

# TV HIGHWAY CORRIDOR PROJECT

## Opportunities and Cost Estimates

AUGUST 2019

### Forest Grove

- Enhanced midblock pedestrian crossings, lighting, street trees, ADA ramp upgrades, and sidewalk widening/infill between Hwy 47 and Yew Street

High Level Cost Estimate:  
\$10-15M

### Cornelius

- Sidewalk infill and pedestrian crossings between Yew Street and 345th Avenue

High level cost estimate: \$5-10M

### Cornelius/Rural

- Complete street-type boulevard between 330th and 345th Avenues with 4, 11' travel lanes, center planted median, protected cycle-tracks, sidewalks and bus pull-outs

High Level Cost Estimate:  
\$10-15M

### Hillsboro

- Downtown Hillsboro Transit Center and street two-way conversion

High level cost estimate: \$5-10M

### Hillsboro

- Enhanced midblock pedestrian crossings, upgraded intersections, bus stop improvements, lighting, street trees, ADA ramp upgrades, and sidewalk widening/infill between SW 17th Avenue and Cornelius Pass Road

High level cost estimate: \$45-55M

### Aloha

- Complete street and enhanced transit between Cornelius Pass Road and 160th Avenue
  - Raised median at warranted locations
  - Pedestrian-scale lighting
  - Protected and separated bike lanes and improved sidewalks
  - Transit priority treatments
  - Bus stop enhancements

High-level cost estimate: \$60-75M (curbside bus); \$90-120M (center-running bus)

### Beaverton

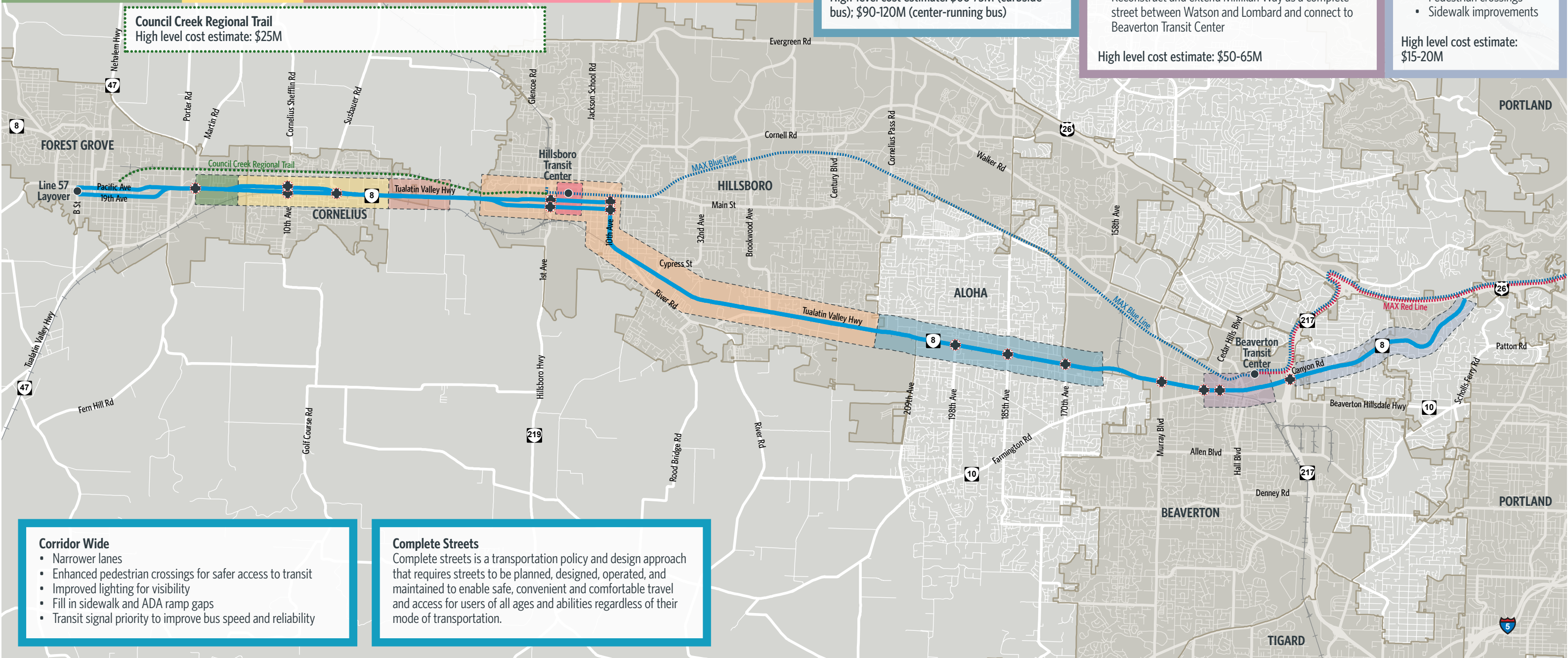
- Complete street along Hall Blvd, Watson Ave, and Canyon Rd, cycle track or shared use path, pedestrian scale lighting, intersection improvements and wayfinding
- Construct at-grade rail crossing safety improvements at six intersections in downtown Beaverton to establish Rail Road Quiet Zone to mitigate noise impacts
- Construct improvements to enhance parallel bike routes on Broadway and Millikan
- Reconstruct and extend Millikan Way as a complete street between Watson and Lombard and connect to Beaverton Transit Center

High level cost estimate: \$50-65M

### OR217 to US26

- Study opportunities for center median, protected cycle-tracks, sidewalk infill, pedestrian crossings and bus pull-outs
- Cost estimate reflects these projects at key locations (e.g. transit stops):
  - Center median
  - Pedestrian crossings
  - Sidewalk improvements

High level cost estimate:  
\$15-20M



### Corridor Wide

- Narrower lanes
- Enhanced pedestrian crossings for safer access to transit
- Improved lighting for visibility
- Fill in sidewalk and ADA ramp gaps
- Transit signal priority to improve bus speed and reliability

### Complete Streets

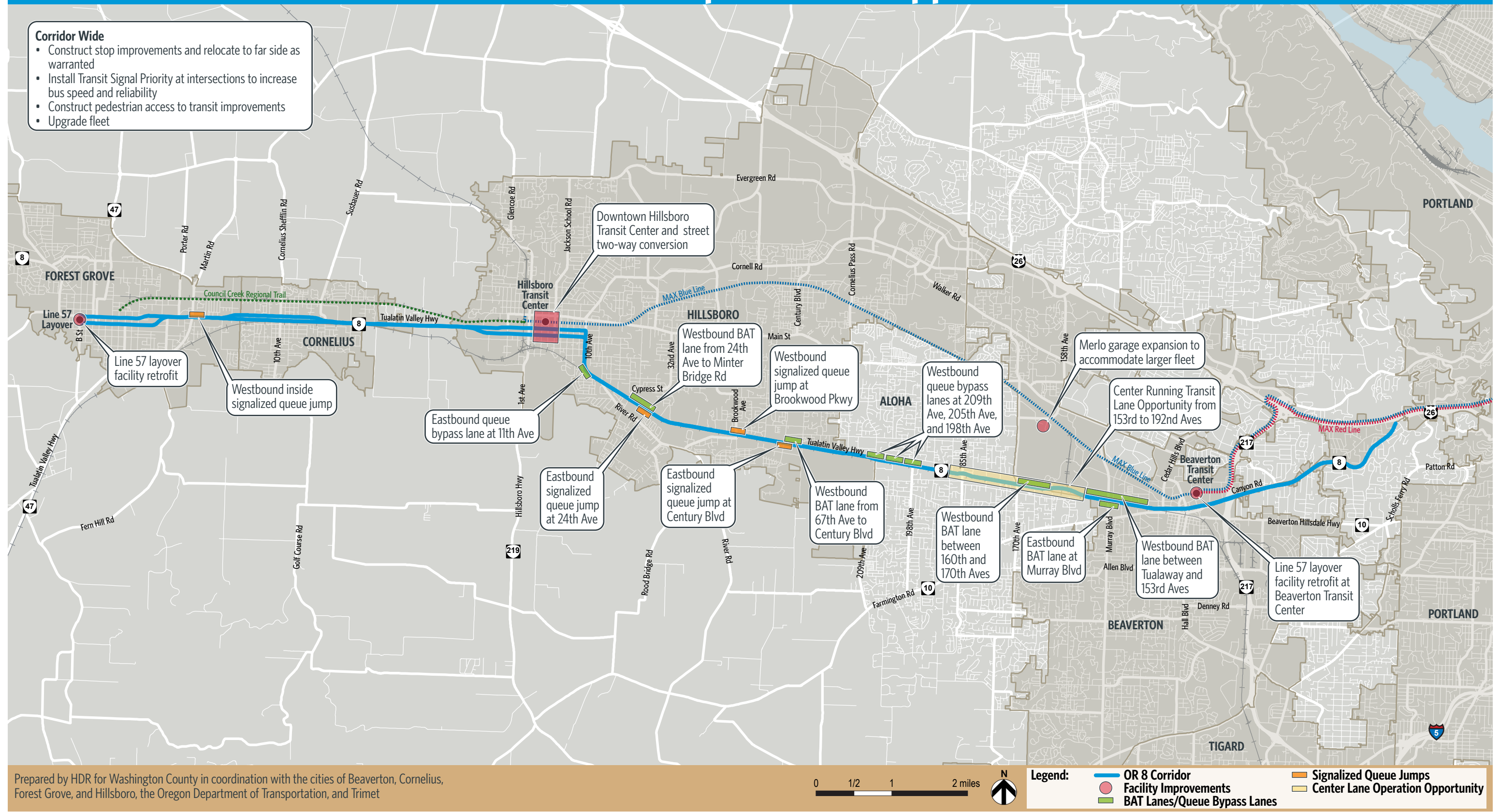
Complete streets is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation.



# TV HIGHWAY CORRIDOR PROJECT

## Potential Transit Improvement Opportunities

AUGUST 2019



## SURVEY FINDINGS: OVERVIEW

**NOTE: Participants in this survey were self-selected and the results are not statistically valid. Instead, the survey responses offer qualitative insights into lived experiences on corridors, and their responses to and suggestions about possible regionwide programs.**

The 2020 Transportation Investment Measure Survey was made public on May 6 and closed on July 8, 2019. 3,458 responses were collected.

Overall, survey responses highlighted strong support for transportation improvements and investments that prioritize pedestrian and bicycle safety, as well as improvements that aim to mitigate and decrease greenhouse gas emissions and to support safe traffic flow with strong support for prioritizing transit during peak travel times.

The summary below includes highlights from each of the main sections of the survey – providing a snapshot of the key learnings, emerging themes, and responses from survey participants. The summary is split into three core sections: Demographics, Corridors, and Transportation Improvements.

Survey participants were invited to respond to a series of optional demographic questions, including the zip code of their home address; information about their gender and racial/ethnic identity, as well as information pertaining to any experience or identity of living with a disability, age, and household income.

Most questions provided a variety of drop-down options, responses were optional, and provided room to write in additional answers or responses they felt were not provided within the menu of choices built into the survey.

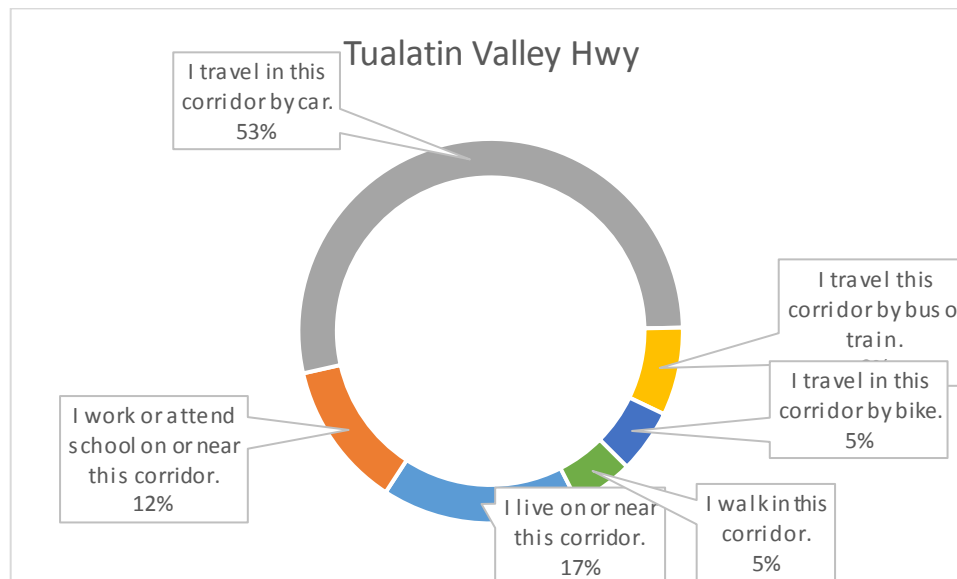
Out of those who completed the optional demographic question, responses highlighted the following trends:

- Most respondents (55%) lived within a Multnomah County Zip Code
- 11% of survey participants self-identified with a racial and/or ethnic identity other than white, with 89% of respondents identifying as white.
- 53% of respondents identified as Woman, 44% as Man, 2% identified as Gender Non-Conforming and 1% self-identified as Transgender
- 46% of respondents were under the age of 44
- 15% of respondents identified as living with a disability, with 5% of those defining their disability as Ambulatory (*which was defined as ‘unable or having serious difficulty walking or climbing stairs’*)
- 61% of survey respondents had a household income (pre-tax) over \$74,999

These findings when presented in comparison to demographics for the region showed the survey respondents to be mostly representative of the demographics of the Metro region as a whole, with the exception of age and household income (in which survey participants presented as older than the median age, and experienced a household income higher than the median household income for the Metro region).

A full summary of these demographic findings has been included in Appendix A.

## EXPERIENCES ON TUALATIN VALLEY HIGHWAY



### TUALATIN VALLEY HIGHWAY: COMMENTS FOR DECISION MAKERS

Respondents would like to see transit improvements that fall in-line with housing and business development in South Hillsboro. Traffic light timing is an issue for many community members, with a large number of respondents expressing the need for synched lights during heavy travel periods.

#### Infrastructure and Design

- “Awful road planning. Too many side access routes making it a very dangerous corridor especially through Aloha and Hillsboro. Travelling this corridor through Beaverton is congested with traffic. It's the worst.”
- “TV Highway has become much worse in the 20 years that I have lived here, and even though I drive it every day, it takes longer due to all the traffic lights that contribute to backed-up traffic and slowed traffic speeds.”
- “With all the infill in Washington County, will become impassable before too long, not enough options to get North or South from TV Hwy by anything but car.”
- “There are insufficient public and active transportation options in this corridor where incomes are among the lowest, people of color and seniors are a high percentage of the population. I try to cycle from Forest Grove to Hillsboro and find it dangerous and very unpleasant. There is no Express bus line, either. What do you want taxpayers in this area to do?”

#### Cyclists and Pedestrians

- “Always busy, a place I wouldn't dream of walking along, let alone trying to cross except at major intersections.”
- “Lacks sufficient lighting and pedestrian facilities. Travel lanes are too wide in portions. Needs more ped. Crossings over rail line or other interventions.”
- “Needs bike lanes, badly.”
- “The bike lanes aren't protected & there is a lack of marked crosswalks, despite more & more housing.”

### **Congestion and Traffic**

- “Downtown Beaverton traffic lights are awful. Get the fellow who timed the lights on NE Weidler to help with the timing!”
- “If the lights were timed to go green together and red together traffic would flow much better. Your light goes green but since the next light is still red it's all just a grid lock and no one goes anywhere.”
- “Had a business on this and the traffic congestion has continuously gotten worse.”  
“I avoid TV Highway whenever possible. It's so SLOW!”
- “Left turning lane at Murray & TV Hwy (NB to WB) is short signal, causes traffic to back up significantly near Toyota Dealership. Lights not sequenced properly causes slow going traffic.”

### **Transit**

- “Bus service is not frequent enough. It’s only twice an hour.”
- “I live here. I love the fact that the busses come so frequently. However I work swing so if a coworker is late it takes me over 2 hours to get home unless I want to pay 30.00 for a cab”
- “In order to use the MAX line it will need to be extended to Forest Grove, Oregon”

### **Speed and Safety**

- “One of the deadliest corridors in the region for pedestrians.”
- “It’s getting a lot more dangerous. Too much housing going in without regard for traffic.”
- “Pretty good except at intersection in Raleigh Hills, Scholls Ferry, TV Hwy etc. DANGEROUS. NEEDS RESTRUCTURING.”
- “Why do people drive 35 mph in the left lane when the speed limit is 45 mph?”

## **RESPONDENT COMMENTS**

### **Infrastructure & Design**

1. 50 mph? Really? Rebuild entire right of way to provide frequent, fast transit, safe cycling and walking, and much safe and more frequent ped crossings to this critical regional corridor serving low income communities of color
2. A critical corridor to improve safety and mobility for all modes
3. A key corridor ripe for redevelopment to improve vehicular; bike and ped transportation.
4. A mess most of the time
5. A nightmare at 5pm.
6. Add more lanes
7. Adequate.
8. All need improvement whether street light timing, widening or better surfaces
9. Another example of a failed METRO design.
10. Another slow motion train wreck (hwy 99 redux)
11. Awful Hillsboro to and from 405. Consistently worse every year .
12. Awful road planning. Too many side access routes making it a very dangerous corridor especially through Aloha and Hillsboro. Travelling this corridor through Beaverton is congested with traffic. It's the worst.

13. Been a while for me on this one, but it was a fairly easy commute.
14. Busier
15. Can be so slow and sluggish, so many lights.
16. Cars are the problem.
17. Cars don't stop at crosswalks unless there is a light.
18. Commutes along this route are not smooth.
19. Corridor is not a highway although it is in the name. Could benefit with times light signals to match the speed limit.
20. Could be better, could be worse. Worst parts are around Beaverton Town Center/Hwy 217 interchange.
21. decrease SOV mode split
22. Despite a lot of signals, good traffic flow.
23. Do not allow any mid-block crossings. They are an annoyance and they hold up traffic.
24. Downtown Beaverton is extremely congested, and the city is taking steps to worsen it. There should be a bypass route that takes through traffic away from the shopping district. People do not like to use US 26 for this purpose because the highway is subject to unexpected backups.
25. Downtown Beaverton traffic lights are awful. Get the fellow who timed the lights on NE Weidler to help with the timing!
26. Drive mainly other than rush hour so I don't find it too bad.
27. Driver behavior is as bit a problem as congestion itself. (cutting in, running signals, etc.)
28. Eastbound better than westbound due to limited access. Still mortal danger to bikes, left turning cars, and all vulnerable road users. #1 vision zero outside portland
29. Epic slow.
30. extraordinarily difficult to walk, drive, and take a bus through this corridor. Feels extremely unsafe for pedestrians and travel times for all modes is severely inconsistent
31. Extremely slow, tons of stoplights
32. Figure out a better flow through Beaverton
33. Fine
34. Get rid of the homeless, bikes and bike lanes
35. get rid of traffic lights; this should be a freeway
36. Getting busier, often takes much longer than it should to get to the Western edges of Washington County
37. Getting much worse with South Hillsboro coming on line.
38. got busy after 1980's but seems to have stabilized
39. Gridlock to downtown Portland, build more roads, less bike lanes. Most people commute in cars.
40. Had a business on this and the traffic congestion has continuously gotten worse
41. Hard to cross in Downtown Beaverton by car, bike or as a pedestrian
42. I attended Washington county's open house for improvements to this corridor. I was favorably impressed.

43. I avoid TV Highway whenever possible. It's so SLOW!
44. I drove this a lot in past years, visiting people with disabilities in my job. Its a corridor built for cars, not people.
45. I hate driving this stretch because of the signal timing, and the amount of signals. Aesthetically, is also an ugly stretch of road, only plus really are the view you get of Mount Hood on clear days. .
46. I use this highway the most. Critical corridor for Washington County. In 2011 I could travel from Cornelius Pass Rd to 217 in 10-15 min, it now takes 25-30 min. Traffic will only worsen with the development of the South Hillsboro neighborhood and continued growth at Nike and Intel and numerous other smaller business in the area. Improvements to add capacity, improve traffic flow, improve safety (too many pedestrians crossing at unmarked crosswalks).
47. I wish the tracks would go away. This one is tough, needs landscaping and trees, bike and ped facilities - transit.
48. I worry about the impact of South Hillsboro development on travel on this road.
49. I'm not here enough to have any opinion except, I see no need to add any kind of expansion
50. If the lights were timed to go green together and red together traffic would flow much better. Your light goes green but since the next light is still red it's all just a grid lock and no one goes anywhere.
51. Improve the tming of the signal lights
52. improve traffic flow and create additional space for emergency responders
53. Increase the amount of sidewalks and sidewalks space. Add in pedestrian crossings as there is a sore lack of them through out the road. Make much needed repairs and finally keep up with maintenance. Improve bus stops. Add bus only lanes and priority at intersections for buses and pedestrians to vastly improve traffic congestion, travel times and ensure the frequent service of the bus line allowing it to be on time all the time. Consider adding and using articulated buses on the 57 route.
54. Is pretty good would be better if there was an expressway to bypass all business
55. Is there a way to make this a better alternative to Hwy 26?
56. Is there any way to couple farmington and TV Hwy through Beaverton to make 2 large one way streets?
57. is this sustainable? What is the future budget to support this?
58. It is a nightmare now and the county allows the developers build 20-30-40 thousand homes. No plans, no parking, no bus No stores close by.
59. It would be wonderful to keep the wilderness around the highway rather than widen it at this time.
60. It's often too stop and go. Would be great if traffic could flow through this area more smoothly.
61. It's getting a lot more dangerous. Too much housing going in without regard for traffic.
62. It's okay
63. Lacks sufficient lighting and pedestrian facilities. Travel lanes are too wide in portions. Needs more ped crossings over rail line or other intervention to address RR. e.
64. Left turning lane at Murry & TV Hwy (NB to WB) is short signal, causes traffic to back up significantly near Toyota Dealership. Lights not sequenced properly causes slow going traffic.
65. Less space for cars. More safety, space, and money for everything else
66. Light timing



67. Like 185th, I live near bus stops for TV Hwy - but it's very unpleasant (and sometimes scary) to walk from stops along TV HWY to a crosswalk, then across a sea of parking (this would be necessary if I took TriMet to the grocery store on TV Hwy). Instead, I end up driving...
68. Limit access please.
69. limit/reduce/combine driveways
70. Looks like sprawl to me within the urban growth boundary. all those parking lots and mini-malls should be replaced by dense (5+ stories) and pedestrian friendly development. Let's get enough density for BRT through here.
71. major opportunity for all modes to be better served. when the 10000 folks move into SOuth Hills boro look out
72. Major problem with south Hillsboro dumping 1000's of cars a day on the road
73. Make it wider.
74. May be beyond hope. Too many driveways to create safe capacity. Study it again.
75. More bus service
76. More dedicated right turn lanes for example at Cornelius pass Rd.
77. More enforcement of traffic laws
78. Mostly flowing, but many lights and great deal of traffic makes it slow sometimes. Road width has not kept up with amount of traffic.
79. Moves pretty well except for the bottlenecks at 185th Avenue and nearing Hwy 217. Bottleneck at 198th can be a problem at times. Way improved in Aloha with South Hillsboro's new road extensions. Need to improve transit amenities and pedestrian access to transit stops.
80. much like BH Highway especially through Beaverton. So slow, and yet speed limit does not make sense for the amount of traffic.
81. Murray and TV HW needs some love. It is getting crazy here. With new development at the corners of this intersection, and Nike expanding, this is another spot that is becoming difficult to travel through
82. Need a north-south corridor, there is too much traffic in murray
83. Need access management, more effort by ODOT and TriMet to support existing transit riders for the 57 bus which is a great line. Need more lighting for safety!
84. Need more access control, better synchronization of signals, last mile connections. Bus line 57 is already excellent. Don't screw it up!
85. Need to look at traffic signal time going east and west from I-5
86. needs more lanes. Add right turn lanes along with left turn lanes
87. Needs to be widened by a lane each direction
88. Nice if it was lined with workforce housing, since the 57 bus is running on 15 minute cycles.
89. Nightmare highway. Reduce speeds, enforcement. Protected bike lanes.
90. No issues.
91. Not a problem.
92. Not enough lanes, turn lane lengths are often inadequate
93. Not much to say
94. Not sure



95.	Not too bad other than rush hour.
96.	Nothing exceptional except for the stretch between Aloha and Hillsboro.
97.	Occasionally have to drive out here. Ugh.
98.	OK as is
99.	One of the deadliest corridors in the region for pedestrians.
100.	Passable most hours in both directions through Beaverton and Aloha
101.	Please make it car friendly.
102.	Please put the off ramp BEFORE the on ramp
103.	Pretty good except at intersection in Raleigh Hills, Scholls Ferry, TVHwy etc. DANGEROUS. NEEDS RESTRUCTURING.
104.	Really needs a facelift from Cornelius pass to Cornell. Can take very long to travel if you hit the lights wrong.
105.	Recent construction on the South Hillsboro development has greatly improved this road in that area. Thank you.
106.	Repaving please
107.	Ridiculous civil engineering in a number of spots. Regularly wish there was a rapid transit Max line to downtown.
108.	Ridiculous. Slow, lights never seems timed. Avoid at all costs. There needs to be a West Hillsboro / Forest Grove to I-5 passage.
109.	Road condition is horrible in many areas!
110.	rough pavement between Cornelius Pass and Imlay, increasing business lots on and off of street congesting right hand lane, signal needed on crosswalk near 173rd (Boys Home)
111.	Since HWY 217 is ineffective, the volume of traffic is far too high for this road and will only get worse with the opening of reeds crossing. There are also too many stoplights for the hwy to be effective as a hwy
112.	Slow the cars down. Build better bike/ped infrastructure. Build a Light Rail down the middle.
113.	So ugly, but getting better with redevelopment.
114.	Super busy road with many lights. Very unattractive area with few active transportation options. Many folks dangerously crossing not at crosswalks.
115.	Super important corridor that is going to explode with large new housing development soon. Would benefit from modernized lighting, sidewalks and extra visibility for biker's path. Feels dangerous to bike here with the cars speeding by so close but I see plenty of people using it despite this.
116.	Sync lights please
117.	The focus for improvement should be primarily on improving traffic flow for automobiles
118.	This corridor needs more car lanes
119.	This corridor really needs light rail and consistent speed zones, there are too many speed changes.
120.	This entire highway should have been converted to a limited access freeway 40 years ago or more. The obvious challenge is how to connect it to 217 without flattening downtown and historic Beaverton. Tunnels? The amount of slow traffic and stoplights is mind-numbing, particularly at rush hour. Hwy 26 is the only other option to travel east/west from this entire area, which is kind of a joke and just creates funnels and backups further up the line.

121.	This highway suffers from many of same problems as HW 99W - too many entrances for traffic speed
122.	This is a high crash corridor. Pedestrians are constantly killed on this road. ODOT is negligent in its responsibility to make this a safe street. We need protected bike lanes, safe pedestrian crossings, lighting, narrowed lanes, and fewer car lanes.
123.	This is an issue at 209th in particular and the South Hillsboro development will increase the problems.
124.	This is really frustrating and difficult to travel on. Years ago I could take TV Hwy to Portland in less time than Hwy 26. Now there is congestion on both and it's super difficult to get into Portland on either.
125.	This one is usually not too bad.
126.	This road needs more traffic lanes and signal light coordination. Serious outdated design for traffic load.
127.	This road should be a separate highway and not subject to countless signals. Takes too long to travel and is very congested
128.	Tons of traffic and suggestion.
129.	too many drive-thrus, speed limits vary too much, and it needs a reroute of many buses that cross over TV highway, West Slope is forgotten part of this orphan highway
130.	Too many lights
131.	Too many lights not synced; traffic is heavy. Major intersections need more lanes or longer lights.
132.	too many people disregarding speed limits, crosswalks and lane marking
133.	Too many people still change lanes in or after the tunnel. Traffic cameras for ticketing when people try to use the middle lane to get around the back up. Or spikes.
134.	too much marijuana, drive-thrus. it lacks places for kids.
135.	too much street racing and loud mufflers on cars here that it is intolerable to bike on. Too much debris in bike lane. You will die or lose your hearing. Too many cars in general.
136.	Too much traffic, need more lanes, lights need synced.
137.	too unfriendly
138.	traffic flow in beaverton needs to be fixed. At times the traffic backs up due to the amount of cars traveling. T.V. Hwy needs to be expanded or ? to fix the current amount of traffic on it. It will be even worse as South Hillsboro area is developed and families move in.
139.	Traffic is about to get a whole lot worse with South Hillsboro building up
140.	Traffic lights everywhere, takes forever to get anywhere.
141.	Traffic lights should be eliminated and replaced with roundabouts
142.	Traffic seems to flow okay compared to TS rd, but it seems like there are a lot of fatal crashes on this stretch of roadway. Priority here to me would be pedestrian bridges and maybe cut-outs for bus stops to keep pedestrians safer.
143.	Traffic signals do not accommodate optimal flow of traffic.
144.	Trains, dedicated bus and emergency vehicle lanes
145.	Truck traffic slows everything, but not much can be done I guess. Lots of businesses.
146.	Try to avoid it in Beaverton

147.	Tualatin Valley Highway needs physical improvements to the road itself.
148.	TV Highway has become much worse in the 20 years that I have lived here, and even though I drive it everyday, it takes longer due to all the traffic lights that contribute to backed-up traffic, and slowed traffic speeds.
149.	TV Highway is a major hang up for anything west of Hwy 217 other than Hwy 26 or Hwy 99 as there is nothing in between. There has been so much building that this road will not be able to handle any kind of efficiency.
150.	TV Highway is dangerous. It's big. It's sprawling. It's everything a road shouldn't be. And it's being developed at a rapid clip. It will need BRT with dedicated lanes or light rail by 2050. I guarantee it.
151.	TV Highway needs to be a freeway. Eliminate intersections & driveways.
152.	TV Hwy needs sidewalks and bike lanes between Hillsboro and Forest Grove.
153.	Way too many lights that are not times for flow
154.	What was a rural highway now needs to act as a main street and a major commute route
155.	Why can't WES run parallel to this?
156.	Wireless EV highway
157.	with all the infill in Washington County, will become impassable before too long, not enough options to get North or South from TV Hwy by anything but car
158.	Would like to consider making this a couplet along with Beaverton Hillsdale Highway in downtown area of Beaverton

### **Cyclists and Pedestrians**

1.	Ability to see pedestrians and cyclists and their safety
2.	Add a separated bike path
3.	Add more bus stop, pedestrians cross walk, bright bus stop, street lights
4.	Always busy, a place I wouldn't dream of walking along, let alone trying to cross except at major intersections,
5.	Better bike access
6.	Bus only lanes and separated bicycling facilities.
7.	Dangerous for pedestrians. No real safe crossings.
8.	Dangerous. Too much traffic, too fast for bikes. Need more than paint to protect riders.
9.	Deadly for all users. Too wide, poor pedestrian and bike facilities. Bus runs regularly but dangerous and unpleasant to access some stops. Bus priority.
10.	Fine for a car. Hate to cross it as a pedestrian. I've stopped walking to the Millikan Max station because I don't feel safe crossing Beaverton-Hillsdale AND TVH.
11.	Focus on safety for ADA/foot/bike/transit. Increase transit!
12.	Hellish. Unsafe for pedestrians. A potential HCT corridor for the next generation, for which we need to lay the groundwork now.
13.	I honestly wish there was safer bike lanes and sidewalks in addition to a public transit only lane in each direction from the 217 all the way out to Forest Grove.
14.	I would frequent this area for shopping and restaurants if there was a dedicated and separated lane for bus, biking, and walking for this key commuting corridor

15. It is impossible to quickly cross this as a bicyclist or pedestrian. I've missed bus connections MANY times.
16. Lighting is very poor along for people biking, driving or waiting for bus
17. Make biking and walking safer. Restrict access (Driveways). Speed up transit.
18. Make it bike friendly
19. most sections are inhospitable to pedestrians
20. needs a road diet and a protected bikeway
21. Needs additional turn lanes to eliminate delay at signals. Needs bike lanes and sidewalks. Few ped crossings. Better transit stop.
22. Needs better lighting and safer pedestrian crossing
23. Needs bike and pedestrian safety improvements.
24. Needs bike lanes, badly
25. Needs everything! Unsafe, high speeds, heavily congested, unimproved shoulder, pedestrians walk on side of highway and run across. Rail crossings.
26. Needs more safe crossings; separated bike lanes for a high speed corridor; Faster bus service, I can leapfrog the bus on my bike much of the day from Aloha to Beaverton
27. Needs off-street bike lanes to be a usable bike corridor due to high traffic and so many intersections...as is Baseline and Blanton are better bike alternatives although they have issues as well. Shaw could be a good alternative if it had wide or protected bike lanes and cross lights for major intersections. I see a lot of speeding through 35mph zones.
28. Needs safe infrastructure for Biking/Walking. Less focus on driving. Add more bus/transit options.
29. Needs safety improvements very badly
30. Not pleasant at all to bike on, and forget about left turns.
31. Not safe for pedestrians (bike/ped). Land use is a mess. Train tracks and highway - very dangerous. Services need to be built on south side of highway to minimize need for folks to walk across the highway/train tracks.
32. Not the speediest route but fairly consistent in a car. Scary on a bike
33. old school highway. kind of dangerous for peds and bicycles. an extensive alternative route running parallel that is well signed and easy to follow could be an alternative for peds and bikes. not sure how the peds would adapt. much easier for a bicycle to ride a safer alternative route such as Johnson or Alexander streets and swing over to TV hwy. any of these streets would require some extensive upgrades for ped and bike safety. reroute bus lines to alternative routes would be the best solution for a real alternative to the highway. for the short term solution, TV hwy has the least swept shoulders in the area. maybe ODOT feels it's not necessary to keep them clean for bikes and peds. shame on you ODOT for not keeping your shoulders safe. that also goes for bridge structures everywhere. never swept..
34. Protected bike lanes would help
35. Safety, transit, walking and biking must be a priority here.
36. Severe lack of pedestrian and bike crossings, lack of bike lanes through downtown beaverton, car traffic is fast and dangerous,
37. slow speeds, prioritize walking, biking and transit - add crossings, protected bikeway, medians



38. Terrible environment to be outside of a car in. Too much car dependency. Too dangerous to do anything but drive.
39. The bike lanes aren't protected & there is a lack of marked crosswalks, despite more & more housing.
40. The railroad inhibits every ideal transformation of this road into a walk/bike/transit corridor. It's really unfortunate.
41. The shoulders along the highway are inadequate for safe bike travel and safe pedestrian travel. I'd like to see more bike lanes and sidewalks included along this corridor.
42. The shoulders are too narrow, bus stops are exposed to the elements and the traffic. Riding a bicycle here requires courage. I cannot imagine how the north-south traffic is going to interface with this road when South Hillsboro is inhabited. As it is, the lack of turn lanes slows people getting off of TV Hwy. The center turn lanes are usually inhabited by people looking for a break in traffic to move east or west. So, riding the bus, biking or walking are just miserable. Also not well lit for pedestrians. .
43. There are insufficient public and active transportation options in this corridor where incomes are among the lowest, people of color and seniors are a high percentage of the population. I try to cycle from Forest Grove to Hillsboro and find it dangerous and very unpleasant. There is no Express bus line, either. What do you want taxpayers in this area to do?
44. This corridor is deadly. Every effort should be made to improve it for transit riders, pedestrians and cyclist.
45. This corridor is hostile to people traveling by bicycle or on foot-to-transit, & there are no trees.
46. This corridor needs fewer lanes dedicated to single occupancy vehicles and more dedicated protected bike/ped/scoot/skate infrastructure
47. This facility badly needs protected bicycle infrastructure and enhanced crossings for transit especially in addition to a BAT lane. It does not need capacity improvements as it already has gotten those and relieving improvements elsewhere.
48. This needs protected bike lanes all the way along it. There are painted bike lanes that aren't good enough--traffic swerves in and out and uses the bike lanes as a road shoulder. We need curbs or barriers. And biking through central Beaverton should not be so dangerous. Think of being on a bike and going to various businesses, it's treacherous and dangerous. How would you get from Fred Meyer to the library, the farmer's market, or to Big 5 sporting goods on a bike?
49. This stretch of roadway is a killer to pedestrians and bicyclists. It's clearly designed and managed to move cars
50. Too much auto capacity, not enough safe bicycle capacity, needs high capacity transit like automated BRT, and suburban retrofit
51. Traffic light sequences puts pedestrians on low priority: safety issue.
52. Very unsafe environment for people biking and walking. Need safer crossings to reach transit stops. Needs more shelters and safer facilities to separate people from cars. Slow traffic, allow more space for people walking and biking to feel safe.
53. Wow--this one needs everything. improvements for all modes of transportation, different form of streetscape to encourage bike/ped.

### **Congestion**

1. Always bumper to bumper between 2pm-6pm
2. Always congested, no sidewalks on large chunks, too many lights that don't sync up. A ton of development over the years around it and no improvements. Needs an Express bus only Lane.

3. Becoming very congested.
4. Congested due to poorly timed signals
5. Congested from downtown beaverton to 185th ave. Will not handle much more traffic.
6. Congested, desperately needs better lighting and more safe crosswalks. People dart across 5 lanes frequently in poor lighting. It's a wonder more haven't been killed. Please fix this for our community.
7. Congested.
8. Congestion
9. Congestion
10. Congestion can occur during rush hours
11. Connection to SW 185th will need to be improved to support the South Hillsboro development
12. Constant start and stop traffic wastes fuel and creates unnecessary air pollution. W&P has a sparsely used rail track adjacent to the highway. Could this be part of the solution??
13. crowded and will be more so when South Hillsboro is built out. Why can water, sewer, and electrical utilities be planned well and traffic considerations are not comprehended in a comprehensive manner?
14. getting congested
15. high traffic
16. High volume
17. Highly congested. Too many controlled intersections.
18. Horribly congested and only going to get much worse with south Hillsboro
19. Rush hour congestion
20. This road is moderately congested but of very little concern. I only use it occasionally.
21. Traffic sucks
22. Traffic too fast, heavy. Not enough trees.
23. Usually heavy traffic but not grid-locked.
24. Very busy with a lot of retail that make for left turns.
25. Very congested between Hwy 217 and 170th during peak hours.
26. Very congested weekends and commute times.
27. very congested, needs to be 3 to 4 lanes each direction
28. Very dangerous regardless of the mode of travel
29. Real crowded
30. Seems to be always congested. Buses impede traffic flow because there aren't pull outs.
31. This corridor is highly congested most of the time.
32. Way too much congestion!

### **Transit**

1. Bus service is not frequent enough. It's only twice an hour.
2. Do not rely on mass transit to make this corridor better.
3. I live here. I love the fact that the busses come so frequently. However I work swing so if a coworker is late it takes me over 2 hours to get home unless I want to pay 30.00 for a cab
4. In order to use the MAX line it will need to be extended to Forest Grove, Oregon
5. Need more transit. Need to address congestion especially at major intersections. Need to maintain TV highway as viable alternative to Highway 26 - which for some unexplainable reason is not on your list.
6. Need safer bus stops, and transit priority lanes from approximately Cedar Hills to Beaverton TC. Also, please focus on development of a multi-use path parallel to the railroad ROW - I doubt TV Hwy itself will ever be safe from a bike/pedestrian perspective
7. Needs enhanced transit plus bike/ped.
8. Needs light rail to connect the Hillsboro Transit Center with the Beaverton transit center.
9. Plan for bus rapid transit, add sidewalks and protected bus shelters
10. Should have a metro line along the length
11. Some 57 bus stops are very hard to access due to poor sidewalk conditions, and other 57 stops feel very unsafe at night due to low lighting.
12. There needs to be more frequent bus or max service along this corridor
13. This corridor has the potential to be a pedestrian- and transit- friendly place with improvements and ROW acquisitions.
14. This is a good candidate for a street car or Max rail expansion.
15. Traffic is terrible. I wish there was a Max from forest grove into Hillsboro so I wouldn't have to drive this. It's also dangerous and there are wrecks frequently
16. Tri-met buses should be required to have turn outs. No more of this stopping in the lane. It slows traffic and it is dangerous. It causes other vehicles to want to quickly pass.
17. Would love more mass transit options

### **Speed & Safety**

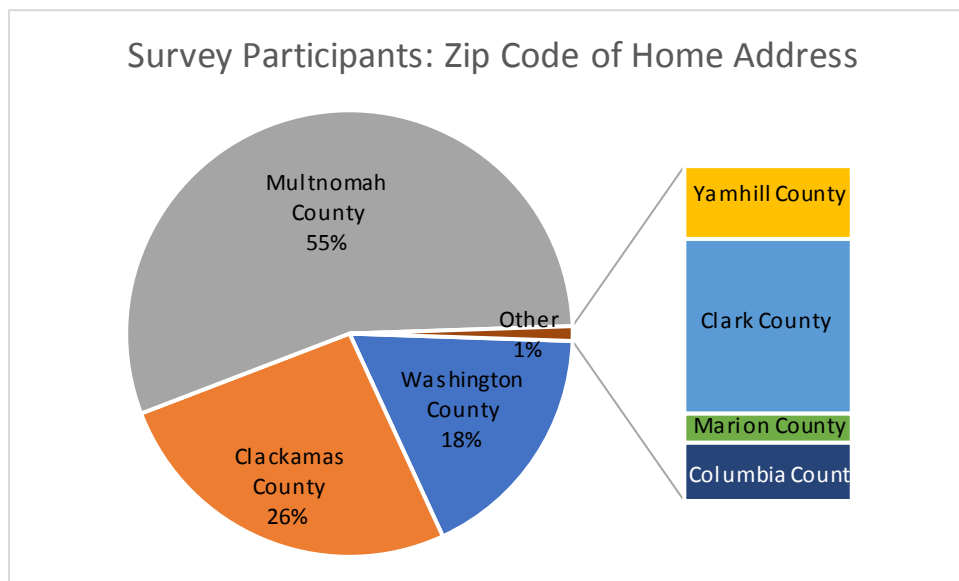
1. Speed on this needs to increase by 5 MPH, and the traffic signals along here need to stay green longer. The timing of the lights seem off in this area.
2. Speeding, no regard for pedestrians
3. Why do people drive 35 mph in the left lane when the speed limit is 45 mph?
4. Unsafe

## APPENDIX A:

### SURVEY PARTICIPANT DEMOGRAPHICS

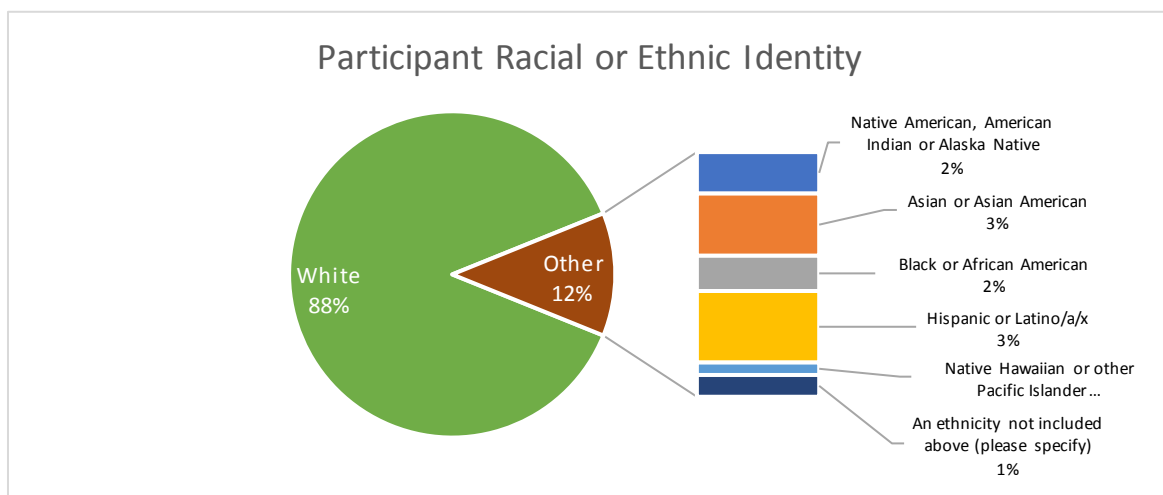
#### ZIP CODE OF HOME ADDRESS:

Out of the total number of respondents, 55% lived within Multnomah County, with the majority living within Portland city limits.



#### RACIAL AND/OR ETHNIC IDENTITY:

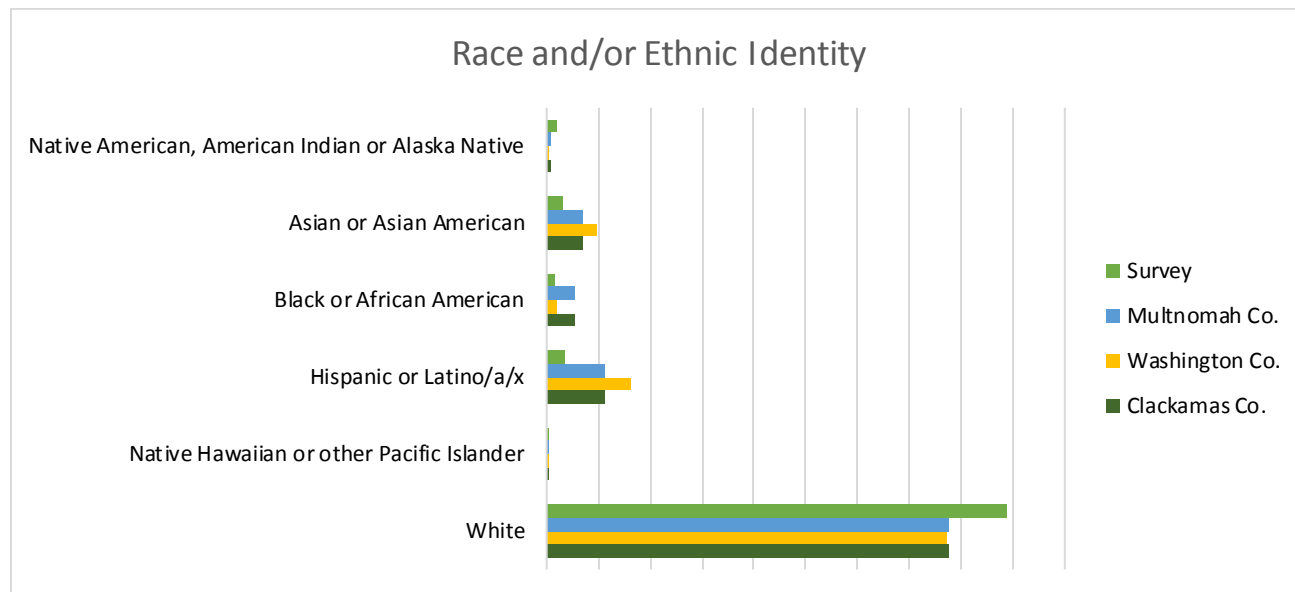
Out of those survey participants (1930 total) who responded to this question, the majority self-identified as white, with 12% of respondents identifying with a racial and/or ethnic identity other than white. Highlighted in the graphic below, this 12% (or 215 total participants) was comprised of individuals who identified as Hispanic or Latino/a/x, Black or African American, Asian or Asian American, Native American or Alaska Native, and Native Hawaiian or Other Pacific Islander.





Participants were also invited to select (and to specify) if they identified with an ethnicity that was not included in the list of provided options. Out of those who selected ‘ethnicities not included’, responses included Middle Eastern, Mixed Race, and Jewish. A large number of comments written into the selection ‘ethnicity/race not included’ either rejected the question all together (i.e: ‘none of your business,’ or ‘what difference does it make?’) or wrote in ‘human’ as a response.

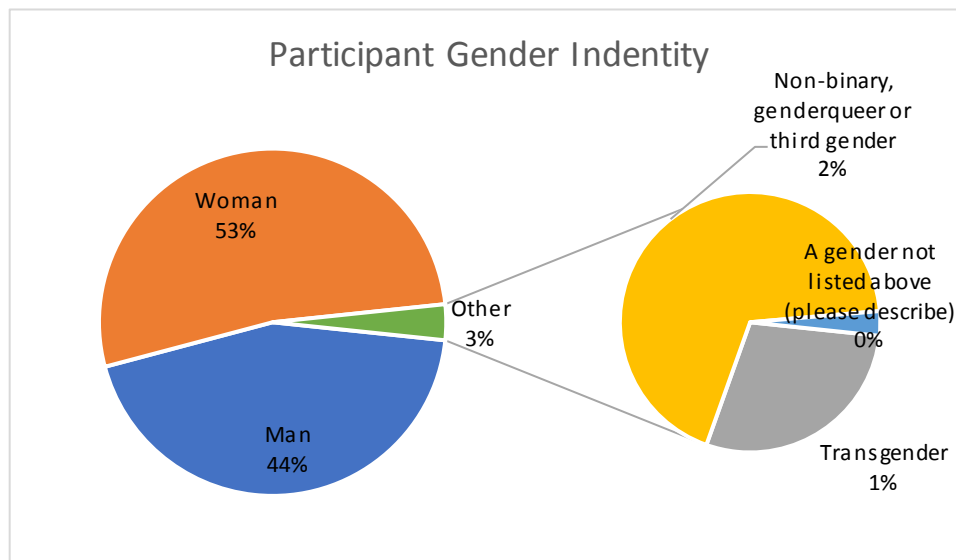
When compared to regional findings in regard to population race and/or ethnicity<sup>1</sup>, survey findings suggest a slight over-representation of participants who self-identified as white (outlined in the graphic below).



<sup>1</sup> Regional data was pulled from the 2018 American Community Survey Population Key Findings data, available through the U.S census.

## GENDER IDENTITY:

Out of those 1986 participants who selected to respond to this question - 53% identified as Woman, 44% as Man, 2% identified as Gender Non-Conforming and 1% self-identified as Transgendered. The graphic below presents these findings from the results in the form of a pie chart.

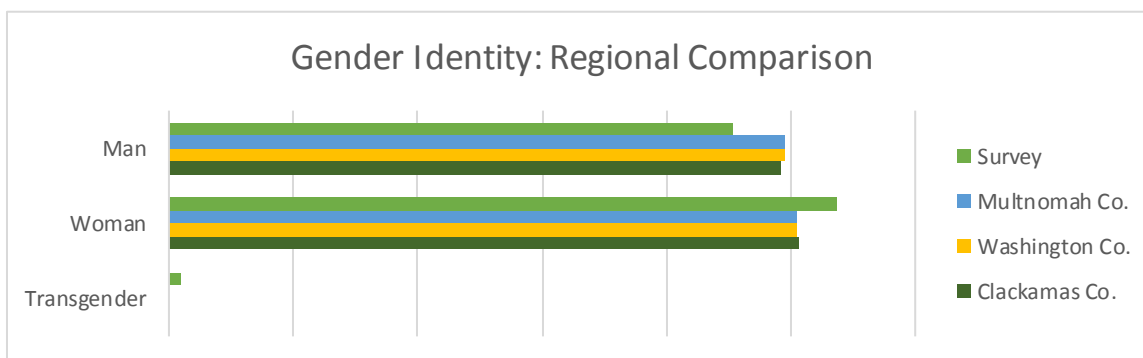


Participants were offered the option to select 'a gender not listed above', and to write in a response they felt was not presented within the drop-down menu. The large majority of these written responses showed strong resistance to the question itself, with one or three responses expressing a gender identity self-described as:

- Bi-gender.
- Present female but am half female and half male.
- Gender Negative, Gendermodal.

Several comments expressed gratitude and recognition for including this question in the survey.

Looking to regional demographics as a baseline comparison, survey findings showed that a higher number of women responded to the survey than the population estimate for the Metro region. It is important to note that the demographic offerings presented in the survey do not match the categories or classifications of the American Community Survey (Census) in regard to gender identity.



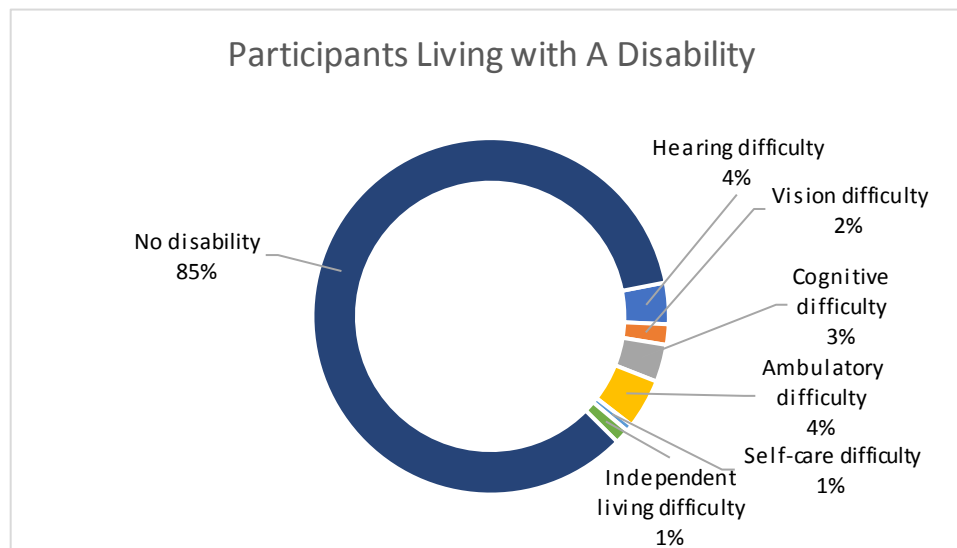
\* COMPARISON DATA FOR THOSE INDIVIDUALS IDENTIFYING AS TRANSGENDERED AND/OR GENDER NON-CONFORMING NOT AVAILABLE THROUGH THE AMERICAN COMMUNITY SURVEY

### LIVING WITH A DISABILITY:

15% of respondents identified as living with a disability, with 4% of those defining their disability as Ambulatory (which was defined as 'unable or having serious difficulty walking or climbing stairs'), and another 4% who defined their disability as associated with Hearing (deaf or having serious difficulty hearing).

Other disabilities were listed and described using the following terms:

- Vision difficulty (blind or having serious difficulty seeing, even when wearing glasses)
- Cognitive difficulty (because of a physical, mental or emotional problem, having difficulty remembering, concentrating or making decisions)
- Self-care difficulty (unable or having difficulty bathing or dressing)
- Independent living difficulty (because of a physical, mental or emotional problem, unable or having difficulty doing errands alone)



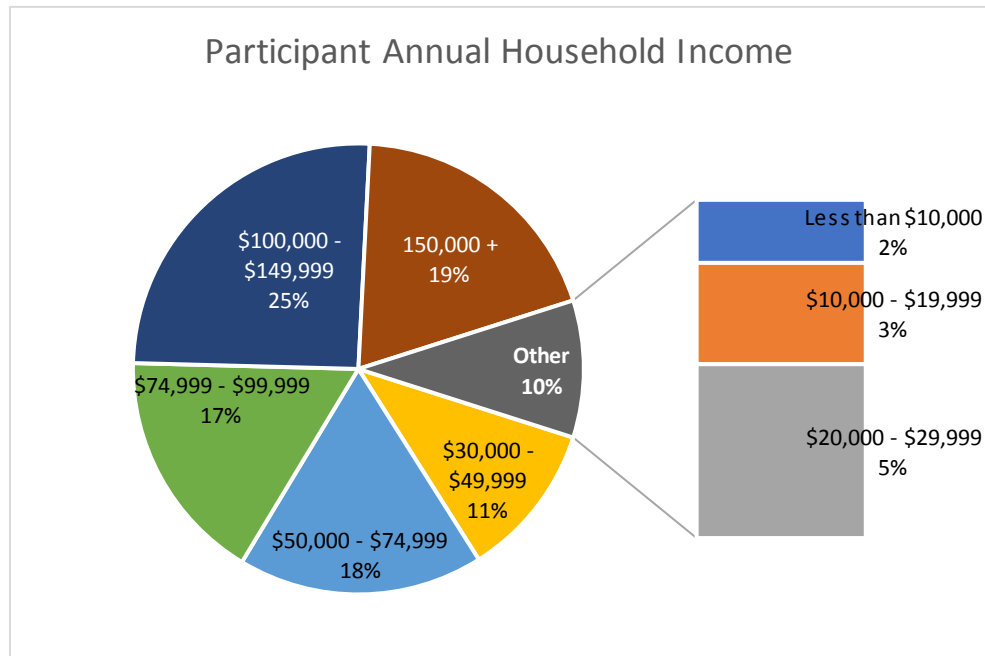
Participants were also given the option to write in a disability that they felt was not represented in the options listed.

These submitted responses included:

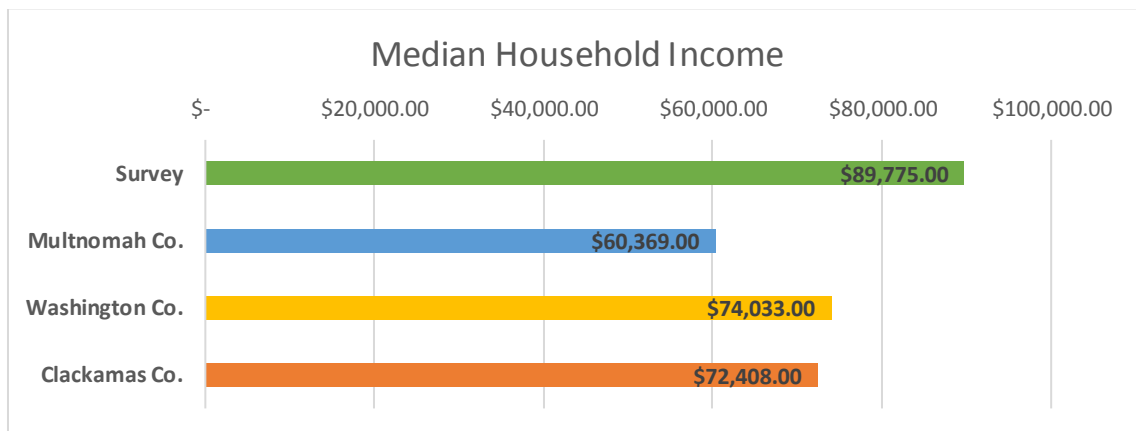
- Spouse and/or child with a disability:
- Mental Health, including PTSD and Anxiety
- Mild Hearing/Vision
- Chronic Pain
- Learning disability that makes planning and sticking to a time table difficult.
- Age
- Asthma
- Temporarily disabled due to Cancer
- Communication disability/speech disorder
- Epilepsy, and seizures
- HIV

## HOUSEHOLD INCOME:

61% of survey respondents identified as having a household income (pre-tax) over \$74,999.



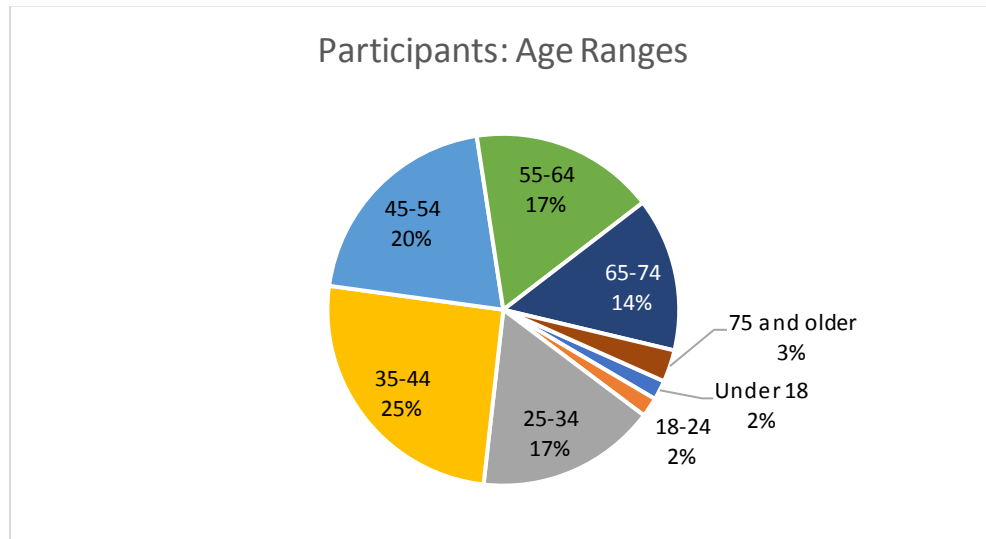
Survey respondents showed a higher median income than that of the region (represented in the graphic below):





## AGE:

Over 2171 participants selected to complete this question, with 46% of those respondents identifying as under the age of 44. Twenty percent identified as between the ages of 45 and 54, 17% identified as between 55 and 64, and 14% identified as between the age of 65 and 74. Three percent of respondents identified as over 75.



In comparison to regional demographics, survey respondents were older than the median age.

