Washington County
Transportation Futures Study
Exploring options • Informing choices

Winter 2015/2016 Public Outreach Summary

February 2016

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I. INTRODUCTION

Overview

Washington County is evaluating long-term transportation investments and strategies as part of the Transportation Futures Study. The Study will identify tradeoffs between alternative transportation investments and inform future choices and decisions.

As part of the study, the County conducted a public outreach and comment period in winter 2015/2016. The main purpose of the outreach period was to present and solicit input on the land use scenarios, future transportation trends, and types of investments to study to meet the economic health and quality of life in Washington County in the coming decades. This report summarizes the outreach conducted and public feedback received.

Outreach Activities

The study team held meetings with the Study Advisory Committee and public agency and jurisdiction staff to solicit transportation investment ideas to study. Additionally, the team conducted outreach to solicit feedback from the public, including:

- Online Open House (Jan 25 to Feb 19, 2016)

- Briefings and meetings with organizations and individuals.

- Targeted outreach to Spanish-speaking populations in partnership with Centro Cultural.

Outreach Purpose

The main purpose of the outreach period was to present and solicit input on the future transportation trends and types of investments to study to meet the economic health and quality of life in Washington County in the coming decades. The study team sought input on two key questions:

- What **trends will change the way we live and travel** in 40-50 years?
- What are the **best transportation investment ideas** to study? The study team presented proposed ideas to study around seven modal categories and sought feedback:
    - Reducing vehicle trips
    - Emerging technology
    - Biking and Walking
    - Transit
    - Freight (Trucks)
    - Major Roads
    - Throughways

II. EXECUTIVE SUMMARY OF PUBLIC COMMENTS

This section summarizes comments from the following sources:

- 274 online open house survey responses
- 6 emails and letters submitted to the Study team
- 5 comment forms submitted at Study Advisory Committee meetings
- 10 comments submitted through the project website comment form

A more detailed summary is provided in section III of this report.

1) Comments on Future Trends and Land Use Scenarios

149 people provided a response to the online open house question: *How do you think people will get around Washington County in the coming decades? What technological, social, or other trends will change the way we travel?*

Many said that in the future, **mixed-use, compact development** will be prevalent in the County's urban areas. People will live in denser communities where they can easily access goods and services without traveling great distances. There will be an increased need to **protect and preserve farmland and open space**, including farms close to urban centers.

Many comments focused on the **type of housing** that will be needed or preferred in the future—including multi-family housing, affordable housing, small homes, large homes, executive housing, and co-housing facilities.

Many comments centered around **how we will get around** in the future. Some commented that **vehicle congestion will increase** and travelers may face a loss of mobility if facilities are not expanded. On the other hand, investment and use of **walking, biking—and especially transit**—will increase. Use of active modes has the potential to improve the health of people in the future. Some said that **self-driving vehicles** will be prevalent, as well as an increase in **car sharing** and use of **electric and low-emissions vehicles**.

2) Transportation Investment Ideas

The study team provided information on potential transportation investment ideas to study, organized around seven modal categories. The public was asked whether the County has captured the most important ideas to study and to provide other ideas.

This section summarizes comments, organized by the seven modal categories.

1. Reducing Vehicle Trips

Many comments focused on the need to plan and design cities and communities to reduce vehicle trips. This includes **community design and zoning that places homes closer to work**, moving toward better

jobs-housing balance, as well as more **mixed-use developments** so that people can walk or bike to access most needs and services.

Some comments were made in support of expanding **employer sponsored transit incentives**, such as employer-sponsored shuttles, bike-to-work programs, as well as tax incentives for employers.

Comments showed mixed support for pricing strategies such as **tolling** and a **road user charge**. There was some concern about **traffic flow impact** of tolling and **effect on low-income drivers**. Some comments wanted to see a **congestion-based** road user charge.

Many people suggested **bicycle, pedestrian and transit improvements** to provide an alternative to driving. Others suggested some **technology** and **road and throughway** improvements. These comments are addressed under the appropriate modal category.

2. Emerging Technology

There was general support for studying impacts of the proposed technologies. A number of comments supported studying **self-driving vehicles**. Some noted that this technology would make travel safer and more efficient, but might actually increase the number of cars on the road. There were questions about whether self-driving vehicles would actually fully develop, and equity implications around who can afford this and other technologies.

Some comments suggested additional technologies to complement the increase in **electric vehicles**, such as continuous charging for vehicles while en-route and **solar-cell paved pathways**. Some would like to study **other vehicle fuels**, such as hydrogen and compressed natural gas.

Some additional technologies suggested for study include delivery drones, personal flying vehicles or hover vehicles, on-demand transit options, and the impact of 3-D printers.

3. Biking and Walking

Many comments supported the proposed investment ideas, particularly **separated bicycle routes** to improve safety and reduce conflict with vehicles. Many want to see **more sidewalks** in all parts of the County, as well as a **complete bike/ped networks** that connects to major urban areas and destinations. Several comments support a comprehensive **trail** and/or **multi-use path** system.

There was both support and concern about **reducing traffic speeds in urban areas**; which could improve safety but have a negative impact to vehicle flow. Some suggested other road diet or traffic calming measures.

Some suggested studying **education and promotion** of active transportation choices, as well as **enforcement** against drivers and cyclists who violate traffic laws and safety.

4. Transit

Some comments were made in support of the proposed transit improvements, especially **extending high capacity transit to Forest Grove and Sherwood** as well as an **express MAX line to Portland**. Many people suggested a wide range of specific new transit lines, including some support for high capacity transit from **Sherwood to Beaverton/Hillsboro**. Many said that there is a need for more **explicit transit plans for high-growth and new residential communities** (such as South Cooper Mountain, Aloha, and South Hillsboro).

Several comments were made about the interaction of transit and other modes. Some would like to see improvements that make it **easier to combine bicycling and transit**, as well as **improved walking and biking access to transit stops**. Some suggested more **bus pullouts** to reduce impediments to vehicle traffic flow, as well as increased **Park and Ride** facilities.

5. Freight (Trucks)

Many comments provided support or concern for some of the proposed improvements. Many people expressed **concern about routing more trucks onto roads** as an alternative to freeway travel, as this could reduce livability and quality of life; many said it makes more sense to **widen roads and add freeway capacity** to keep trucks off of local roads. At the same time, people worried that widening roads and adding freeway capacity could increase the amount of driving and congestion in the long term and harm agriculture in the rural areas where new throughways are proposed.

Some people provided ideas for other improvements to study. Many suggested **restricted travel times for freight** to reduce trucks on roads during peak hours. This could be complemented with **congestion pricing**. Similarly, some suggested **restricting the size of trucks that can travel in urban areas** or implementing policies that would allow only small delivery trucks in urban and neighborhood areas. A number of people also suggested studying **increased use of freight rail** to take more trucks off the roads. Some would like to study the impact of new technology such as **drone deliveries**.

6. Major Roads

Many comments provided support or concern for some of the proposed improvements. A large number of people supported the **"Around the Mountain"** concept to provide connections for the new communities in South Cooper Mountain and South Hillsboro. There was both concern and support for building a **new arterial between Forest Grove/Hillsboro and 99W/Sherwood**; some said it would alleviate congestion, and others were concerned about impacts to rural communities, farmland, and the environment. Some expressed concern about **widening Cornelius Pass Rd** for similar reasons.

Participants provided a wide range of other ideas to study, including many specific suggestions to improve select roads and connections. Some of the many suggestions including widening Tualatin-Sherwood Rd, improving travel around Nike and Intel, and alternative ways to address the Sunset Tunnel bottleneck.

7. Throughways

Many comments provided support or concern for some of the proposed improvements. People expressed both support and concern for a **new limited access road between Hillsboro, Sherwood and I-5/I-205**. The new throughway could alleviate congestion and provide an alternate route, but could also negatively impact farmland, forests and quality of life. Some expressed concern about an **extension to Hwy 30 and Columbia Blvd via Germantown** due to potential impacts to farmland and Forest Park. Many supported **widening Hwy 26 and 217**. There was general concern that widening roads and freeways could **cause more people to drive and contribute to more congestion**.

Some new ideas were suggested. These included **alternative routes to connect Hwy 30 with I-5** and/or Vancouver via a new bridge over the Columbia River; **widening Hwy 26** all the way to Portland or otherwise addressing the Sunset Tunnel bottleneck; and building an **upper deck to Hwy 217** for express traffic.

A number of people supported building some of the major road improvements first (specifically the Around the Mountain concept) and then focusing on developing new throughways as a long term plan.

III.   ONLINE OPEN HOUSE SUMMARY

1) Online Open House Format and Participation

The online open house was available from January 25 to February 19, 2016. It can be viewed at: http://openhouse.jla.us.com/project/wcts2# (commenting features are now disabled).

Approximately 674 people visited the online open house, and 274 members of the public submitted responses to the online open house questions.

2) Open House Stations

The open house included four "stations" that provided information about the study and invited participants to provide feedback on specific questions:

1. **Study Overview** – This station provided background information about the study purpose, process, and public engagement program.

2. **How could we grow in the next 50 years?** – This station included videos and graphics that illustrate how the County might grow over the next 40 to 50 years, based on current plans and policies and expert input on future trends and potential shifts in demographics, economics, land use, and travel behavior. Participants were asked to post comments about the technological, social, or other trends they think will change the way we travel.

3. **Transportation Investment Options** –This station included potential transportation investment ideas to study, organized by mode. Participants were asked survey questions about whether the County has captured the most important ideas to study and to provide other ideas.

4. **Next Steps** – This station explained the next steps in the study process and ways to stay involved. It also asked for any other comments and provided optional demographic questions.

3) Notification and Outreach

The study team used the following outreach strategies to publicize and invite the public to participate in the online open house:

- **Emails** – A series of emails were sent to the stakeholder database to invite members of the public, stakeholders and agency partners to participate in the online open house.

- **Website announcements** – The study website and Washington County website prominently announced the online open house and invited people to participate.

- **Media releases** – The study team sent several press releases to area media sources.

- **Community Newspapers and Newsletters** – The study team reached out to cities, chambers of commerce and community organizations throughout the study area to collaborate on outreach

for the online open house. As a result many cities, agencies and organizations included information about the online open house in their newsletters and email blasts.

- **Tualatin Valley Community Television** – County staff used TVCTV to invite the public to the online open house by running Bulletin Board notifications and the study overview video.

- **Social Media** – Washington County staff used the WC-Roads and Washington County Twitter feeds and Facebook pages to tweet and post about the study. Other agencies and organizations reposted and retweeted through their own Facebook and Twitter accounts.

- **Outreach Targeted to Underserved Communities** –

  Spanish-Language Outreach: The study team partnered with Centro Cultural to obtain input from Spanish-speakers in Washington County. Centro Cultural posted a short survey in Spanish on their Facebook page asking for input on future trends and transportation investments. They also led short discussions with Spanish speakers during three regularly scheduled classes and events.

  Other Outreach: The study team reached out to community based organizations to encourage them to spread the word about the online open house to their membership. The study team also provided a briefing to the Beaverton Diversity Advisory Board.

- **Outreach to Youth and Schools** – The study team reached out to school districts, PCC Rock Creek, Pacific University and public libraries to distribute notices about the online open house to their students and staff.

4) Comment Summary

This section summarizes feedback received through the online open house. Some comments are followed by a number in parenthesis to indicate approximately how many people said that comment.

Question #1: How could we grow in the next 50 years?

The online open house asked: *How do you think people will get around Washington County in the coming decades? What technological, social, or other trends will change the way we travel?*

Participants provided their feedback on a comment wall where they could see other participants' comments. 149 people provided a comment.

Comments related to land use:

- **Mixed-use, compact development** will be more prevalent. People will live in denser communities where they can easily access goods and services. (19)
    - o This will be fed by increased telecommuting, better public transportation hubs, and a greater percentage of the population that desires high quality housing in vibrant areas. Communities will become more walkable as a result of compact development and increased investment in sidewalks.
- **Urban centers will become denser.** (4)
    - o Will lead to increased investment in all modes.
    - o Will include population centers with land for food production.
- **Increased density** will lower our quality of life because it will feel too crowded and there will be increased congestion. (7)
- Preference for **growing the existing system** and developing within the UGB rather than expanding roads. (2)
- Increased need to **protect and preserve farmland and open space**, including farms close to urban centers. (6)
- Increasing need to **protect open spaces** and access to nature. (3)
- **Hillsboro will become a major city** and global center for high technology. (3)

Population, Demographics and Employment

- **Population is likely to double** or more. (4) There will be increased population from climate refugees, and larger, older, and more diverse population.
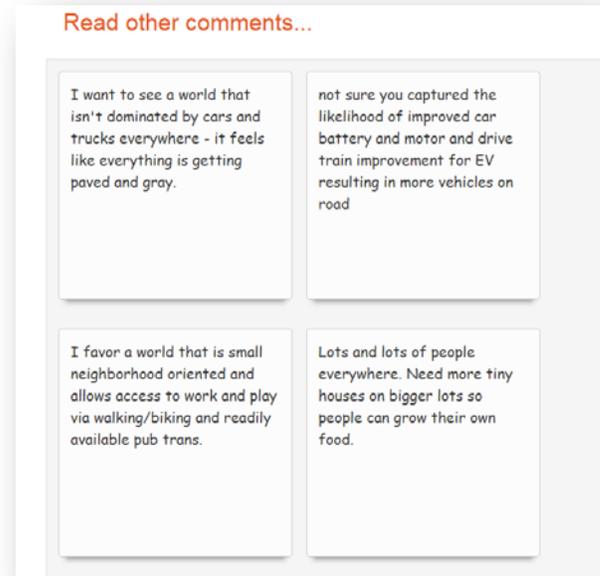
- Major industries may leave the County resulting in **less population growth** than expected (2)
- Employment projections seem too high.
- More people will **work locally or online**, reducing commutes. (10)
- Traditional **commuting hours will disappear** as schedules become more varied.

Housing: Many diverse comments on the types of housing that will be needed in the future:

- We'll see an **increase in multi-family, co-housing, and small homes.** (3)
- Will need **housing for all income levels**. (2)
- Need more **affordable housing** near city centers or see a decline in low-income families. (2)
- People will **not desire to live in small apartments**.
- Need more **executive housing** as economic growth produces very high income earners.

How we get around

- **Vehicle congestion will increase**. (20) In the face of increased population, there will be a need to make more road improvements and expand facilities, or else face a loss of mobility. (7)
- In general, we'll see more **walking, biking, and taking transit**. (21)
  - Aided by an increase in bicycle and pedestrian commuter paths and trails. (4)
  - Active transportation options will improve health of people; we'll see a healthy population (mentally and physically) overall as a result. (3)
  - Increase in **older population** means we'll need more non-driving options. (2)
- Increased investment in and use of **mass transit.** (12)
  - Investment in transit will be necessitated by population growth. (3)
- Increased desire for **healthy, inexpensive, and reliable** transportation options.
- **Self-driving vehicles** will be prevalent. (11) It is likely that they will not be personally owned and will make parking obsolete. Driving will become safer and more efficient.
- Increase in **car sharing and alternative transportation methods** as opposed car ownership. (4)
- **Increase in electric and low emissions technology.** (5)
- **Fewer cars.** (3)
- We will see an **increase in driving**. (3)
- **Hovercraft and above-ground travel** options will increase.
- More **automated freeways.**
- **Modular vehicles** that can "entrain" on freeways.
- **Hyperloop** technology.
- Increased **real-time traffic information and "smart" traffic infrastructure.**
- **Increase in delivered goods** including drone deliveries. (2)
- Higher density will create the need for more public **right of way** to serve all modes. (2)
- Improved economy means **more freight on roads**.
- **Income inequality** will result in smart car ownership for a few and transit for the majority.
- We won't see much change; **people's habits change slowly**. (2)

Question #2: Have we captured the most important transportation ideas to study?

The online open house presented information about the potential transportation investment ideas to study that the team had collected over the past several months. It then asked participants to answer whether the team has captured the most important ideas to study and to provide other ideas and comments.

The investment ideas were organized into **seven modes or categories**.

1. Reducing Vehicle Trips

75 participants said that the County has captured the most important ideas to study, and 132 had other ideas or comments. 139 people made a comment.

Comments related to "new mixed use areas" and parking management, plus other **land use planning strategies**:

- Community design and zoning that places homes closer to work, moving toward better **jobs-housing balance.** (12)
    - Including affordable and senior housing. (2)
    - Incentives for people to live close to work. (2)
    - Work with Metro to allow jobs and housing in the same sub-regions to shorten commutes.
    - Provide adequate market housing choice around employers and industry. (2)
- More **mixed-use developments** so that people can walk or bike to access most needs and services. (12)
    - Especially around transit stations. (2)
    - Redevelop underutilized lands.
    - Should be walkable areas and help balance housing, jobs and retail. (2)
    - With parking garages rather than large lots.
    - Multi-story buildings. (2)
    - Require new developments to provide convenient access to transit and services near residential areas. (2)
    - Redevelop mixed-use neighborhoods to include **affordable housing** so people of all income levels can walk and bike to services and jobs.
- **Co-housing and CLT housing** strategies to reduce the amount that people travel.
- Shorten commutes by **fostering new businesses** and avoiding huge employment complexes.
- More **street trees** (2). Put powerlines underground to allow growing more big trees.
- **Parking maximums** for housing, retail and job centers.

> The online open house presented these strategies to **reduce vehicle trips** for public review:
> - New mixed-use areas with **parking management** (i.e., paid parking and limited parking hours areas)
> - Employer sponsored **transit incentives**
> - Increased **car, bike, and ride-sharing** programs
> - Implement a **road-user charge** based on how many miles a person drives (as an alternative to the gas tax)
> - Turn some freeway lanes into **tollways** and/or "**managed lanes**" where drivers pay a charge to use a lane
> - Integrated mobility, real-time information, and mobility hubs
> - Increased **telecommuting**

Comments on **ride-sharing programs**:

- Support for studying **bike sharing**. (5)
- Government sponsored **smart car carpools** that will send cars to specific locations on-call.
- **Education and incentives** to use car sharing programs.

Comments related to **employer sponsored incentives**:

- Incentivize **variable business hours** to spread out peak travel times.
- Incentives for large employers with multiple locations to allow **employees to transfer** to locations closer to their homes.
- Tax incentives for businesses/employers that can demonstrate **vehicle trip reductions.** (2)
- Employer-sponsored **shuttle buses and bus transportation.** (3)
- Employer-sponsored **bike-to-work programs.**

Comments related to **telecommuting**:

- Telecommuting is not an option for many employment types. (2)
- Increased teleconferencing/videoconferencing will be the norm. (3)

Comments related to **pricing strategies**:

- **Tolling/HOV lanes**
  - Support HOV lanes (to encourage more ridesharing). (4)
  - Strategies to avoid congestion caused by waits at toll booths.
  - Tolling is discriminatory towards the poor. (2)
  - Tolling does not seem to improve traffic flow. (2)
  - Don't think of tolling and road user charge as a way to reduce trips. It is a revenue generating tool.
  - Look at Texas model for tollways.
  - Support tolling on the new throughways. (3)
- **Road user charge**:
  - Should be based on time of day; higher at peak hours (i.e., congestion-based road user charge). (4)
  - Question about the financial impact and how the charge is collected. (3)
  - Do not support. Unfairly punishes those who live in rural and outer areas. (2)
- **Avoid punishing** drivers.
- Charge a fee to people who move from out of State.
- Concern about how to **fairly pay for improvements**. All travelers should bear part of the cost, regardless of their mode (including drivers, electric vehicle owners, cyclists, etc.). (2)

Do not support trying to change travel behavior. (9) People will continue to drive; build more roads. (8)

Comments that pertain to other categories:

- **Biking and Walking**
  - Improve **bicycle and pedestrian** infrastructure, connectivity, and safety to provide an alternative to driving (20). This includes more multi-use paths, trails, protected bike lanes, connection to transit, and others.
  - Reduce speeds on some roads and use road diets.(3)
  - Others: Safe routes to schools; increased use of electric-powered bicycles; powered walkways.
- **Transit**
  - Improve/make it easier to use transit (27). Includes improved bus routes to all parts of the County, more MAX and high capacity lines, adequate park and rides, better ticket affordability, last mile connections, street car routes and smaller buses, and senior access.
- **Technology**
  - Foster self-driving vehicle usage. (7)
  - Others: Drones for future deliveries; coordinated traffic signals; increase in electric vehicles.
- **Arterials and Throughways**
  - Support for new North-South throughway. (5)
  - Support Around the Mountain Concept. (2)
  - Increase road and highway capacity; improve road and freeway system. (9)
  - Fix the Raleigh Hills crash corner. (2)

2. Emerging Technology

101 participants said that the County has captured the most important ideas to study, and 85 had other ideas or comments. 97 people made a comment.

New ideas to study:

- Chair lifts and **cable cars.** (2)
- **Drones** that make deliveries will reduce some need for freight or delivery trucks. (3)
- **Personal flying vehicles.** (3)
- **Hover vehicles** that do not require roads.
- On-demand transit options and technologies to improve **transit**. (2)
- Impact of 3D printers on business, retail, and freight movement.
- **Breathalyzer controlled ignitions** on all vehicles to reduce drunk driving. (2)

Comments about **electric vehicles and charging stations**:

- **Electric bicycles** will increase the ease and range of cycling.
- Increase in **electric vehicles.**
- Will need **more electricity generation** to support increased use of electric vehicles.
- **Support studying more EV charging stations** (will be needed for people that don't have access to garages and driveways) and **continuous charging for EVs** while enroute. (2)
- **Other vehicle fuels**, such as hydrogen and compressed natural gas. (4)
- **Modular vehicles** that can "entrain" on freeways (linking cars in chains). (2)
- **Solar-cell paved pathways** and roadways to charge vehicles and buildings. (3)
- Only **wealthy individuals** will be able to afford electric vehicles.

Comments about **driverless vehicles**

- Support studying **self-driving vehicles**. (11) Self-driving vehicles will make travel more safe and efficient, require much less parking, and may be publicly owned.
- Study policies that **incentivize carpooling** over SOV trips. Self-driving cars are not likely to reduce trips. (2)
- It is likely that self-driving vehicles may never fully develop. (5)
- Concern that self-driving vehicles are unsafe and should not be encouraged.
- Examine **health and equity impacts of self-driving cars**; not everyone will be able to afford. (2)

Comments about **interconnected traffic signals**

- Support studying Interconnected traffic signals to manage traffic and sense traffic flow. (3)

> The online open house presented these emerging technologies for public review:
> - More **electric vehicles**—including electric cars, bicycles, and freight trucks
> - Electric vehicle charging stations
> - Driverless vehicles, i.e., "**self-driving cars**"
> - **Interconnected traffic signals**
> - **Smartphone technologies** that help people plan routes, share rides, and share cars and bicycles
> - Increased **online shopping**

- **Infrastructure that can sense pedestrian and cyclist** movement to make biking and walking more efficient. (2)

Comments about **smartphone technologies, wayfinding and ridesharing**

- Support increased and incentivized **ride-sharing.** (4)
- Increased **wayfinding** with real time traffic and incident monitoring. (4)
    - Increased use of map apps is likely to increase traffic on alternate routes.
- More **enforcement** when people use **phones while driving.**
- County-wide **free Wi-Fi** to support affordable use of smartphone technologies while moving.
- To increase bike sharing, **prevent bike thefts** and provide secured/locked bicycle parking.

Comments about **online shopping**

- Online shopping and services will reduce driving (2) but increase freight on roads.
- Increased online shopping will hurt local and small businesses.
- Delivery vehicles should be fully loaded and routes coordinated to maximize efficiency .

Other comments

- Technology is not enough to fix congestion. (2)
- County policies and decisions are likely to have little effect on technology and what people choose to drive. The market will dictate this. (4)
- Only consider technologies that reduce vehicles on the road; many of these strategies are auto-centric. (2)
- With rising income inequality, only some of the population will be wealthy enough to take advantage of new technology. (2)
- Prioritize use of technology.
- Concern about how we will pay for all of these improvements.

Comments that pertain to **other modal categories**:

- Use **rail to move goods** instead of freight trucks. (2)
- Invest in additional roads and **road improvements.** (3)
- Increased **telecommuting.** (2)
- Increase in **compact neighborhoods** with amenities nearby. (2)
- Use of **toll roads.**
- **Shared microbuses** for commuting (see Hong Kong example).
- **Incentivize biking to work** (ex: pay commuters to bike to work).
- **Narrower travel lanes.**
- **Allow more bikes on buses.**

3. Biking and Walking

96 participants said that the County has captured the most important ideas to study, and 104 had other ideas or comments. 114 people made a comment.

Comments about **bike/ped infrastructure**

- Install **sidewalks where they are needed, in all communities** (11). Including in residential areas, to fill in sidewalk gaps, and less populated and unincorporated areas.
- **Ramps** for disabled users on sidewalks.
- Add additional **public right of way** for sidewalks and bike lanes rather than taking up driving lane capacity.(3)
- Use of motorized skateboards/**hover boards** .
- Build **bike/ped overpasses** as major crossings.
- More **underground ped crossings** (2). Including under TV Hwy at 170th to improve traffic flow and improve bike/ped safety
- **Mid-block bicycle and pedestrian crossings** on collectors and arterials.
- Support bike access to mixed use and commercial centers, such as Brookwood Parkway from US 26.
- Support **protected** bicycle facilities (shared roadways on existing arterials). (4)
  - Marked, separate bike lanes so that bicycles do not ride in the roads (safety concern).
- Support **separated** bicycle routes. (13)
  - Install concrete barrier buffers or designated trails that parallel roadways.
  - Would have less impact to vehicle traffic flow. (2)
  - Support **separated bicycle express route** between Hillsboro and Beaverton, and then extend to Tigard/Tualatin.
- Support *complete* **bike/ped networks** throughout the County. (6)
  - Develop a comprehensive multi-use path network separate from roadways.
  - Connect to major uses such as schools, commercial areas and parks. (2)
  - Fill in the bike/ped network in older portions of County (not just in new developments)
  - Should be built as part of a comprehensive plan.
- Focus on **bicycle lanes in rural areas**, which currently feel unsafe with fast vehicle traffic.
- **Support signal priority** for cyclists. Will increase safety.
- **Concern about signal priority** for cyclists. Would slow down traffic flow. Prefer separate facilities for cyclists. (2)
- Support more **secure bicycle parking.**
- **Proper drainage** off bike/ped facilities.
- Install **green bike boxes** at lights and intersections.

> The online open house presented these strategies for improving biking and walking for public review:
> - Install **protected bicycle and pedestrian facilities** on all collectors and arterials accessing major mixed-use and employment centers.
> - Install **separated bicycle express routes** accessing major mixed use and employment centers.
> - Increased bike and pedestrian **connectivity** in mixed-use areas
> - Pedestrian and bicycle **signal priorities** and amenities such as **bike parking**
> - **Reduce travel speeds** of arterials through downtowns and town centers to improve safety.

- **Bumps/cuts on bicycle paint lines** to alert drivers when they enter a bike lane.
- **Maintain** sidewalks and bike lanes. (2)

Trails

- **Complete and connectivity to regional trail** systems and parks. (3)
- Inexpensive cycling trails through **rough terrain**.

Reduced speeds and city design and **safety**

- Should **reduce travel speeds** beyond just city centers.
- **Concern about reduced travel speeds**. Would make traffic flow worse and have negative impact on economy. (3)
- **Road diets** to reduce travel speeds. (2)
- Protect neighborhoods from **cut through vehicle traffic.**
- **Restrict vehicle traffic** on certain roads at certain times of day.
- Increased **visibility/lighting** on walkways and bike paths. (2)
- Increased **walkability and mixed-uses** in neighborhoods so that people can walk/bike to nearby services (6). Require **new developments** to create walkable neighborhoods. (2)
- Fund **Safe Routes to Schools** programs. (2)
- Consider safety impact to all users—drivers, walkers and cyclists.

Connection with **transit**

- Prioritize bike/ped improvements that **support transit use.** (4)
- Bike paths that connect into neighborhoods to support **last mile travel**. (2)

Education and Fees

- Increased **enforcement against drivers** who injure bicyclists and pedestrians. (3)
- Increase education and **promotion of active transportation** and health and safety benefits. (3)
- Increased **education** about bicycling rules and safety. (3)
- **Bicycle registration/licenses** and enforcement against breaking traffic rules. (3)
- **Employer incentives** for bicycle commuters.
- Require bicyclists to **register and pay a fee** to fund improvements. (6)

Other comments

- **Support** all of these ideas. (5)
- **Aging and/or disabled population** will not be able to bicycle. (3)
- Travel by bicycle will **never become a major transportation mode** (6) Due to rainy weather, suburban character of county, and inability to move goods.

4. Transit

96 participants said that the County has captured the most important ideas to study, and 107 had other ideas or comments. 124 people made a comment.

Comments about the **proposed strategies**:

- Support **upgrading WES** to all day service. (2)
- **Eliminate WES** due to low ridership and negative impact on vehicle movement. (2)
- Support **extending high capacity transit (HCT) to Forest Grove and Sherwood.** (7) Prefer MAX extension. (2)
- Support **Bus Rapid Transit (BRT) on TV Hwy** with improved stops and pedestrian links.
- Support **Amber Glen/Evergreen streetcar** to reduce 185th congestion and provide transit to Cornell area.
- **Extend streetcar** to serve PCC Rock Creek and areas north.
- Support **express MAX to Portland**; making it faster to get through downtown Portland and to the airport .(6)
- Support **dedicated HOV/transit lanes** on major arterials and throughways. (2)
- **Do not remove travel lanes** for transit, as this would make congestion worse. Build new lines or lanes.
- Concern that **HCT through rural areas** will have negative environmental impact to farmland.
- No more transit on **Hwy 26**, which is already at capacity.

Support for **general improvement types**:

- Support **express options** with limited stops. (2)
- Support more **MAX and rail** lines.
- Support **major transit lines with grid service** to neighborhoods.
- Support **transit to jobs**/employment centers.
- Increase **last mile connections** between transit centers and destinations/centers and suburban areas (2). Perhaps with smaller buses/shuttles.
- Better **local transit** in neighborhoods and residential areas. (3)
- Instead of light rail/trains, provide **more bus service**—which is more flexible and less costly.
- Increased **bus frequency** and service. (2)
- Make transit more affordable for **short trips.** (2)

The online open house presented these strategies for improving transit for public review:

- More **bus routes and connector shuttles** to serve residential and employment areas
- Communications upgrades and **adaptive signals** in key corridors countywide that provide for transit priority
- **Upgrade WES** to all-day service, and extend WES to Salem
- Extend **high capacity transit** to Forest Grove and Sherwood
- Add **Bus Rapid Transit** on TV Hwy and Beaverton-Hillsdale Hwy
- Amber Glen/Evergreen **streetcar** to connect employment and residential areas
- **Express MAX service** to downtown Portland and Portland Airport (Blue and Red lines)
- Improved **bus service coordination** with transit providers in adjacent counties
- **Dedicated transit lanes** on throughways to support express transit services
- More **park and rides**

Suggestions to study **other transit types**:

- Build **subways/MAX lines underground.** (4)
  - MAX Blue line should run under Portland for commuter service.
- Use **freight rails tracks** for commuter rail (ex: along TV Hwy).
- Consider **passenger rail** and other long-distance public transportation.
- Special transit options for the increasing **older population**.

Connection to **land use**:

- More **explicit transit plans for high-growth and new residential communities** (such as South Cooper Mountain, Aloha, South Hillsboro). (9)

Suggestions to improve transit in **particular areas/routes**:

- HCT from **Sherwood to Beaverton/Hillsboro** (such as new MAX Line). (4)
- HCT connecting **Wilsonville to Hillsboro.**
- Service to **Durham Rd.** (2)
- Express bus line between **North Bethany** and high-tech employment area.
- Connect Southern **Tualatin/Sherwood to Wilsonville** by transit.
- Light rail from east of **Beaverton to NW Washington County.**
- Improved **transit to PCC Rock Creek** and areas north of Hwy 26. (2)
- Upgrade **Line 96** to all day service.
- More transit along **99W.**
- Rapid transit along **Hwy 217.**
- **Rail service on TV Hwy** from Portland to Beaverton.
- Express bus service from **Sherwood/Tualatin to Portland.**
- **Outer ring transit system** that links Progress Ridge, South Cooper Mountain, Tanasbourne, and PCC Rock Creek.
- High speed service to **South Cooper Mountain** and River Terrace. (2)
- Better connection to **Banks, Forest Grove and North Plains.**
- Build a new transportation corridor in the **new urban areas of west Washington** for vehicles and transit. (2)
- Light rail stop at **Sylvan.**
- Light rail from **Sunset Highway to Intel.**
- Express bus from **Portland to Intel** and high tech jobs.
- Enhanced bus from **McMinnville to Hillsboro** (to support new subdivisions in Gaston, Yamhill, and Carlton).
- Connections to **Newberg and Yamhill.**
- Commuter rail to **Battleground.**
- More transit service to **outlying and rural** communities.
- More **buses on North-South routes.**

Interaction with **other modes**

- Make it easier to **combine bicycling and transit** (i.e., easier to take bike onboard, more safe bike parking) (5)
- Improved walkability, **bike/ped access** and safety to transit stops (6)
- Install **bus pullouts** or improvement to provide **cars** with way to **bypass buses** that are loading passengers so that buses do not impede traffic flow. (6)
- Extend capacity of current P**ark and Rides** and build more new Park and Rides (6). Especially Sunset MAX station. (4)
- Do not support increased transit. (7) **Impedes vehicle traffic** and is inefficient. Invest in roads.
- Currently, **driving is faster** and more reliable than transit. (3)

Other **amenities and technology** to study

- Make bus **stops and shelters more comfortable**, clean and safe. (4)
- Improved **technology**, such as real-time bus arrival information. (2)
- **Driverless** transit vehicles.
- Study **Japanese transit** models.
- **Hyperloop** technology. (2)
- Use technology to provide **on-demand neighborhood transit** service.
- Make it easier to **carry goods** on transit. (3)

Funding and cost comments

- Determine whether there is **enough demand for transit** (through polls, statistics) before investing heavily in this mode. (3)
- Need **dedicated funding** for bike, ped and transit improvements.
- Educate the public on the significant public subsidies that pay for roads.
- Make transit users pay for improvements.

5. Freight (Trucks)

86 participants said that the County has captured the most important ideas to study, and 109 had other ideas. 118 people made a comment.

Suggestions for **other ideas to study**

- Study **restricted travel times** for freight. (20)
  - Incentivize or restrict truck travel to **non-peak travel** times to reduce congestion. (15)
  - Institute **congestion pricing** on freeways: trucks can only drive at peak times if they pay (5)
- Suggest **restricting the size of trucks that can travel in urban areas**, so that local roads are only carrying smaller trucks for local deliveries. (5)
- Limit truck size for safety; should **not be able to haul 3 trailers**. (2)
- Use more **freight rail** to take more trucks off roads. (11)
  - And to reduce the damage that trucks do to pavement. (2)
  - Solve labor issues to reopen **Port of Portland** and reduce number of trucks on roads. (2)
- Use **MAX light rail tracks** for freight transportation. (3)
- Increased **drone deliveries** to reduce local deliveries by truck. (5)
- Encourage **hybrid/electric trucks** or other environmentally friendly truck design. (2)
- Explore **driverless delivery/freight vehicles.** (2)
- **Underground freight systems** to move goods to major distribution centers/airports.
- Protected bike lanes for **cargo bikes/bike delivery.** (2)
- **Prohibit** trucks from **using left lane** on highways. (2)
- Review **capacity of our bridges** to handle trucks.
- **Separate routes** for trucks and bike/peds and small electric personal vehicles. (2)
- Need an **alternative North-South freight route** other than Sunset Highway to I-405 and I-5, such as a tunnel or bridge on Cornelius Pass Rd to avoid environmental impacts. (2)
- A **tolled freight-only route** that parallels US 26.
- Stimulate **local business** so fewer items need to be shipped in. (2)
- Explore the **impact of 3-D printing** on business and retail operations and freight movement.
- Develop a **new port** on the Columbia River as an alternative to Port of Portland.
- Allow **greater truck speeds** using auto sensing to manage traffic flow.

> The online open house presented these strategies for improving movement of goods by truck for public review:
> - **Expand capacity on major roads** as an alternative to freeway travel.
> - **Improve arterial roadways** to better accommodate trucks.
> - Construct **freight ramp meter bypass** lanes at key locations.
> - **Expand capacity on throughways** and give priority to freight.
> - **Dedicate truck lanes** on US 26, I-5, and new north-south limited access roadway with dedicated on-ramps at key locations.
> - Develop new **freight consolidation facilities** that improve access for Washington County goods

Comments about the **proposed freight improvement ideas**:

- Support **widening roads and adding freeway capacity.** (15)

- o Goal should be to take trucks off small urban and rural roads. (9)
- o New North-South Corridor (12). Include new bridge across Columbia River.
- o Add lanes to US 27 and Hwy 217. (5)
- o Widen Sunset Tunnel.
- o New North-South highway from Vancouver to Beaverton/Hillsboro area.
- **Concern about widening roads and adding freeway capacity.** (17)
  - o Will only encourage more driving and increased congestion. Does not solve the freight movement problem. (3)
  - o Would be detrimental to quality of life.
  - o Put in more sidewalks and bike lanes instead.
  - o Reduces farmland, which means diminished food security.
  - o Do not support build the restricted access North-South throughway. (6)
    - ▪ Would harm agricultural land.
    - ▪ Destructive and outdated strategy.
  - o Do not support widening Cornelius Pass Rd. (3)
- **Concern about routing more trucks onto roads** as an alternative to freeway travel. (17)
  - o This reduces livability and quality of life, and is an air and water pollution issue. (6)
  - o Especially keep trucks off of 175th.
  - o Negative impact to rural areas and farmland. (2)
  - o Freight should only travel on routes meant for trucks. (2)
  - o Concern about large freight vehicles in dense areas, and how this might compromise walkability and livability. (3)
  - o Concern about further bisecting neighborhoods.
- Support **freight consolidation facilities/distribution hubs.** (4)
  - o Support **localized/smaller freight hubs** rather than huge facilities.
  - o Put **freight hubs near freeways** so large trucks do not need to go into city cores. Large trucks could then transfer goods to smaller trucks to make local deliveries.
  - o Integrate with rail network.
- Support **dedicated truck lanes.** (4) On US 26 and to get around major bottlenecks.
- Do not support **dedicated truck lanes.** (7) Especially on I-5. (2) Would be inefficient and a poor use of limited travel lanes and discriminatory to other users. (2)
- Support **freight ramp meter bypass** lanes.
- Do not subsidize freight travel. (2)

6. Major Roads

86 participants said that the County has captured the most important ideas to study, and 154 had other ideas. 170 people made a comment.

Suggestions for **improvements to specific roads**

- **Straighten out curves** on rural roads. (2)
  - **Scholls-Sherwood and Cornelius Pass Rd.**
- **Widen Farmington and Sholls Ferry Rd.**
- **Overpasses and underpasses** on TV Highway.
- Make **TV Hwy** more of a limited access route.
- Create a **bypass option for TV Hwy.** (2)
- Improve travel in the area **around Nike and Intel** (i.e., Walker, Jenkins and Murray Roads). (3)
- Widen **Tualatin-Sherwood Rd** to 5 or 6 lanes. (3)
- Improve **arterials parallel to Hwy 217.**
- Improve **flow at Murray Blvd/Hwy 217** (sic) intersection. (2)
- Improve **Hwy 210** as an alternative to the proposed Cornelius Pass improvement.
- **Extend 175th to TV Hwy**, with bike/ped improvements.
- **Widen 175th and Tile Flat. Widen Roy Rogers to 4-lanes to Sherwood.**
- **Extend the Cornelius Pass improvement** to include a bridge to connect to Marine Dr and Columbia Blvd, and then a bridge across the Columbia River at North Portland Rd.
- **Connect 99W to I-5 well south of Wilsonville**. The proposed option (Basalt Creek Parkway extension) will cause traffic backups in Wilsonville.
- **Connect Hillsboro to Yamhill County**, either by expanding Hwy 47 or building a new, direct road between Hwy 219 and Hwy 47. (2)
- Address the **Sunset Hwy Tunnel** bottleneck. Widening Cornelius Pass will not solve this.

General suggestions

- **Build more parallel routes** rather than widening existing roads, for better overall connectivity.
- Add **carpool lanes.** (2)
- More options for regional commuters to avoid traveling through downtown Portland area.
- **Plan roads** before building. (2)
- **Study how to calm and manage traffic** rather than widening roads (for example, staggered employment and retail opening hours to disperse peak travel).
- **Consider more tunnels** as a way to manage traffic without impacting farms and open spaces.
- **Support creating a road grid** that connects existing routes with urban areas.

> The online open house presented these strategies for improving travel on our major roads for public review:
> - **Widen Cornelius Pass Road** between Hwy 26 and US 30
> - Connect and **widen arterials parallel to I-5 and Hwy 26** and upgrade with new transit and protected bicycle and pedestrian facilities
> - Connect and **improve existing rural roads** with passing lanes for trucks and bikes for travel between Hillsboro, Forest Grove, and Sherwood
> - Add **arterial crossings** of Hwy 26 and I-5
> - Add **new arterial** between Forest Grove and Hillsboro and between 99W and I-5
> - Improve **access management** along key section of TV Hwy and 99W
> - **Redesign** selected major **intersections** as roundabouts or grade-separated

Comments about **proposed improvements**

- **Support new arterial** between Forest Grove/Hillsboro and 99W/Sherwood. (7)
  - This would alleviate traffic on other arterials and provide a new connection. (2)
- **Do not support new arterial** between Forest Grove/Hillsboro and 99W/Sherwood. (9)
  - Would be harmful to rural farmland, urban areas, and cause environmental damage. (4)
  - Concern about increased speeds through farm lands.
- **Concern about widening Cornelius Pass Rd**. (11)
  - Would harm the environment, increase carbon emissions, and harm rural areas (9)
  - Would dump traffic into N/NW Portland that cannot handle it. (2)
- **Support widening Cornelius Pass Rd**. (2)
- **Do not support widening West Union/**arterials parallel to Hwy 26 on the north side, due to negative impact to farmland. (2)
- **Concern about roads through rural areas.** (4)
  - Building highways through rural areas will harm agricultural economy, livability, and rural communities. (3)
  - High speed roads in rural areas are unsafe and discourage use of other modes. (1)
- **Support the Around the Mountain Concept**. Many new houses and centers are planned for the South Cooper Mountain and South Hillsboro areas. Traffic is already bad and driving is unsafe on 175th Ave. (41)
  - It makes more sense to build a road around the area than to try to funnel traffic on the already-congested 175th Ave. Increased traffic on 175th is a safety concern. (21)
  - Include bus transportation on the route. (5)
- **Do not support Around the Mountain Concept**.
- Support **improving existing rural roads** with passing lanes.
- Do not support **improving existing rural roads**. Would allow fast traffic that harms farmland. (2)
- **Support connecting and improving existing rural roads** (all rural roads, not just between Hillsboro, Forest Grove and Sherwood).
- Support **new arterial between 99W and I-5.**
- Concern about **new arterial between 99W and I-5** because of farmland impacts.
- **Support arterial crossings** of Hwy 26 and I-5. (3)
- **Support adding bike lanes** to any improved rural roadways.
- Do not support **roundabouts** (bad for cyclists and pedestrians).
- Support **roundabouts.**
- Build the proposed new roads as soon as possible.
- Some of these improvements are **outside of the UGB**, and will encourage urban sprawl.
- **Do not support** these strategies. (8)
  - These strategies will result in increased vehicle trips. (2)
  - Instead, invest in better bicycle and pedestrian facilities. (2)
  - Will result in more congestion in the long run. (2)
- Generally **support these strategies** to reduce congestion. (3)

7. Throughways

110 participants said that the County has captured the most important ideas to study, and 108 had other ideas. 123 people submitted a comment.

Suggestions for **other ideas to study**

- **Widen Hwy 219** and straighten curves, then link to 99W.
- **Build an upper deck to Hwy 217** for express traffic.
- Improve **Hwy 99W.**
- **Widen Hwy 26** all the way to Portland. (2)
  - Build 2nd tier freeway above existing Hwy 26, with capacity for light rail.
- Improve access from Hwy 26 to I-5 North.
- Address **Sunset Tunnel bottleneck** before widening Hwy 26.
- Support **new extension to Hwy 30**, and extend even further to I-5 Bridge and to PDX airport. (2)
- Alternatives to proposed **new connection to Hwy 30**:
  - Build a new bridge to replace Lewis and Clark Bridge to connect Hwy 30 with I-5 far north of Portland.
  - New bridge across Columbia River that connects Hwy 30 with I-5 further north of Portland (ex: north of St. Helens, north of Sauvie Island). (4)
  - Need a way to get to Vancouver other than I-5. (2) Suggest extending the new Sherwood-to-Hillsboro highway north to Hwy 30 with a crossing into Washington.
  - Need new bridges across Willamette and Columbia Rivers.
  - Build a tunnel outside the foothills of the Tualatin Mountains.
- **Instead of the proposed new limited access road**, build a new road that gets I-5 traffic to Hillsboro. Suggest a route that uses Roy Rogers, Scholls Ferry and River road corridors, and then using Brookwood corridor to get to I-5.
- **Provide throughput in Hillsboro** to avoid "dumping" traffic there from the proposed limited access road.
- **Connect 99W to I-205 south of Wilsonville**, as an alternative to the Boone Bridge.
- Build an option to carry traffic from increased population in South Hillsboro and South Cooper Mountain areas.
- Build a **new limited access Rd between Hillsboro and Yamhill County** (closer to Newberg or Yamhill).
- Build a **freeway along the edge of Washington/Yamhill counties** (from west of Forest Grove to south I-5). (2)

The online open house presented these strategies for improving travel on throughways for public review:

- Construct **new limited access road** between Hillsboro, Sherwood and I-5/I-205
- Add **new interchange in/near Wilsonville** to access I-5 and I-205
- **Widen Hwy 217**
- **Widen Hwy 26** from Brookwood Pkwy to OR 217
- **Widen I-5** from Hwy 217 past Wilsonville,
- **Widen I-205** between I-5 and Oregon City
- Prioritize **new capacity for transit and freight**
- Dedicated **truck on-ramps** at key locations
- **Build a new connection to Hwy 30 and Columbia Blvd** from Germantown and Kaiser Roads via a new road (at grade or tunnel) and a new bridge across the Willamette

- Need **east-west thoroughfares** south and north of downtown Portland that avoid downtown.
- Build **dedicated lanes for commuters and freight trucks**, and have those users pay for the cost of improvements.
- New **Interchange that connects Cornelius Pass Rd to 99W.**
- Add many **safe bicycle and pedestrian crossings** over new throughways.

Comments on **proposed investment ideas**

- **Support/prioritize the new limited access road** between Hillsboro, Sherwood and I-5/I-20.5 (10)
    - With added new connection to Hwy 30, will free up capacity on existing freeways. (2)
    - **Prioritize the new limited access road soon** and reserve right of way (4)
- Concern about **new limited access road** between Hillsboro, Sherwood and I-5/I-205. (21)
    - Do not support, generally. (8) Has already been vetted and dismissed during the Western Bypass process. (5)
    - Impact to high-producing farmland and forest, and quality of life. (8)
    - Make this an elevated road with no exits to avoid impacts to sensitive lands.
    - Will bring increased traffic to the area. (2)
    - Concern about impacts to land between Dairy Creek and McKay Creek (natural habitat for migratory birds).
    - It does not address congestion issues for existing, closer-in communities.
    - Instead, upgrade Hwy 219 (save farmland).
    - Would not serve the major employment centers (Intel and Nike) because its terminus is too far away from place of work.
- Prioritize **widening Hwy 217.** (4) Needs improvement, especially to move freight trucks.
- Prioritize **widening Hwy 26.** (3)
- Concern about **widening Hwy 26 and Hwy 217**, which will never have enough capacity.
- Prioritize a **new connection to Hwy 30** from US 26.
- Concern about **new connection to Hwy 30** and Columbia Blvd via Germantown. (18)
    - Impacts to farmland, important wildlife habitat, and Forest Park. (10)
    - Kaiser Road was not designed to handle the volume of traffic that a new road or tunnel would generate.
    - Does not seem necessary. Trucks should not be using Cornelius Pass Road.
    - Need to protect rural areas and build within UGB, per legal agreements. (2)
- Widening roads and freeways **will cause more people to drive** and contribute to more congestion. (14)
    - New capacity for transit and trucks should be exclusively for these uses, without added auto capacity.
    - We can't build our way out of congestion.
    - Building new roads and acquiring right of way is extremely costly and time consuming.
    - Goal should be to *reduce* vehicle traffic, not encourage it. (3)
- **Support throughway widenings**, generally. Should be our top priority.
- **Prioritize the Around the Mountain concept first.** (16)

- - Then build the new limited access road between Hillsboro, Sherwood and I-5/I-205. (10)
  - Then focus on some of these longer term throughway improvements. (6)
- Good long term plan, but **need short term relief now.** (4)
  - Especially in South Cooper Mountain area. (2)
  - Need to improve Sherwood to Hillsboro connection in short term.
- **Autonomous vehicles** will increase the need for roadway capacity.
- Do not increase population density and extend UGB in a way that threatens farm and agricultural resources. (2)
- Concern about **financial implications** of all of these improvements.

Comments that pertain to **other modal categories**

- Increased rail to move people and goods, to reduce need for capacity improvements.
- Invest in ped/bike improvements. (4)
- Improve mass transit. (6)
- Support congestion pricing.
- Focus on reducing number of cars and building denser development.
- Prioritize major road/arterial improvements before building the new North-South throughways. The more urgent need is to manage congestion to high-growth areas. (2)
- Focus on incentivizing off-peak freight travel.

8. Other Challenges

The online open house asked if there are there other transportation challenges the study should consider. 37 people provided a response.

- Look at **short term** improvements, not just long term.
- Figure out how we can make the **best use of existing infrastructure.**
- **Connect the existing road network** wherever possible. (2)
- Look more seriously at **reducing single occupancy vehicle** travel. (4)
    - Incentives or requirement for large employers to encourage employees to commute in ways other than SOV travel.
    - Learn *why* people travel alone, and address the root cause. (3)
    - Incentives to employers who encourage telecommuting.
- Plan for a future where **vehicles that run on fossil fuels will become obsolete.**
- Incorporate **solar technology** into roadways.
- Find ways to **encourage non-peak travel.**
- Build a **complete, safe bike/ped network.**
- Build more **sidewalks.**
- Incorporate more **traffic calming and speed regulation.**
- Make **transit more affordable** for users (ticket prices). (2)
- **Improve transit** service.
- Increase **transportation safety** for all users (Vision Zero).
- Integrate **land use.**
    - More neighborhoods with complete services, to encourage walking and biking. (2)
    - Allow farms to co-exist with housing.
    - Develop **transportation plans** for new residential and growth communities.
- Consider **earthquake resiliency.**
- Figure out **how to fund** improvements.
- Find **dedicated funding for non-road projects.**
- Increase the **cost of driving** by implementing a carbon or highway tax.
- **All modes should pay the true cost** of their chosen travel mode.
- Reduce the amount of **urban traffic on rural roads.**
- Provide additional **parking** for vehicles.
- Reduce the number of cars on 175th. (3)
- Find ways to **reduce congestion.**
- Plan for **impacts of climate change.**
- **Protect natural resources** (clean air, water, farms, forests). (2)

Question #3: Do you have any other comments?

30 people provided additional comments on the online house, and 21 people provided comments through emails, letters, and the online comment form.

Many of the comments supported **prioritizing some mode or transportation challenge**

- Focus on reducing congestion and improving traffic flow. (2)
- Improve bike infrastructure. (2)
- Better planning for public transportation.
- Prioritize sidewalks and safe walking. (2)
- Prioritize active transportation.
- Prioritize maintenance and fixing existing infrastructure.
- Focus on pricing strategies, with all modes paying for their mode. (2)
    o Develop innovative pay-as-you go pricing for all travel modes.
- Important to bring land use and transportation strategies together, rather than looking at them separately.

Some supported **specific improvements**

- Support the North-South limited access freeway to address congestion. (2)
- North-South limited access freeway should be within the Urban Reserves.
- Building a new road through the West Hills would affect farmland and wildlife areas. (2)
    o Alternative: Tunnel under the Tualatin Mountains to connect to Hwy 30.
- Reduce travel speeds and traffic on 175th.
- Focus on traffic calming and redistributing hours of traffic.
- New road from Tualatin to East Lake Oswego.
- Better visibility of paint lines on roads.
- Prioritize coordinated traffic signals, especially along Hwy 217 and Scholls Ferry Rd.
- Need better bike/ped facilities in Helvetia and other rural parts of Washington County to provide transportation options other than driving.
- Support the Around the Mountain concept to improve safety. (2)

Some provided **suggestions for collaborations and partnerships**

- Collaborate with cities to encourage multi-use zoning.
- Collaborate with other jurisdictions and private companies to develop smart Transportation Demand Management strategies.

Comments related to **values**

- Important to prioritize saving productive farmland and natural areas. (3)
    o This including keeping freight and urban traffic on urban—not rural—roads
- Maintain small town atmosphere of Hillsboro.
- Prioritize safety and health of communities. Implement Vision Zero. (2)

Comments related to **evaluation process and measures**

- For the modeling to be informative, structure investment packages that are substantially different and can show the different impact of travel demand reduction strategies (including bike, ped, and transit projects) versus road capacity projects.
- The study should answer the following questions with regard to land use:
  - Effect on farmland and rural areas.
  - Impact to growth and density in centers versus outlying areas.
  - Costs for public agencies and individuals.
  - Which areas of the County will be affordable.
  - How much land would be used for roads and parking.
- The study should determine if and to what extent the investment packages challenge or contradict the rural reserves commitment (HB 4078). (3)
- The evaluation should help determine how the investment packages relate to: walkability; health and healthcare costs; equitable investment in neighborhoods of all income levels; safety of children walking to school; and the time/cost to drivers who chauffeur non-drivers to destinations because of lack of transportation options.

Comments on the three **Transportation Investment Options**

- Option C has the real potential to take significant farm acreage, bisect multiple agricultural communities, bring additional conflicts to the movement of farm machinery, among other negative agricultural impacts.

Other comments

- Concern that the study has too big of an assumption that Intel will have the same or larger economic and demographic impact as today.
- The study has done a good job of including the best improvements to study (2)
- Involve the whole community in this study, beyond the online survey tool
- Rural interests appear underrepresented on the Study Advisory Committee
- Concern that the online open house questions appear biased against vehicle travel
- Thank you! (2)

The online open house asked participants to provide information about the way they travel, how they heard about the online open house, and select demographic information.

9. ZIP Code of Primary Residence

279 people provided their zip codes. Most said they live in the Beaverton, Hillsboro, and Tigard/Tualatin areas. The following chart lists all zip codes provided by participants.

Zip Codes	Corresponding Area	Number of responses
97003, 97005, 97006, 97007, 97008, 97078	Beaverton-Aloha	98
97113, 97116, 97119, 97133	Cornelius/Forest Grove, Gaston, North Plains	20
97123, 97124	Hillsboro and surrounding areas	56
97062, 97140, 97223, 97224	Tigard, Tualatin, Sherwood, King City, Durham	31
97229	Bethany/NW Portland	22
97070	Wilsonville	2
97106	Banks area	2
97225	Beaverton/SW Portland	7
97201, 97202, 97203, 97204, 97205, 97231, 97211, 97213, 97214, 97219, 97281, 97221, 97239	Portland	29
97056	Scapoose/Vernonia	1

10. Do you live in Washington County?

265 respondents answered this question. 226 (85%) said they live in Washington County, and 39 (15%) said they do not live in Washington County.

11. Do you work or go to school in Washington County?

260 respondents answered this question. 175 (67%) said they work or go to school in Washington County, and 86 (33%) said they do not work or go to school in Washington County.

12. How long is your typical one-way commute to work or school?

257 respondents answered this question. 126 (49%) said their commute is less than 30 minutes, and 67 (26%) said their commute is between 30 and 60 minutes. 22% said they don't commute.

How long is your typical one-way commute to work or school?
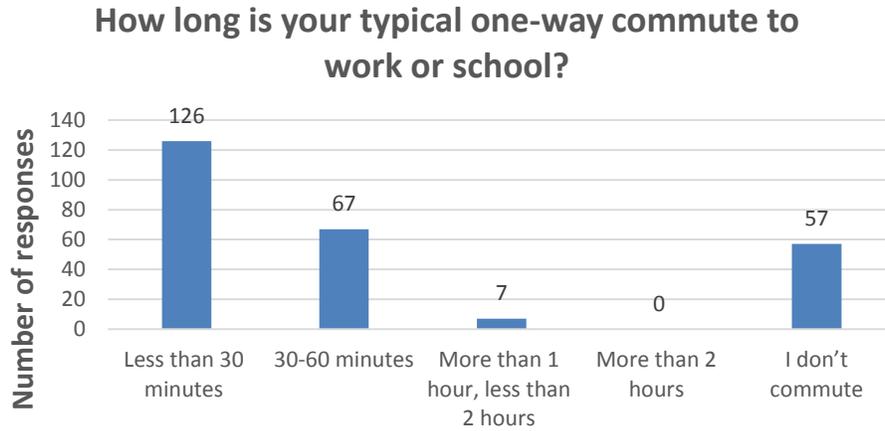
13. How do you usually commute to work or school?

270 respondents answered this question. Most (60%) said that they drive alone. 10% carpool, 12% take transit, 10% bike, and 7% walk.

How do you usually commute to work or school?
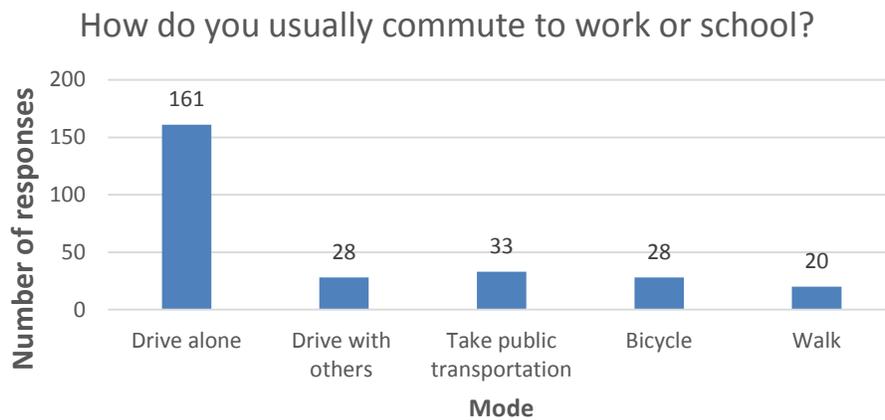
Mode Other: Some people said they usually commute using other modes, including:

- Work at home (6)
- Retired (5)
- Public transportation limited with poor parking access at Sunset transit center (2)
- Drive during winter, mostly bike the rest of the time

14. How did you hear about this online open house?

How did you hear about this online open house?
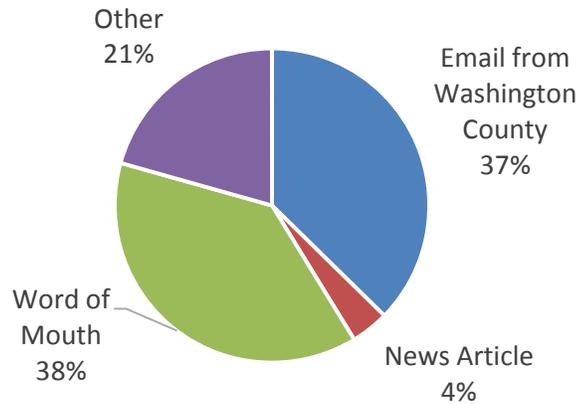
Most people heard about the online open house via email and by word of mouth. Some said they heard about the online open house through some "other" means, including:

- Email (12)
- 175th Ave. Neighborhood Assn. (3)
- Westside Economic Alliance (2)
- BTA (2)
- City of Hillsboro (5)
- Norwood neighborhood blog
- SW Trails email newsletter (2)
- Save Helvetia (2)
- Social Media (7)
- Nextdoor (4)
- Other (2)

- CPO mailing
- CPO-6
- Flyer in my door
- Ibach CIO
- Paper notice at Sherwood, OR City Hall.
- PMAR
- Postcard handout
- Rob Dixon COH (2)
- Was paid to do this
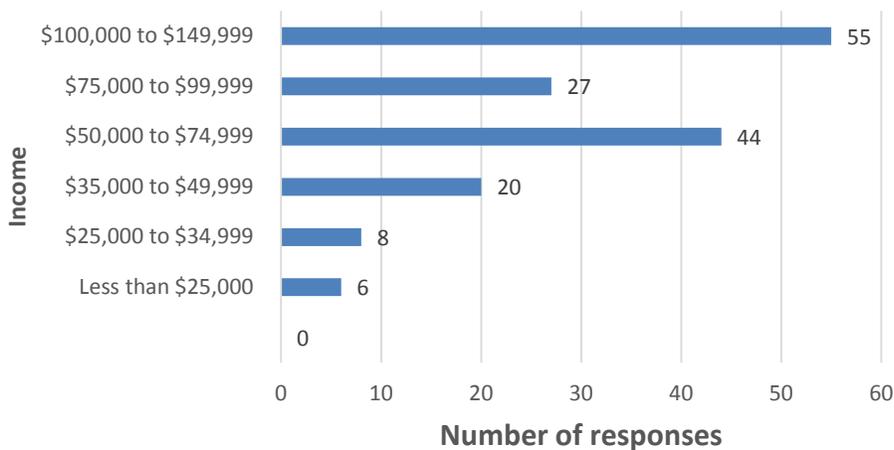- Web Site

15. What is your age?

204 respondents indicated their age range. They most commonly said that they are between 55 to 64 years old.

How old are you?
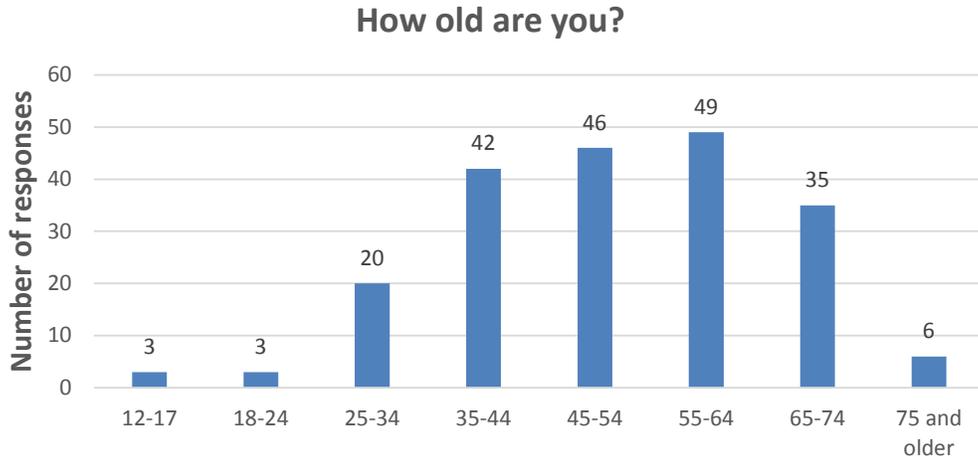
16. With which gender do you identify?

219 respondents answered this question. 112 (52%) said they are male, and 103 (47%) said they are female.

## 17. What is your total annual household income?

18. What languages do you speak at home?

223 people answered this question. 202 (91%) said they speak only English at home. 14 people (6%) said they speak Spanish at home, and 7 people (3%) said they speak some other language at home.

Other languages listed include: Russian, French, German, Hebrew, Farsi and Punjabi.

What languages do you speak at home?

- English ■ Spanish ■ Other
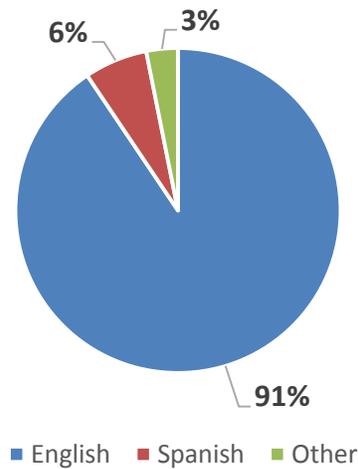
19. What is your race/ethnicity?

214 people answered this question. Most (84%) said they are Caucasian. 6% said they are Hispanic, and 3% said they are Asian.