1. Geographic distribution of metro area residents and questionnaire respondents

| Metro Area | Total Population ² | Questionnaire Responses |
|---|----------------------------------|---------------------------------------|
| Metro Area | 2,351,319 | 1,692 (93% of all respondents) |
| Clark County | 450,893 (19% of metro area pop.) | 787 (47% of metro area respondents) |
| Multnomah County | 778,193 (33%) | 575 (34%) |
| Washington County | 564,088 (24%) | 156 (9%) |
| Clackamas County | 394,967 (17%) | 159 (9%) |
| Skamania, Yamhill and Columbia Counties | 163,178 (7%) | 15 (1%) |
| Outside the metro area | -- | 118 (7% of all respondents) |

Gender

More than half (53 percent) of questionnaire respondents identify as male, while 34 percent identify as female and approximately two percent identified as non-binary, gender non-conforming, transgender or other. Just under 11 percent said they preferred not to say. In the metro area, the gender ratio is 49/51 male to female.³

Figure 3-2. Gender of questionnaire respondents (N = 1,789)



Age

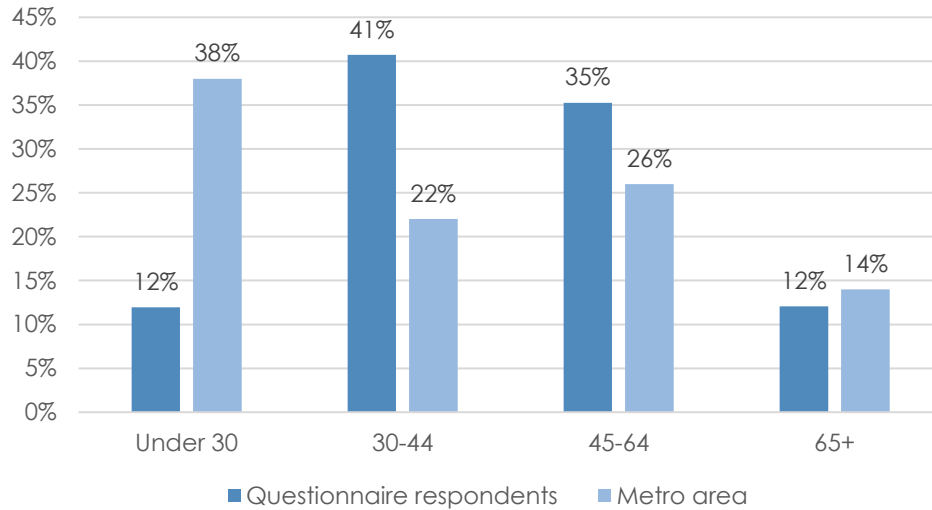
The median age of questionnaire respondents was 43. By comparison, the median age of Portland metro area residents is 38. People under age 30 were underrepresented by the questionnaire respondents, while those between 30-64 were overrepresented.

² U.S. Census Bureau, American Community Survey 2012-2016 5-Year Estimates

³ Ibid.



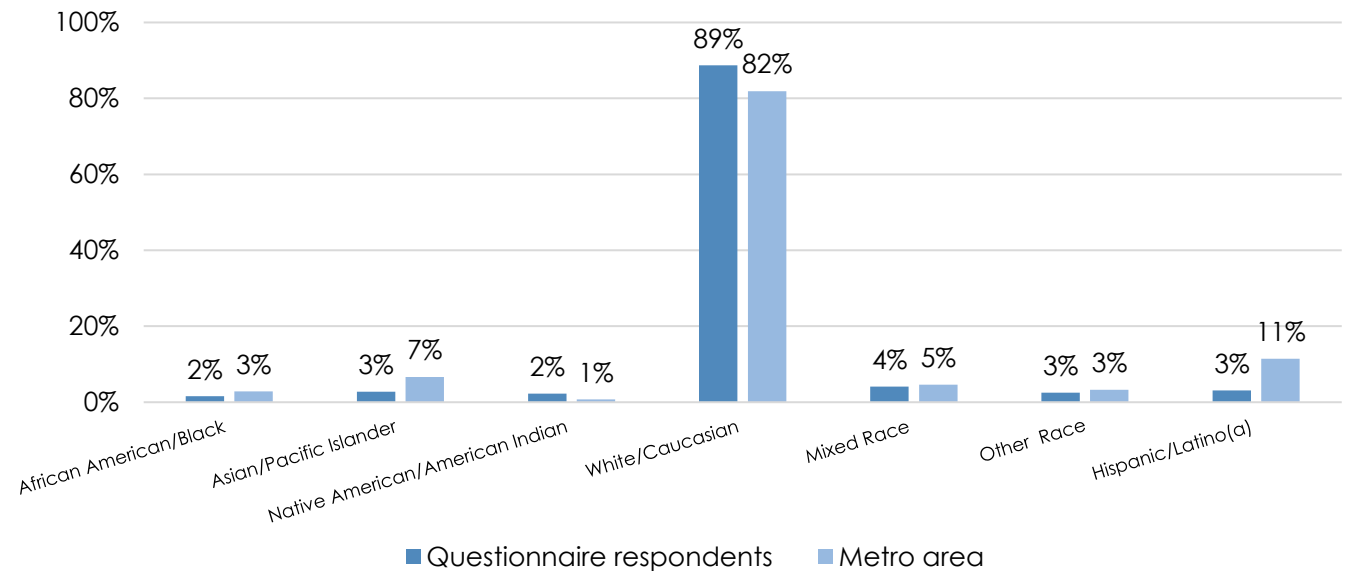
Figure 3-3. Age of questionnaire respondents (N = 1,670) compared to metro area residents



Race/ethnicity

The majority of questionnaire respondents identify as white. Overall, people who identify as Asian/Pacific Islander and Hispanic/Latino(a) are underrepresented in this sample.

Figure 3-4. Race/ethnicity of questionnaire respondents (N = 1,491) compared to metro area residents



3.2 In-person community conversation attendees

Approximately 260 people attended three in-person community conversations.



Table 3-2. In-person community conversation attendees

| EVENT | ATTENDEES |
|--|---------------|
| Clackamas Town Center Community Conversation Tuesday, January 23, 2018 – 4:30 – 7:30 p.m. | 30 attendees |
| Lloyd Center Community Conversation Saturday, January 27, 2018 – 10 a.m. – 1 p.m. | 70 attendees |
| Vancouver Community Library Community Conversation Tuesday, January 30, 2018 – 4:00 – 7:00 p.m. | 160 attendees |

Community conversation attendees came from many communities across the metro area. At the events, attendees were invited to indicate where they typically begin their journey on a map. Table 3-3 summarizes the “origin” locations selected.

Table 3-3. Origin location for community conversation attendees

| Origin Location | Number | Origin Location | Number |
|-----------------------------------|--------|--------------------|--------|
| Fisher’s Landing area (WA) | 15 | Tualatin (OR) | 3 |
| Downtown Vancouver area (WA) | 14 | West Linn (OR) | 3 |
| Salmon Creek area (WA) | 14 | Hazel Dell (WA) | 2 |
| Northeast Portland (OR) | 11 | Milwaukie (OR) | 2 |
| West Vancouver (WA) | 9 | Oregon City (OR) | 2 |
| North Portland (OR) | 6 | Ridgefield (WA) | 2 |
| Camas (WA) | 5 | Tigard (OR) | 2 |
| Happy Valley (OR) | 5 | East Portland (OR) | 1 |
| Orchards (WA) | 5 | Gladstone (OR) | 1 |
| Southeast Portland (OR) | 5 | Gresham (OR) | 1 |
| Inner Portland neighborhoods (OR) | 4 | Hillsboro (OR) | 1 |
| Southwest Portland (OR) | 4 | Lake Oswego (OR) | 1 |
| Downtown Portland (OR) | 3 | Sellwood (OR) | 1 |



Attendees at in-person community conversation events
Source: ODOT

4 WHERE CONGESTION CHALLENGES EXIST



Community conversation map station
Source: ODOT

Members of the public had the opportunity to provide input on where they experience congestion challenges through an online, interactive map and a map station at each in-person community conversation. These mapping activities intended to:

- Encourage participants to think about where and how they experience congestion on typical journeys
- Help participants begin thinking about how congestion impacts them personally and their travel patterns
- Provide information for ODOT and the project team to validate and enhance existing data on traffic patterns

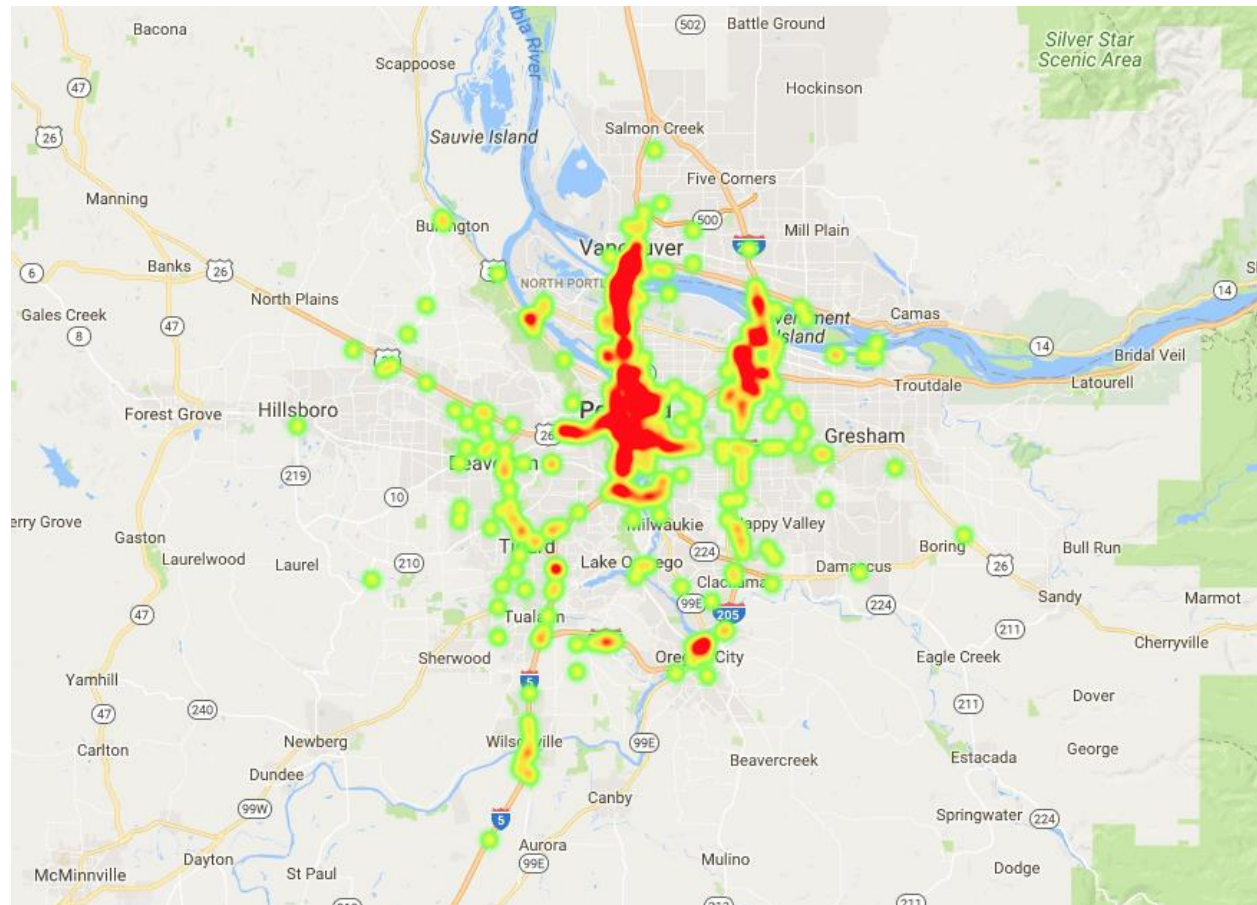
On the online interactive map, participants could “drag” pins onto a map and provide additional context in a short comment box. Map viewers could also interact with others’ activities, such as “liking” existing pins and comments. At the in-person events, attendees were invited to place three different color dots on large-format maps to indicate where they typically start their journey, end their trip and experience the biggest congestion challenges.

Overall, 257 people placed 573 pins and comments on the online map. Pins on the online map received 919 “likes” and 140 “dislikes.” In addition, around 115 congestion challenge “dots” were placed on the printed maps at in-person events.



Vancouver community conversation participant places a dot on the map

Source: ODOT

Figure 4-1. Online interactive map heatmap

The heat map above shows the distribution of pins on the online interactive map. Areas shaded in red indicate the highest concentration of pins while areas in green represent the lowest concentrations. To view an archive of the interactive map and read comments associated with the pins, visit <https://tinyurl.com/CongestionMap>.

Key takeaways from the mapping exercises

- The most frequently identified “challenging locations” exist along the I-5 and I-205 corridor, including:
 - The Rose Quarter area where I-5 and I-84 converge
 - The I-5 bridge over the Columbia River
 - The junction of I-205 and I-84
 - I-205 near the airport and Marine Drive, Killingsworth, Sandy and Airport Way exits
 - The Abernethy Bridge on I-205
 - The Terwilliger Curves on I-5
 - The Marquam Bridge
 - Junction with OR-213 and OR-224
 - US-26 interchange with I-205
- The maps showed more people that participated experience congestion challenges on I-5 than I-205, though both roadways have challenging locations.



- Many participants experience congestion throughout the metro area, and frequently reported “hot spots” exist on other thoroughfares. These include:
 - The Sunset Highway (US-26 westbound between downtown Portland and Beaverton)
 - Multiple locations along OR-217
 - The Sellwood Bridge and parts of OR-43
 - The Ross Island Bridge
 - The Banfield (I-84 between I-205 and I-5)
 - US-26/Powell Blvd. heading east from downtown Portland
 - Highway 99E/McLoughlin Boulevard
 - Highway 99W/Pacific Highway West
- Participants were more likely to report congestion challenges around downtown and near the Columbia River than in the southern, eastern or western metro area.
- Several people identified congestion challenges on local roadways as well, including Airport Way, NE Halsey Street, SE Stark Street, and more.



5 QUESTIONNAIRE RESULTS (CLOSED-ENDED QUESTIONS)

The following sections present the results for the closed-ended questions of the questionnaire. See Appendix A for the complete text of the questionnaire. Results are summarized around three key categories:

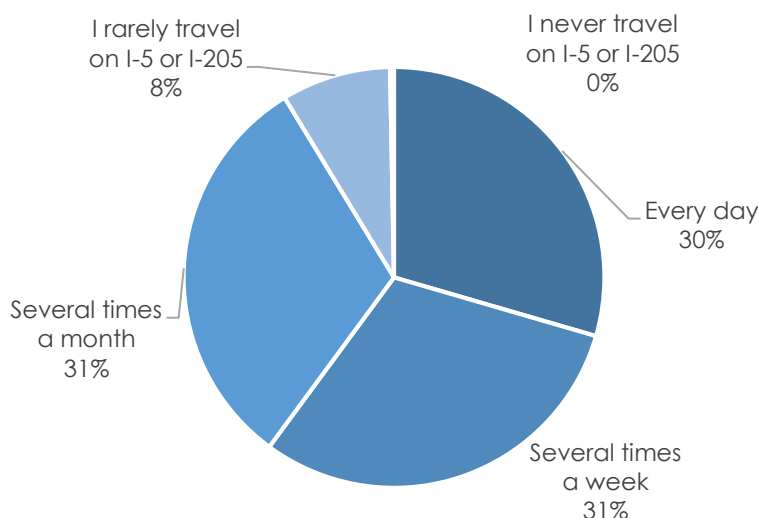
- Travel patterns and behaviors
- Congestion perceptions and impacts
- Value pricing expectations and considerations

Areas of significant difference among demographic groups are noted at the end of each section. Detailed tables showing data for all recommendation-related questions by demographic cross-section are available in Appendix B.

5.1 Travel patterns and behaviors

Respondents were asked how frequently they travel on I-5 and I-205, anywhere between the Oregon-Washington border and where I-5 and I-205 meet near Tualatin. Around 30 percent said they travel on the interstates every day, while similar proportions selected several times a week (31 percent) or several times per month (31 percent). Around 8 percent rarely travel on the highways, and less than 1 percent never use them.

Figure 5-1. Q1: How frequently do you travel on I-5 and I-205, anywhere between the Oregon-Washington border and where I-5 and I-205 meet near Tualatin? (N=2,137)



Around 38 percent of respondents who “rarely” or “never” use these highways said it was because I-5 and I-205 are not near where they need to travel, and 29 percent said they mostly bike or walk. Ten percent of this group said they work or study from home, and 5 percent choose to travel on surface streets to avoid the highways. Around 18 percent of respondents who rarely or never use the interstates provided other explanations, including:



- They avoid driving around Portland in general because of congestion
- They use transit
- They don't own a vehicle
- They avoid driving in the area because of safety concerns and roadway hazards
- They live out of the area
- They are retired and do not need to travel much anymore

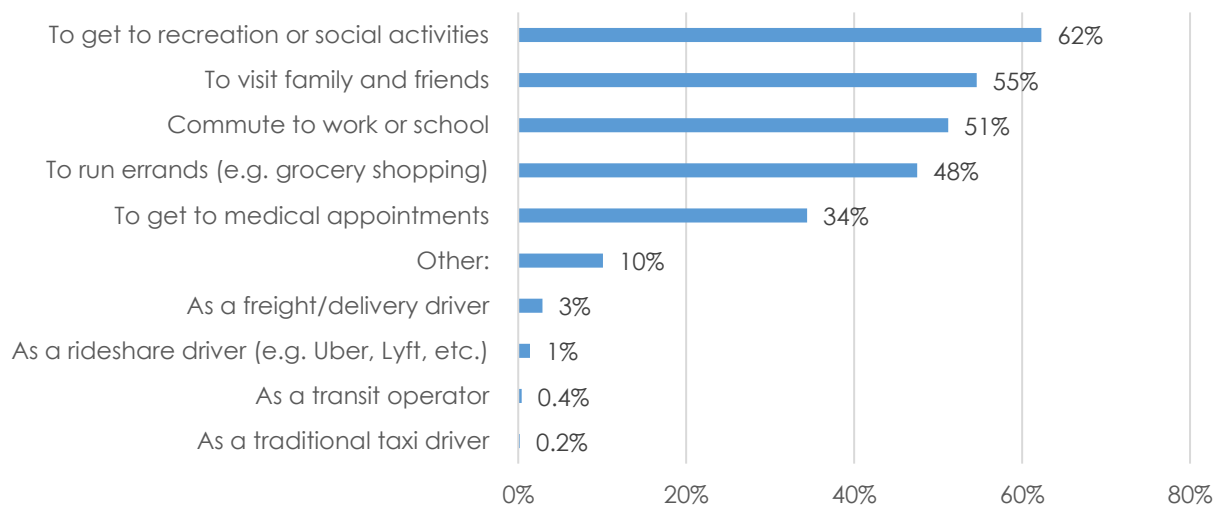
All respondents were asked for what purposes they travel on I-5 and I-205. Recreational trips (62 percent) and visits to family and friends (54 percent) were the most common travel reasons. Just over half (51 percent) of all respondents use the highways to commute to work or to school, and just under half (48 percent) drive on I-5 or I-205 to run errands. A third (34 percent) take these routes to get to medical appointments.

Around 5 percent said they travel on I-5 or I-205 in a professional capacity, either as a freight/delivery driver (3 percent), a rideshare driver (1 percent), a transit operator (.4 percent) or a traditional taxi driver (.2 percent).

Other purposes mentioned include:

- Business appointments and work-related travel (non-commute)
- Passing through on the way to other places or when traveling out of the metro area
- Vacations and tourism
- Travel to airport
- Travel to church
- Volunteering and charitable trips

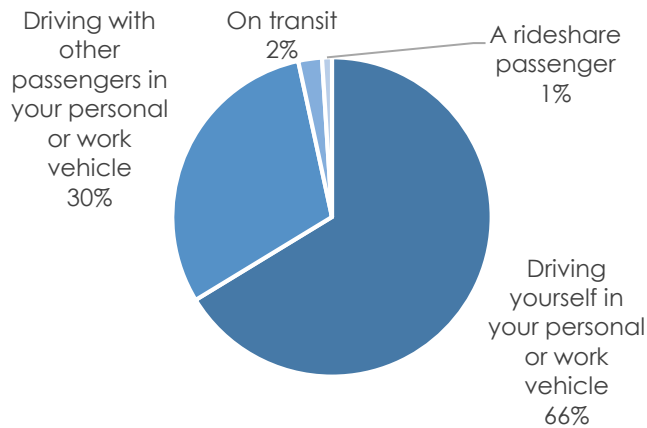
Figure 5-2. Q2: For what purposes do you travel on I-5 and I-205? Check all that apply. (N=2,138)



Most respondents (66 percent) said they typically drive alone in their personal or work vehicle when using I-5 or I-205. Just under a third (30 percent) say they drive with other passengers in their personal or work vehicle. Around 2 percent of respondents say they typically travel on transit when using I-5 or I-205, and 1 percent travel on the highways as rideshare passengers.



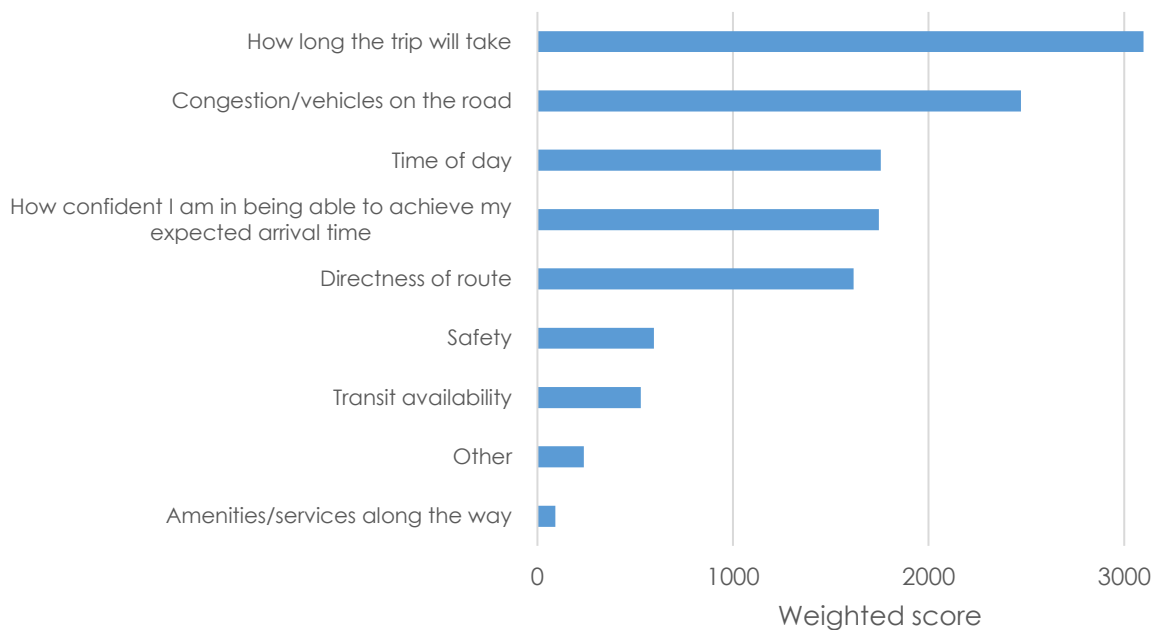
Figure 5-3. Q3: When you travel on I-5 or I-205, are you mostly...? (N=2,132)



Respondents were asked to identify the top three factors they consider when deciding whether to travel by car on I-5 or I-205. Considerations were assigned a weighted score based on how often respondents selected them and how high they were ranked.⁴

Trip length was the top consideration, followed by congestion on the road, the time of day, confidence in arrival time and directness of route. Factors like safety, transit availability and amenities along the way were considered less important by respondents.

Figure 5-4. Q4: When deciding whether to travel by car on I-5 or I-205, what factors do you think most about? Please rank your top 3 considerations.



⁴ Items ranked higher were given a higher value or "weight." The score for each answer option is the sum of all the weighted values.



Differences among demographic groups



Lloyd Center community conversation attendees discuss the project with members of the technical team
Source: ODOT

Geography: Respondents from Clackamas County were more likely to travel on I-5 and I-205 every day (43 percent) than Clark County (32 percent), Washington County (30 percent) and Multnomah County (21 percent) respondents. In turn, a greater proportion of Multnomah County and Washington County respondents use the interstates rarely or never (15 and 12 percent, respectively) compared to Clackamas and Clark County residents (6 and 4 percent respectively). Most Washington County respondents who rarely use I-5 and I-205 said it was because these roadways are not near where they need to travel (68 percent), while most infrequent users in Multnomah County said it was because they mostly bike or walk (56 percent).

Clackamas County respondents were more likely to be commuters (65 percent) compared to 54 percent of Washington County respondents, 53 percent of Clark County respondents and 43 percent of Multnomah County respondents.

Multnomah County respondents were between 8 and 14 percentage points more likely to drive with other passengers when on I-5 or I-205 (36 percent) than other respondents.

Most respondents throughout the region ranked trip length and congestion on the road as the top two factors to consider before driving. Clackamas County and Washington County residents were more likely to rank directness of route as the third highest consideration, while it ranked fourth for Multnomah County respondents and fifth among those from Clark County.

Income: Respondents from metro ZIP codes with household incomes less than two-thirds of the metro median (i.e. less than \$42,697) were much more likely to rarely travel on the interstates (20 percent compared to 8 percent overall). However, those that did use I-5 and I-205 were slightly more likely to travel daily or several times a week. Half of those who rarely use the highways said it is because they mostly bike or walk, and 40 percent said I-5 and I-205 are not near where they need to travel.

Respondents from ZIP codes with median household incomes lower than \$42,697 (68 percent of the metro area median income)⁵ ranked confidence in arrival time higher overall than other respondents (third out of nine), while ranking time of day lower overall (fifth out of nine).

Race/ethnicity: Respondents from communities of color were 12 percentage points more likely to travel on I-5 and I-205 every day than white respondents (39 percent compared to 27 percent). Similarly, 59 percent of respondents from communities of

⁵ This analysis used U.S. Census American Community Survey 2016 data on median household income by ZIP code. A "natural break" classification method was used to identify a subset of ZIP codes with lower median household incomes for further analysis.



color said they travel on the highways to commute to work or school, compared to just under half of white respondents (49 percent). White respondents were also less likely to use the highways to get to medical appointments (33 percent) than non-white respondents (42 percent).

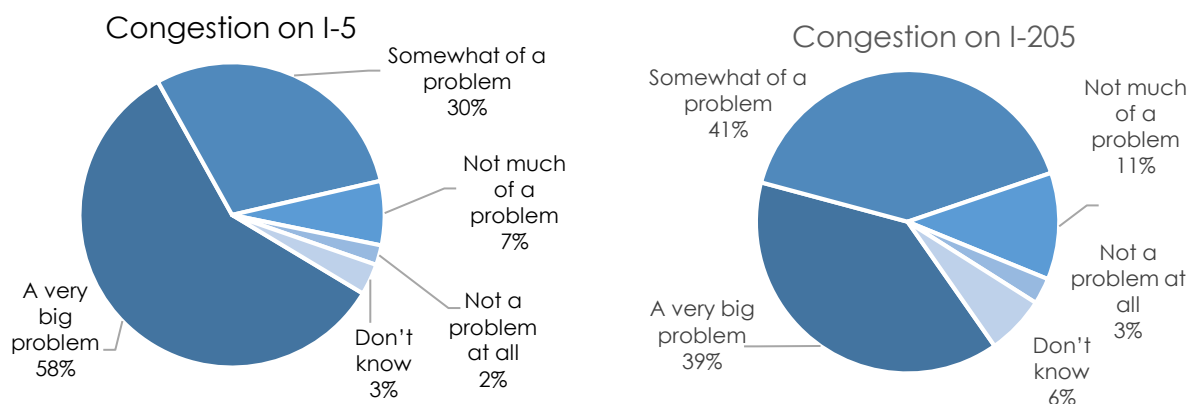
Purpose of trip: Most respondents who are commuters, rideshare/transit/taxi operators, and freight drivers travel on I-5 and I-205 every day or several times a week (between 78 – 89 percent). Commuters are more likely to drive by themselves (80 percent) than those traveling for personal trips (62 percent). Regardless of trip purpose, respondents are most likely to consider trip length and congestion on the road before using I-5 or I-205. Commuters ranked confidence in achieving arrival time third overall, while those taking personal trips were more likely to consider time of day.

Age: Most respondents under age 64 use the highways frequently (58-65 percent use them every day or several times a week). Respondents over age 65 were less likely to be frequent users (44 percent every day or weekly). Among infrequent users (never or rarely), those under 30 were much more likely to say they mostly bike or walk (46 percent compared to 7-28 percent of the other age groups). Younger respondents under age 44 were more likely to be commuters (59 percent of those under 30 and 57 percent of those 30-44). In turn, almost half of respondents (48 percent) over 65 use the highways to get to medical appointments, compared to less than 37 percent for all other age groups.

5.2 Congestion perceptions and impacts

Respondents were asked how big of a problem they feel congestion is on I-5 and I-205. Overall, traffic on I-5 is perceived to be a bigger problem on I-5 than I-205, though the majority think it is problematic on both interstates. Around 58 percent said congestion on I-5 is a “very big” problem, while 30 percent think it is somewhat of a problem. Concerning I-205, 39 percent feel congestion is a “very big” problem, and 41 percent think it is somewhat of a problem. For both highways, less than 3 percent of respondents think congestion is not a problem at all.

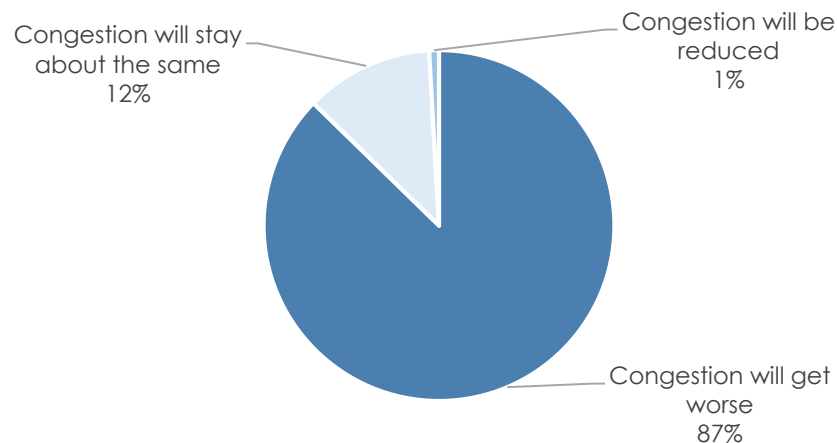
Figures 5-5. Q5-6: Do you consider congestion along I-5/I-205, between the Oregon-Washington border and where I-5 and I-205 meet near Tualatin, to be... (N=2,016)





A large majority of respondents (87 percent) expect congestion to get worse in the Portland metro area over the next few years. Around 12 percent think it will stay about the same, and approximately 1 percent think it will decrease.

Figure 5-6. Q8: How do you think congestion in the Portland metro area will change over the next few years? (N=2,003)



Differences among demographic groups

Geography: Respondents from Clark County and Washington County were more likely to say congestion on I-5 is a “very big problem” (68 and 67 percent) than respondents from Multnomah County (46 percent) and Clackamas County (59 percent) respondents. Around 13 percent of Multnomah County respondents think congestion is “not much of a problem” (9 percent) or “not a problem at all” (4 percent), compared to between 6 and 8 percent of those from other metro counties.

Concerning I-205, more Washington County and Clackamas County respondents felt congestion was “a very big problem” (50 percent and 49 percent) than Clark County (40 percent) and Multnomah County (32 percent) respondents. Similarly to perceptions of I-5, Multnomah County respondents were more likely to feel congestion is not a major problem (12 percent “not much of a problem” and 5 percent said “not a problem at all”). Respondents from Multnomah, Clackamas, Washington and Clark counties all felt strongly that congestion will get worse (87 – 90 percent).

Frequency of use: Respondents who are frequent users (daily/weekly) were about 10 percentage points more likely to feel I-205 congestion is a “very big problem” than infrequent users (43 percent compared to 33 percent). The trend is similar but less pronounced on I-5, with 61 percent of users saying it’s a “very big problem” compared to 55 percent of infrequent users.

Purpose of trip: Respondents who are commuters and professional rideshare/taxi/and transit operators were most likely to say congestion is a “very big problem” on I-5 (63-66 percent) and I-205 (38-44 percent). Freight and delivery driver respondents were slightly less concerned about congestion, with 54 percent thinking congestion is very problematic on I-5 and 35 percent on I-205. Similarly, freight and delivery driver respondents are less likely to think congestion will get worse (71 percent compared to 87-89 percent of other drivers). A quarter of these respondents think congestion will stay the same.



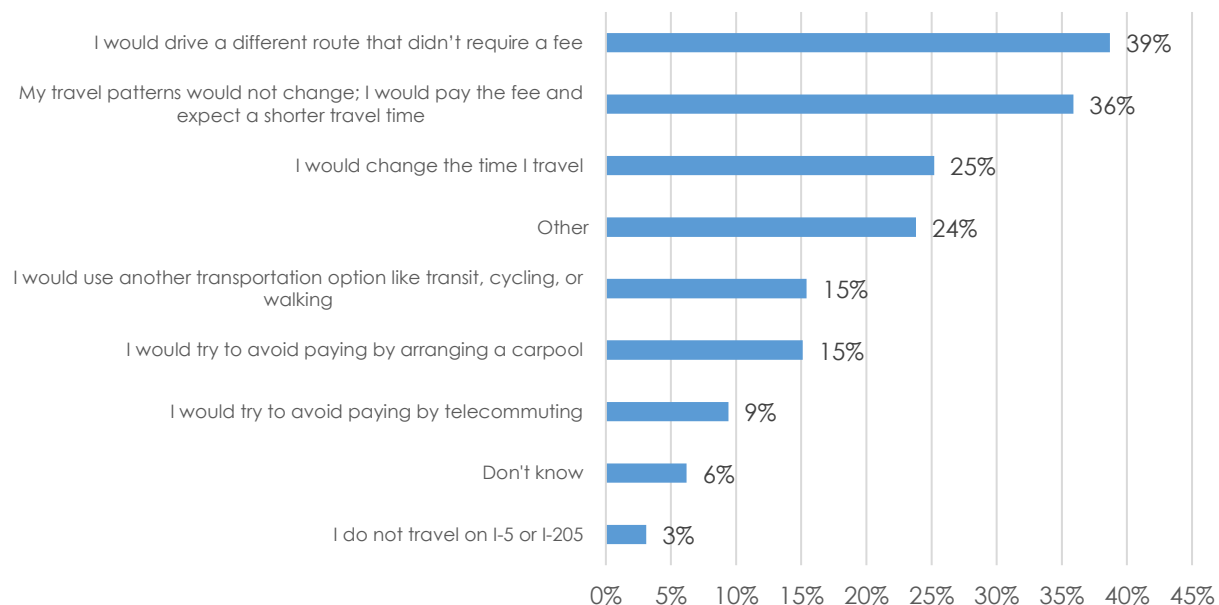
Age: Perceptions of congested conditions are greater among senior respondents than those under 30. Two-thirds of respondents 65 and older think I-5 traffic is “a very big problem” compared to 52 percent of under 30-year-olds. Similarly, seniors are six percent more likely to think I-205 traffic is a “very big problem” (44 percent compared to 38 percent). More than 80 percent of all age groups think congestion will get worse over the next few years.

5.3 Value pricing expectations and considerations

Respondents were asked how they expect their regular trips would change if a user fee was implemented on I-5 and I-205 that resulted in a faster, more reliable trip. The questionnaire asked respondents to assume cars with two or more passengers would be free or discounted, and they could check as many options as applied.

The largest proportion of respondents (39 percent) expect user fees would cause them to drive a different route that didn't require a fee. A similar proportion (36 percent) said their travel patterns would not change and they would pay the fee expecting a shorter travel time. Around a quarter (25 percent) expect they would change the time they travel, thereby improving the likelihood that their fee would be small compared to peak travel times. A similar proportion would consider taking transit (15 percent) or carpooling (15 percent). Around nine percent suggested they would telecommute. Approximately six percent were not sure how their trips would change, and three percent said they don't travel on the interstates.

Figure 5-7. Q9: How would your regular trips change if there were user fees on I-5 and I-205 that resulted in a faster and more reliable trip? Check all that apply. (N=1,836)



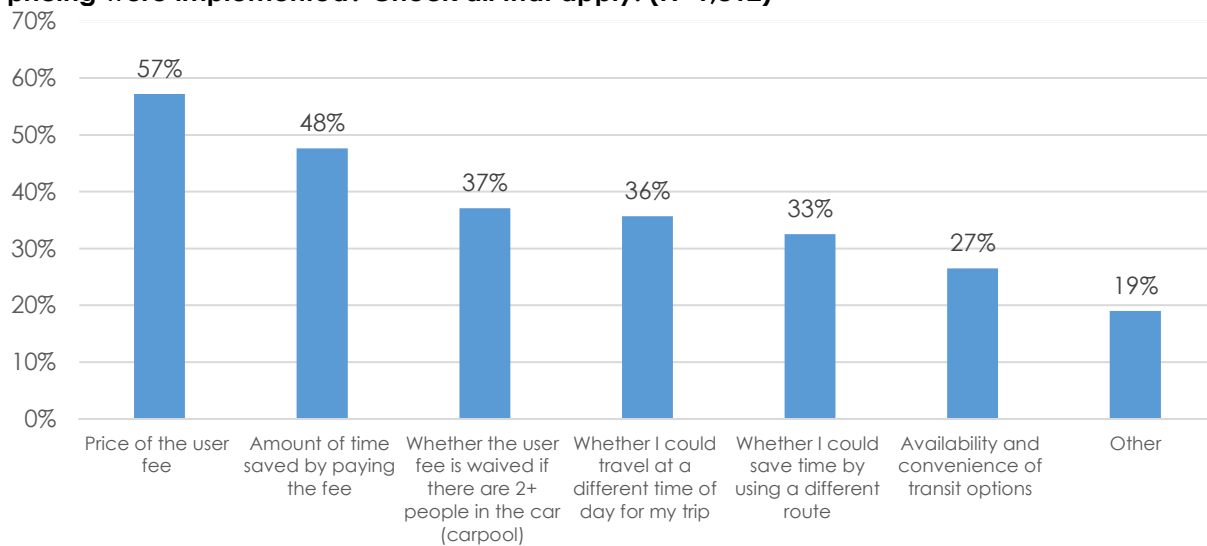
Almost a quarter (23 percent) provided an “other” response. Many used this write-in opportunity to provide general comments about the project, and these themes are captured in the following section of this report. Other comments about how trips may be expected to change if value pricing was implemented included:



- Reduce or eliminate trips to Portland
- Pay the fee because of a lack of options but be angry about doing so
- Find employment elsewhere to avoid paying the toll
- Pay the fee but would pass on the cost to clients
- Commute by bike or motorcycle if they are exempt
- Move to avoid the tolls
- Would not change route because they have no other option
- Several do these things already to avoid traffic
- Encourage their employer to cover the cost or provide transit passes
- Find other doctors and services closer to home
- Shop and recreate elsewhere or online
- Use rideshare services more
- Drive through residential neighborhoods

Respondents were asked what factors would influence their decision to drive on I-5 or I-205 if congestion pricing were implemented. The most selected consideration was the price of the user fee (57 percent). Just under half would consider the amount of time saved by paying the fee (48 percent). Around a third of respondents respectively said they would consider whether the user fee is waived for carpools (37 percent), whether they could change their travel time (36 percent) or whether they could use a different route (32 percent). Just over a quarter (27 percent) said the availability and convenience of transit options would influence their decision.

Figure 5-8. Q10: What factors would influence your decision to drive on I-5 or I-205 if congestion pricing were implemented? Check all that apply. (N=1,812)



Other factors mentioned included the following:

- Their destination
- The time of day traveling
- Whether the fee could be passed along to clients
- Cost of fuel needed to take longer routes
- Whether motorcycles would qualify for a discount or exemption
- Many said they have no viable alternative route to traveling on I-5 and I-205



- Many said they do not have a choice of time or mode
- Where the revenue is being spent (e.g. if they see any personal benefit)
- Whether a rail option was available for commuting across the river
- If the fees were progressive (i.e. based on income, with higher income commuters paying more than lower income commuters)
- If income and equity concerns were accounted for in the fee structure
- Whether telecommuting is an option (for many, it isn't)
- Many say they will not pay a fee out of principle

Differences among demographic groups

Geography: Expectations for how typical trips would change differed significantly among respondents from different geographies. Respondents from Multnomah County were more likely to say they would use another transportation mode (32 percent) than respondents from other counties (6-10 percent in Clackamas, Washington and Clark counties). Multnomah County respondents were also 5-13 percentage points more likely to say they would change their travel time than other respondents, 5-11 percentage points more likely to carpool, and 6-14 percentage points more likely to maintain their travel patterns and pay the fee. Almost two-thirds of Clackamas County respondents (65 percent) said they would drive a different route that didn't require a fee, while only half of Washington County (51 percent) and around a third of Multnomah and Clark County (36 and 31 percent) agreed.

Clackamas County respondents (50 percent) were more likely to consider whether they could save time by using a different route before driving on I-5 and I-205, compared to around 27-42 percent of respondents from other counties. Amount of time saved by paying the fee was selected as a key factor by more Multnomah and Washington County respondents (52 and 55 percent) than Clackamas and Clark County respondents (44 and 43 percent). Availability of transit options was a relatively low factor in most counties except for Multnomah County, where 42 percent said they would consider it.

Frequency of use: Respondents who use the highways monthly or rarely reported more flexibility. They were 8 percentage points more likely to say they would change the time they travel and 9 percentage points more likely to consider another transportation option. Related to this, infrequently traveling respondents said they would be more likely to consider whether transit options are available (33 percent to 23 percent), whether the fee was waived for carpools (47 percent to 31 percent), and whether they could change the time they travel (45 percent to 30 percent). These results imply potential flexibility and willingness to change behavior among less frequent metro area drivers.

Purpose of trip: Similar to frequent versus infrequent travelers, respondents taking personal trips on I-5 and I-205 suggested more flexibility in what they would consider if congestion pricing is implemented. Respondents taking personal trips were 12 percentage points more likely than commuters to consider whether fees are waived for carpools (42 percent to 30 percent) and 11 percentage points more likely to consider changing the time they travel (39 percent to 28 percent).



Age: Respondents under the age of 30 were more willing to find ways to avoid paying a congestion charge than other age groups. Younger respondents were between 7-17 percentage points more likely to say they would arrange a carpool, 3-14 percentage points more likely to consider other transportation modes, and 12-16 percentage points more likely to drive a different route to avoid a fee. Around a third of older respondents (33 percent) would change the time they travel, which is 8-10 percentage points more than other age groups. Price and availability of transit options were bigger considerations for respondents under age 45 than for those over 45.

Race/ethnicity: Respondents from communities of color were around 8 percentage points less likely to say they could change the time they travel than white respondents (19 percent to 25 percent). In turn, they were 6 percentage points more likely to say they would drive a different route to avoid a fee (45 percent to 39 percent). White respondents were 16 percentage points more likely to consider the amount of time saved, 13 percentage points more likely to consider traveling at a different time, 10 percentage points more likely to consider carpools and 8 percentage points more likely to consider the price of the fee. In general, respondents from communities of color were less likely to select any of the considerations.

Income: Respondents from ZIP codes with lower median incomes were eight percent more likely to say they would drive a different route to avoid paying a fee (47 percent to 39 percent).



Project staff record feedback at the Vancouver community conversation
Source: ODOT



6 OPEN-ENDED COMMENT ANALYSIS

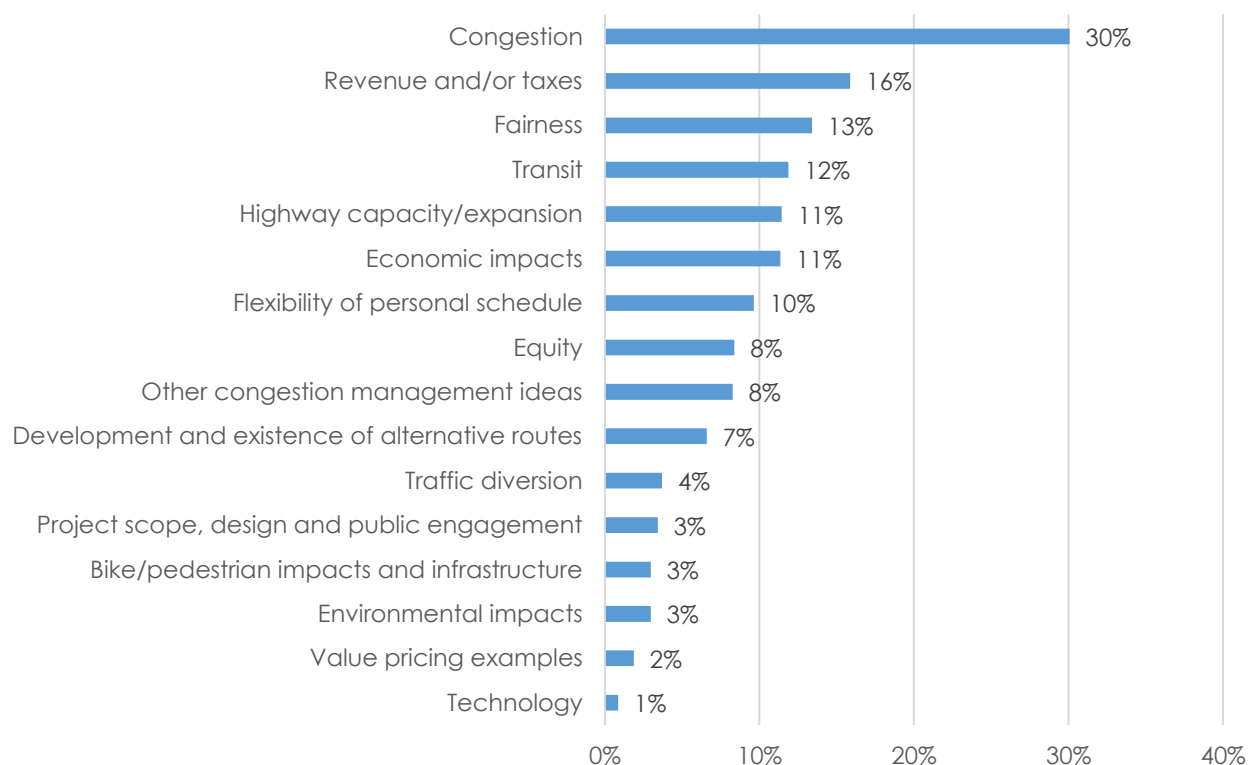
This section summarizes the key topics and themes mentioned in open-ended comments received by the project team between November 2017 and Feb. 5, 2018. Open-ended comments provide detailed insight into public opinion, feedback and user experience. Comments were submitted via email, voicemail, verbal comment at Policy Advisory Committee meetings, the Ask ODOT phone line, in-person community conversations and the outreach questionnaire. Themes did not differ significantly depending on how the comment was transmitted, and the following sections summarize feedback submitted from all sources.

6.1 Key topics and themes

Figure 6-2 shows the distribution of the most frequently mentioned topics in open-ended comments. Most comments discussed multiple topics, and several themes overlap across multiple coding categories. In the summary that follows, some of these topics have been combined to avoid duplication and illustrate connections among themes.

Within each topic and theme, several sub-topics were also identified. The following sections discuss key messages, questions and concerns related to these categories. Each section includes selected quotes from the comments that generally represent the range of responses received. Verbatim comments are presented in Appendix C.

Figure 6-1. Open-ended comments by thematic topic





6.1.1 Congestion perceptions and impacts

Approximately 30 percent all comments discussed congestion, either in terms of experiences and perceptions of congestion; the impact congestion has on people, the economy and the environment; or expectations for congestion in the future.

Comments about congestion most frequently also discussed: highway capacity and expansion; transit; traffic diversion; and flexibility of personal schedule.

Perceptions of congestion

- Echoing the closed-ended questionnaire results, many commenters expressed concern about growing congestion on Portland metro area roads. Many said congestion has been increasing over time, and this is not a new phenomenon. Some, however, said they don't feel congestion is a big issue, and a few said Portland congestion is not as bad as congestion in other metro areas.
- Many felt current congestion is exacerbated by road capacity and design. Congestion comments frequently referred to bottlenecks, areas of the highway where they feel additional lanes are needed, or a perceived lack of capacity in the freeway system overall. Several felt the lack of viable alternative routes to bypass I-5 and I-205 increases congestion on these freeways.
- Many discussed the impact they believe value pricing could have on congestion. Several felt value pricing could provide incentive for behavior change and regulate demand for the highways. Several others were skeptical that congestion pricing would be effective at reducing congestion.

Many of these comments said people do not voluntarily drive at congested times; they only do so because they have no other option. Some feel value pricing could make congestion worse, either because they assume it will introduce toll booths or because of bottlenecks as people try to exit/enter before a priced lane or roadways begins.

- Many said they adjust their travel patterns to avoid congestion, either by commuting earlier or later, avoiding personal trips at certain times, or avoiding certain routes. Some said they feel congestion is bad for most of the day rather than just at peak periods, which can make it hard to avoid.
- Many noted congestion occurs on roadways in addition to I-5 and I-205. Several questioned why value pricing is not being considered on these roadways, including US-26, I-84, I-405, and OR-217.

Quotes from comments about congestion:

"[Congestion] causes considerable uncertainty when planning trips on I-5 and I-205, because it is very difficult to predict when congestion will occur."

"I now find myself leaving as much as several hours before a scheduled meeting time to arrive "on time" which then impacts my other daily activities."

"I look elsewhere other than the Portland metro area for entertainment, shopping, and hiking. Nothing is worth getting trapped on a bridge in barely moving traffic for hours."

"I see more bad behavior from drivers [because of congestion], cutting off, tailgating, etc. Lots of impatience."



- Several linked congestion to population growth people moving to the area from other places. Some linked it to planning, housing and land use development. Several others said out of state commuters have a significant impact on congestion levels.
- Some said they feel there are currently no disincentives to traveling on the freeways, which increases congestion.
- A few argued freight and truck traffic exacerbates congestion, and suggested this be limited to certain lanes or times of day.

Personal impacts of congestion

- Many comments about congestion discussed the amount of time spent in traffic each day. Time lost was often discussed in terms of hours spent away from family and friends, work and other activities.
- Many comments mentioned unpredictable or unreliable trip times. Several of these comments noted trip length can differ significantly depending on the time of day, whether a traffic accident has occurred, weather, and other factors. These comments often said congestion can make it difficult to plan trips.
- Several comments said congestion increases feelings of stress, anxiety, frustration and anger when traveling.
- Several comments discussed the impact congestion has on the behavior of other drivers. Some said it makes other drivers more erratic, more likely to use phones and can make driving less safe. Several mentioned behavior they think exacerbates congestion, such as driving in the HOV lane as a single passenger, driving slow in passing lanes, and not merging properly.
- Several noted economic impacts of congestion. Some of these comments focused on personal economic impacts, such as spending more on gas, wasting resources and eliminating productive time. Others linked it to broader economic impacts, such as congestion being a deterrent to travel for shopping trips or recreation activities, particularly into downtown Portland.
- Several comments discussed the impacts congestion has on air quality and pollution.

6.1.2 Revenue and taxes

Approximately 16 percent of comments discussed taxes and/or revenue. This included comments about how existing tax revenue and transportation dollars are spent, as well as comments about expenditure of potential new revenue collected through value pricing.

Taxes and revenue were most frequently linked to: fairness; economic impacts; trust; and highway capacity and expansion.

Expenditure of existing tax revenue

- Many comments discussed how existing transportation funding is spent. Many said tax revenue has not been effectively managed to address congestion and road capacity thus far, and several suggested a lack of trust in government oversight of revenue. Some mentioned poor conditions of roadways, and several others referenced the Columbia River Crossing project. Several implied Oregon has spent very little resources on congestion thus far, indicating a lack of awareness of ODOT's prior and concurrent efforts around this issue.



- Many comments from Southwest Washington commuters referenced Oregon state income tax revenue generated by Washingtonians. Several said it is unfair that they are taxed without representation. Many others felt this was an adequate contribution to Oregon state revenue, and some questioned whether income tax dollars could be spent on roadways.
- Many said they feel taxes are currently too high and said they do not want to pay more. Several suggested more existing tax revenue should be spent on roadways.
- Several comments discussed gas taxes. Some felt gas taxes are a more equitable and fair system for raising transportation revenue, while others felt a new system is needed.
- A few said certain user groups should pay more in taxes, e.g. corporations who transport merchandise on roadways and out of state commuters who may pay less in gas tax.

Quotes from comments about revenue and taxes:

"Paying extra to use roads that my taxes should already be paying for is frustrating."

"If the tolls paid for better roads, more lanes, etc., I would consider it."

"I wish income tax from Washington residents could go to a third bridge over the Columbia River (near Camas and Troutdale) but I believe all income tax goes to education and economic development."

"I am all for bike and transit infrastructure but tolls have got to be used for the infrastructure they are raised on."

Expenditure of potential new revenue

- Many comments asked questions about where and how value pricing revenue could be spent. As summarized in the above sections, commenters expressed opinions about new revenue spent to increase and build new capacity, support transit, address equity concerns and other issues.
- Several comments from Southwest Washingtonians discussed how revenue collected by Washington drivers should be spent. Many commenters from Clark County tied this to issues of fairness and said Oregon shouldn't be able to collect money from out of state residents on federal highways. Some of these commenters suggested revenue should be shared with Washington or directed to projects that benefit Washington commuters.
- Several said value pricing should be considered and referred to as a "tax."
- A few mentioned concerns about private corporations implementing the tolling infrastructure and managing the collection of revenue through a value pricing system.
- A few said roads with value pricing should not "double dip" and have access to gas tax funding.

6.1.3 Fairness

Around 13 percent of comment discussed the fairness of a value pricing system. This included the ethics of a user fee system, the fairness of the feasibility analysis process, whether travelers have a choice and the availability of other options. The concepts of "fairness" and "equity" are related, but distinct. For this analysis, comments were categorized as relating to "fairness" when they discussed the **ethics of value pricing**



systems and the **project design**. Comments about “equity,” instead, focus on whether certain groups will experience disproportionate **outcomes** and **impacts** as a result of value pricing.

Comments about fairness were most commonly linked to taxes, equity, flexibility of personal schedule, revenue and alternative routes.

Fairness of a “user fee” system

- Many comments said systems where users are charged proportional to their use of a roadway are “fair.” Some argued this is fairer than other revenue raising systems, like the gas tax, because it is directly tied to use and many frequent users do not buy gas in Oregon. Some others noted pricing systems present all drivers with an equal charge, which is a fairer system than gas taxes, which can vary per user based on the fuel efficiency of one's vehicle.
- Many others, however, said value pricing is not a fair system. Several stated freeways should be free as they are a public good. On the other hand, some said driving is privilege and not a right.
- Many said these roadways have already been paid for, and charging a fee to use them is “double taxation.” Some also said they find it unfair that Oregon could implement a fee to use a federal roadway. Many comments said value pricing would only be fair if it was implemented on new infrastructure or roadways as a way to pay for their construction.
- Several comments linked fairness to how and where revenue would be spent. Many of these said it would only be fair if revenue collected from drivers in one part of the study area was spent on improvements in that area. Several comments from Clark County residents stated Washington drivers would not reap as many benefits as Oregon drivers, so Oregonians should pay more. Some comments from Oregonians, on the other hand, said visitors from out of state should pay the same or more.
- A few said tolling is not congruent with Oregon values around fairness.

Quotes from comments about fairness:

“Pay per use is the most fair method of improving roads and reducing driving to only necessary trips.”

“I have an 8 a.m. – 5 p.m. job and I cannot change the hours. I will be forced to pay the maximum toll since I cannot change my hours. You are penalizing those of us who do not have flexible work hours.”

“I disagree with tolls on any highway that has already been bought and paid for with my local and federal tax dollars.”

“I think this is a good idea so long as the funds collected are used to improve these sections of I-5 and I-205. People need to see that the implementation of tolls benefits their experience on these freeways.”

Fairness of the project design

- Many comments said they felt the feasibility analysis' focus on the north/south I-5 and I-205 corridors was unfair as it potentially “targets” out-of-state commuters.
- Some comments from Washington residents said the fact that a decision will be made by the Oregon government is unfair because Washingtonians are not represented by the OTC.



Choice and viable alternatives

- Many comments said the fairness of the system would depend on where it was implemented. Several comments from Southwest Washington commuters noted the implementation of pricing at the state line would mean they have no choice but to pay because I-5 and I-205 are the only routes across the Columbia River.
- Several comments said the availability of options and viable alternatives is crucial to the fairness of the project. Some said priced lane systems were fairer because people would have a choice to pay or not. Others said it would only be fair to price a roadway if a viable alternative route existed. Several suggested there are no viable alternatives to I-5 and I-205 in many locations (including across the Columbia River or for those living on Hayden Island).
- Some said the system would only be fair if it was applied at both the northern and southern end of the study area.

6.1.4 Transit

Approximately 12 percent of comments referred to transit. Key themes included the availability and convenience of transit, whether transit is a viable alternative to driving and revenue expenditure on public transportation.

Comments about transit also frequently discussed congestion, active transportation, highway capacity and expansion, equity, and alternative routes.

Availability and convenience of transit

- Many comments discussed the extent of the transit network. Many said transit options are not available or do not extend to where they live. Several tied this to equity concerns as they suggested lower-income residents are pushed farther out from the central city.
- Many said they personally take transit to avoid congestion and were supportive of increased transit opportunities.
- Several discussed the increased time transit travel can take compared to driving. Some of these comments suggested more express options are needed (e.g. express lanes, express bus routes, express MAX trains, etc.).
- Some comments discussed the schedule and reliability of transit. Some said the lack of schedule flexibility can make transit an impractical option for their commute.
- Some expressed concerns about riding transit related to safety and comfort.
- A few noted most transit service connects to Portland but not between other surrounding cities or key destinations.

Quotes from comments about transit:

"Our forward-thinking focus should be on affordable and accessible mass transit. We could become such a cool city if we'd think outside the box and really step up our mass transit instead of investing in ugly, pollution filled, unsafe highways!"

"I used to ride the bus/max and it's not worth the hassle, wait time, indirect routes, smell, inconvenience, lack of safety."

"Expand transit options to Tualatin so they have better evening/weekend coverage, and I would happily take public transit."

Transit as a viable alternative to driving

- Several comments said value pricing is a way to encourage more drivers to consider transit. Many of these comments were supportive of this idea, while



many others felt transit is not a viable alternative for a significant number of drivers.

- Comments that said transit is not a viable alternative most frequently said:
 - Service doesn't extend to where they live or go where they need to go
 - Trips would take too long or be too unreliable
 - Tickets or passes are too expensive

Revenue expenditure on transit

- Several comments said too much money has been spent on transit infrastructure at the expense of expanding highway capacity.
- Many others, however, felt additional revenue—including money potentially raised through value pricing—should help fund the expansion and improvement of transit so it can function as a viable alternative to driving.
- Many comments submitted by Southwest Washingtonians discussed light rail expansion to Vancouver. Several suggested public support for this has risen and it is important to help Washington commuters have an alternative to driving. Others noted light rail plans have been unpopular in the past and may still be undesirable.

6.1.5 Highway capacity and expansion

Approximately 11 percent of comments related to highway capacity and expansion. These comments often discussed the capacity of existing infrastructure as well as suggestions for constructing additional, alternative routes to I-5 and I-205.

Highway capacity and expansion was most frequently mentioned in parallel with revenue and taxes, transit, congestion and alternative routes.

Existing infrastructure

- Many comments said the capacity of the existing highway infrastructure in the metro area is inadequate. Several comments said capacity issues have been identifiable for some time and more should have been done to expand the roadways earlier.
- Many comments identified locations where new capacity is needed. The most frequently mentioned areas included:
 - The I-5 bridge across the Columbia River
 - I-5 near the Rose Quarter
 - Abernethy Bridge
 - OR-217
 - US-26

Quotes from comments about highway capacity and expansion:

"The area is growing and so roads need to grow too."

"Adding more lanes of travel alone will not solve the congestion problem. We have to give people better incentives to use public transport, carpool, or just avoid driving all together."

"Another bridge needs to be built to ease congestion. All this fee is going to do is levy a tax on people that rely on these bridges, as they are the only two Columbia River crossings within reasonable distance."

"We cannot build our way out of congestion, we need to reduce the number of cars using the roads we already have."

"I would suggest adding an additional lane on both highways and make it a pay to use during heavy traffic."



- Several called for the development of new capacity on existing roadways, such as:
 - Adding lanes to both I-5 and I-205
 - Adding reversible lanes on key commute routes that could change direction in the morning and afternoon
 - Creating “double decker” bridges to accommodate more cars
 - Removing the HOV lane on I-5 to add capacity
- Several comments said freeways should not be expanded as this will encourage further car use at peak times and new capacity will just fill up quickly. Some noted this has happened already, using I-205 as an example. Several suggested value pricing should be implemented before any road widening or expansion occurs.

Construction of alternative routes

- Many comments said new alternative routes are needed to alleviate congestion on main arterials in the metro area. The most common suggestions included:
 - Construction of additional bridge(s) over the Columbia either on the west side (connecting US-30 with Washington) or the east side (Camas/Washougal to Troutdale).
 - Development of a new Westside route
 - Construction of a new east/west thoroughfare to alleviate congestion on US-26 and I-84

6.1.6 Economic impacts

Approximately 11 percent of comments discussed the economic impact of congestion in the metro area as well as the potential economic effects of introducing value pricing. Economic impacts were most commonly discussed alongside taxes, flexibility of personal schedule and congestion.

- Many comments discussed how existing congestion conditions impact the economy. This includes:
 - People being less likely to travel into Portland to shop or recreate
 - People spending more money on gas and less on other goods
 - Movement of freight and goods is slowed
- Some comments were optimistic about the potential for value pricing to alleviate some of these congestion-related economic impacts.
- Many comments also focused on potentially negative economic impacts of introducing value pricing:

Quotes from comments about economic impact:

“Congestion in both directions between the OR/WA border and the Rose Quarter deters me from making trips to Portland area, so Oregon destinations lose my shopping dollars.”

“Time is of the essence when I drive. Time is money. Traffic congestion costs both time and money.”

“I live in Vancouver and I used to travel to Portland for work, but the commute and the uncertainty of how long it would take made me stop looking there. It has affected my financial life because I am now limited to jobs in Washington.”

“Placing a toll on traveling into Oregon will TAKE a toll from Oregon business. I for one, will no longer shop in Oregon if a toll is placed to travel into your state.”



- Several said they would intentionally choose not to shop or recreate in Portland because of value pricing.
- Some others said the additional cost on their commute could make them have to reconsider where they work unless their employer was able to support them.
- Some said pricing could make Portland a less desirable place to come visit, recreate and vacation, harming tourism revenue.
- Some said they are concerned goods will be more expensive as higher shipping costs are passed on to consumers.
- A few professionals who travel on I-5 and I-205 frequently for work said they may consider passing on the price of the fee to clients.

6.1.7 Equitable impacts

Approximately eight percent of comments discussed the equity impacts of value pricing. The vast majority of these focused on income-based equity, though others referred to impacts to different racial and ethnic groups and persons with disabilities or medical issues.

Equity was most frequently discussed alongside transit, flexibility of personal schedule fairness and taxes.

Income

- Many comments discussed the impact value pricing could have on low income drivers. Many focused on the cost burden to these individuals, with some using figures that suggested tolls would cost \$50 or \$100/week or more. Several noted rising costs of living—including housing, gas and food—and said fees or tolls could make travel unaffordable for them. A few described pricing strategies as regressive.
- Many comments also suggested the benefits of value pricing could be inequitable. These comments noted wealthier drivers would be more likely to be able to choose to pay the fee, and would therefore enjoy the benefits more than lower income drivers. Some suggested this could have compounded impacts as wealthier commuters can have more opportunity, job flexibility and mobility.
- Many comments suggested lower income commuters have less flexible work schedules, so choosing to travel at a different time to pay a lower fee may not be a viable option.

Quotes from comments about equity:

“With my limited income I don't have a choice about where to live and have to take what work I can, so my transport options are dictated by that.”

“Low income people will need to be considered too, maybe with lesser fees based on income.”

“The wealthy get a quicker travel option, while those with lower income are forced to face a longer commute.”

“The neighborhoods surrounding I-5 and I-205 are mostly low income. Commuters already speed through N/S neighborhood streets trying to avoid the freeways and I worry that it will become worse with tolling if not done correctly.”



- Several comments noted low income residents are being displaced to neighborhoods further away from Portland because of rising housing costs. These neighborhoods are not always well served by transit, which means more residents must drive to commute to work.
- Some noted the current system of transportation finance is inequitable, as lower income people may pay more in gas tax relative to their income or if they own less fuel-efficient cars. A few disagreed, though, and said the gas tax is a more equitable system.
- Some said having to drive longer routes to avoid tolls could lead to low income drivers having to spend more on gas and spend more time in the car.

Race/ethnicity

- Some comments discussed disproportionate value pricing impacts on communities of color. Often this was mentioned in conjunction with income equity concerns. Some noted communities of color may be more concentrated along parts of the interstate corridors or farther out where transit access is limited, which reduces options for avoiding the toll.

Persons with disabilities and medical requirements

- Several comments said I-5 and I-205 are used by drivers to access medical appointments in and around Portland. Many of these comments expressed concern about the potential disproportionate impact on those who make these trips regularly to stay healthy.
- A few asked about transportation between the VA hospitals in Washington and Oregon as well as between other medical facilities.
- A few noted people with disabilities and the elderly have less access to vehicular transport, so revenue spent on expanding highways will not benefit them.

Modal equity

- Some said value pricing will have an inequitable impact on drivers compared to bike commuters, people who can walk to amenities and services and transit riders. A few suggested charges should also be levied on bike commuters and at electric charge stations.
- On the other hand, many comments said other modes should be subsidized or incentives should be offered to encourage their use as an alternative to driving on the interstates.

Mitigation

- Many comments that discussed equity concerns asked about mitigation opportunities. The most commonly discussed strategies include:
 - Discounts or incentives for low income commuters
 - Passes or exemptions for those traveling for medical reasons
 - Directing revenue toward transit and increased multi-modal options in communities currently underserved
 - Relief for those who have inflexible schedules



6.1.8 Other congestion management ideas

Approximately eight percent of comments discussed other ideas for managing congestion (beyond those mentioned above related to capacity and transit). These suggestions included:

- Eliminate HOV lanes on I-5 or increase enforcement.
- Introduce HOV lanes on I-205 or elsewhere.
- Make HOV lanes 24-hours.
- Eliminate or move on/off ramps near congested spots (e.g. near bridges).
- Implement lanes on congested highways that can switch direction at peak times.
- Discourage/prohibit freight traffic at certain times of day.
- Use signal lights more effectively on on-ramps.
- Dedicate lanes on the freeway to transit and/or freight traffic.
- Charge studded tire users for impact to roadways.
- Limit bridge lifts during key traffic times.
- Improve highway signage.
- Work with employers to offer incentives for telecommuting.
- Convert shoulders into drivable lanes.
- Consider new solutions for a Columbia River crossing (e.g. double decker bridge, tunnel).
- Improve traffic law enforcement and increase penalties for improperly using passing lanes.
- Charge high polluters and re-direct money for traffic projects.
- Coordinate with WSDOT on alternative solutions.

Quotes from comments about other congestion management ideas:

"Try ending the HOV lane to open up traffic."

"Create bi-directional express lanes in the center of the freeway."

"Reach out to large employers asking them to do more to help their employees not be on the roads at high congestive times."

"Discourage commercial trucks from using the roadway during peak congestion."



6.1.9 Traffic Diversion

Approximately four percent of comments discussed diversion of congestion from I-5 and I-205 to local roadways. Diversion was most frequently also mentioned with congestion, safety and equity.

- Many comments expressed concern that pricing I-5 or I-205 would divert traffic onto neighborhood roadways as people try to avoid the toll. Several commenters said they would personally do this to avoid paying.
- Many said diversion is already happening because of the congestion conditions on the freeways. Examples included OR-43, Highway 99E and 99W, and other routes. Some mentioned apps like Google Maps and Waze encourage this behavior.
- Some comments said diversion would have a disproportionate impact on lower income residents because neighborhoods near freeways typically tend to have lower median incomes. In turn, others said they think more low income drivers will be diverted off the freeways because of inability to pay.
- Some expressed concerns about safety in neighborhoods if congestion is further diverted onto local streets.
- A few discussed examples of tolled roadways in other states where diversion occurred. Some of these noted this is okay if a viable alternative route is available. Others discussed the need to try to mitigate diversion, possibly by implementing penalties.

Quotes from comments about diversion:

"Congestion affects what mode of transportation I take, but also the traffic on the highways makes me take boulevards and other smaller streets in order to get to my destination, even if it takes me a little longer to get there."

"I think value pricing would be an impactful way to reduce congestion, as long as measures were taken to prevent drivers from simply using side streets and pushing Portland's traffic onto other roads and into our neighborhoods."

"If I-205 and I-5 have more predictable travel times, commuters will be less likely to divert onto Sandy and 82nd, and other surface streets."



6.1.10 Project scope, design and public engagement

Approximately three percent of comments discussed the feasibility analysis project itself and the associated public engagement process.

- Many comments asked why I-5 and I-205 were selected for analysis and not other highways. Several suggested congestion conditions on roadways like I-84, I-405, US-26, OR-217 and more could warrant analysis as well. Several commenters, particularly those from Southwest Washington, said by only looking at the north/south corridors, the project unfairly targets commuters from Washington.
- Several appreciated the opportunity to comment and share their feedback with the project team. Some stated a need for greater notification to ensure all are aware of the process.
- Several asked for additional and more specific information from the project team, including:
 - More specific congestion figures for the two highways
 - Congestion data for other roadways
 - Evidence of success in places where value pricing has been implemented
 - Results from modeling and future forecasts
 - Economic impact analysis
- Some felt the questionnaire was too short or didn't adequately allow for a range of opinions to be collected.
- Some comments said they feel the project is a "done deal" and a decision to implement value pricing has already been made. Others, however, wanted to see more specific proposals. Some were concerned their feedback would not be considered by the project team.
- Some said they found the use of the phrase "value pricing" be misleading and suggested this be called a toll or tax.
- Several comments suggested evaluation criteria they would like to see used as proposals are analyzed, including:
 - Equity and mitigation for disproportionately impacted groups
 - Fairness
 - Impacts on throughput
 - Economic benefits and costs
- Several comments discussed the decision-making process. Some suggested a vote should be held. Others said they do not feel represented by the OTC. Some comments suggested a lack of clarity around who is the eventual decision maker on this project and what is allowed by the FHWA.

Quotes from comments about project scope, design and public engagement:

"Thank you for considering each of our voices!"

"Curious as to why PDX is focusing on tolls for I-5 & 205 when US-26 & I-84 are just as bad if not worse."

"The west side of town contributes a large amount of traffic to the Portland area as does I-84 traffic. Why are you being selective? I notice by your plan you have a very large focus on Washingtonians and "southsiders"."

"I suggest a focus on people and goods movement not vehicles as performance measures."



- A few discussed the cost of the project. Some were concerned the cost to implement and administer a value pricing system is too high.

6.1.11 Bike and pedestrian impacts and infrastructure

Approximately three percent of comments discussed bicycle, pedestrian and other active transportation infrastructure and impacts. These comments were often related to comments about transit, highway capacity and expansion, alternative routes, congestion, revenue, diversion and safety.

- Several comments stated support for improving and increasing active transportation infrastructure to enable more people to use it as an alternative to driving.
- Some others, however, felt it would be unfair to use revenue generated from value pricing to support non-highway related projects. Other comments suggested it is not realistic to expect large numbers to start using active transportation.
- Several comments discussed the impact congestion has on safety for bike users and pedestrians. Many of these comments also said the condition of bike lanes and pedestrian infrastructure is not adequate in many areas, creating safety concerns.
- Some expressed frustration at the emphasis and existing revenue put toward active transportation infrastructure, which may not benefit commuters who live further out.
- Some comments linked increasing incentives for active transportation to environmental benefits of reduced car traffic.

Quotes from comments about bike and pedestrian impacts and infrastructure:

"Build better roads and stop giving road space to the few who bike. Roads are for cars not bikes."

"Portland needs better bike, walking, and mass transit infrastructure."

"I am a regular bike commuter who also uses a car on the weekends. As a biker, I feel unsafe when aggressive drivers, frustrated by congestion, act with little regard to my presence on the road."



6.1.12 Environmental impacts

Approximately three percent of comments discussed the environmental impacts of congestion and value pricing's potential to mitigate these effects. Environmental impacts were frequently discussed alongside congestion, highway capacity/expansion, public health and transit.

- Several comments mentioned concerns about air quality, particularly in neighborhoods close to freeways where congestion is worst.
- Some comments mentioned reducing congestion as a key element in achieving goals related to climate change and carbon emissions. Several of these tied value pricing to the environmental benefits of encouraging more transit and active transportation use.

Quotes from comments about environmental impacts:

"The air quality in the Eliot Neighborhood is already terrible and if we get more cars, the quality is only going to get worse."

"Please implement congestion pricing! Environmental health is important to Oregonians!!"

"The reality and ever-increasing severity of climate change should be the number one consideration when making decisions about congestion pricing."

6.1.13 Other topics

In addition to the themes discussed above, several comments touched on a range of other topics, including:

- **Value pricing and tolling examples from other states:** These include positive and negative examples from cities such as:
 - Seattle
 - Los Angeles
 - New York
 - Denver
 - Minneapolis
 - Houston
 - Dallas
- **Technology:** These comments discussed the technology used to collect fees in value pricing systems. Key themes include:
 - Some evidence of misinformation around whether toll booths will be constructed and used to collect fees
 - Interest in learning more about remote sensor and other electronic technologies
 - What technology and what entity would be used to collect tolls, issue refunds and address customer service issues
 - The cost and accessibility of purchasing electronic transponders
 - Questions about how tolls will be collected from non-local users who don't have a transponder



7 NEXT STEPS

The findings from this first phase of public engagement will be considered by the Policy Advisory Committee and technical team as they refine a set of concepts for further analysis. The project team expects to solicit feedback on these refined concepts through online platforms and in-person events in spring 2018. ODOT invites public comment at any time throughout the project via the project website, email or phone.

The Policy Advisory Committee will submit its recommendations to the OTC in mid-2018. After considering technical findings and public input, the OTC will submit a final report and proposal to the federal government by the end of 2018 for review. The timeline for next steps after 2018 depends on direction from the FHWA. Additional work from 2019 onward is likely to include additional public outreach; environmental, traffic, and revenue analysis; and the development of an implementation plan.

Figures 7-3. Timeline for the Portland Metro Area Value Pricing Feasibility Analysis

