

Transportation Census 2019



Transportation Census 2019

The goal of this census is to collect the feedback of daily commuters to improve accessibility for all.

1,785 selected respondents

11 work sites

81 total possible questions

30 questions seen by each respondent on average

13 minute average completion time

The OHSU Transportation Census is conducted in support of the OHSU Transportation Demand Management Plan, the Marquam Hill Plan, and to fulfill requirements of transit partners and the Oregon Department of Environmental Quality.

Plans referenced in this document:
www.ohsu.edu/transportation.

Census by year

The census was launched in 2016 to improve analysis and modernize reporting methods. Since ECO Survey reporting years every 2 years, in non-ECO years, the survey is limited to locations where OHSU owns and actively manages transportation and parking facilities. In 2019, South Waterfront sites were combined into a single location, streamlining these results and reducing the total required respondents to a ratio comparative with the much larger Marquam Hill Campus.

2016: 13 work sites. 2,047 people surveyed.

2017: 15 work sites. 2,313 people surveyed.

2018: 4 work sites. 1,078 people surveyed.

2019: 11 work sites. 1,785 people surveyed.

KEY TERMS

Central: Marquam Hill, South Waterfront, Market Square Building, Fifth Avenue Building, Marquam II, Marquam Plaza.

Lower Marquam: Marquam Plaza and Marquam II buildings.

Downtown: Lower Marquam and Market Square/Fifth Ave combined.

ECO Survey: Employee Commute Options Survey submitted to Oregon Department of Environmental Quality.

Work site: A building or collection of buildings that can generally be considered a single commuter destination.

2019 CENSUS KEY FINDINGS

Factors contributing to key findings are discussed on the following page.

OHSU continues to outpace local and industry trends in reducing driving alone.

The latest U.S. census (2018) saw a 59% drive alone to work rate for Portland vs OHSU's 40% rate.

Marquam Hill employees who primarily drive alone report an increase of 3% over 2018.

This finding is in line with an increases to OHSU employee parking capacity as well as regional trends.

Nearly half of people who primarily drive alone to Marquam Hill use a secondary mode.

Adding one person to a vehicle vastly improved the experience for respondents.

This is true even when OHSU factors are excluded.

15% of people rated their drive alone experience as very good, compared to 55% of carpools.

Fewer people took transit as a primary mode, but transit remains popular overall.

41% take transit (at least some of the time) making it the most popular alternative to driving.

However 26% take transit primarily, an 8% decline from 2018. People still ride bus and rail but they are using other modes for longer distances. This finding is in line with regional trends.

People said OHSU made them more likely to use transit at a rate of 41%, the highest of any mode.

Waterfront walk trips rose at the same rate that waterfront bike trips fell.

Walk trips to waterfront locations rose by 7%, the same percentage at which bike trips fell.

This could be due to the introduction of a cash incentive for walking.

Some people who may have previously biked to earn an incentive appear to now choose walking.

Telework is the highest rated experience and a direct replacement to driving.

90% of people who telework to Marquam Hill report their back up mode as driving.

Downtown leads OHSU for teleworking, exceeding regional trends.

METHODOLOGY

Summary of limitations

- 5% margin of error.
- Patients, students, contractors, volunteers, float employees and visitors not represented.
- Increasingly, commuters take multiple modes in one trip.
- Primary mode captures mode traveled farthest, not mode arriving on campus.

Summary of progress on methodology

- Data validation ensures ensure random sample integrity.
- Follow up questions refined the analysis of travel behavior.
- Answer choice randomization reduces answer bias.
- Survey invitation and incentives for completion are mode neutral.
- Two changes to the ECO question have been reviewed and approved by DEQ and TriMet: Carpools and people "dropped off" have been differentiated. "Streetcar" has been added to transit.
- Mode split is tracked by both daily trips and overall primary mode.

Recommendations for future surveys

- Ask respondents to describe multiple mode trips in more exact detail. Which modes did a traveler use, for what distance, and what mode arrived on campus?
- Refine benchmarks. Set single occupancy vehicle goals for the end destination, central locations and the region.

KEY FINDINGS FACTORS

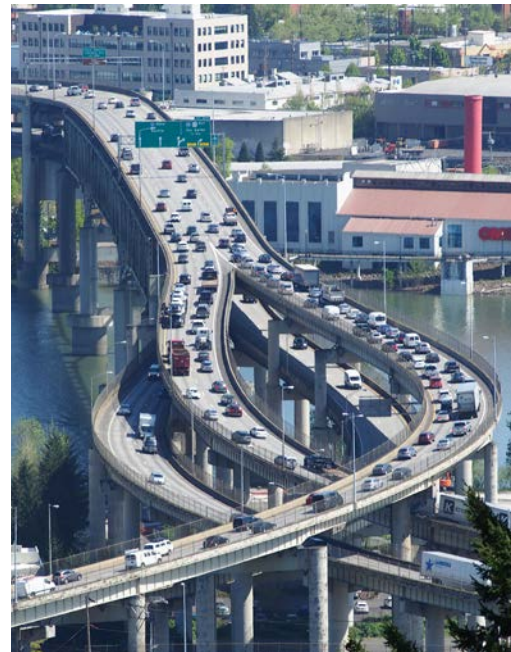
Drive alone trips to OHSU appear to have risen since last year. Although the increase (1%) is within the margin of error (5%), a discussion of factors currently affecting drive alone trips is constructive for identifying solutions.

OHSU FACTORS

1. How data is collected: The ECO Survey defines “primary mode” as the mode taken for the longest portion of the trip, not the mode that arrives on campus. So a person that drives 4 miles to off site parking at an off site facility, and then takes the bus 3 miles to campus, is primarily driving. As people rely more on offsite parking, it is possible to decrease vehicle miles traveled and vehicles on campus, while still counting trips as drive alone.

2. OHSU central campus parking capacity increased by 8% (KCRB garage, Rood Family Pavilion garage and Opera parking lot) or 373 new spaces for employees. The survey-eligible population of South Waterfront and Marquam Hill combined is 12,383 people. If 373 of those people filled the 373 new parking spaces, this projects an increase to the drive alone rate of 3%.

Additionally, Marquam Hill employees with long term parking were moved to new South Waterfront sites. Their stalls were replaced by daily parking, which tends toward a higher drive alone rate.



REGIONAL FACTORS

1. Rising housing costs mean more people living further from work.

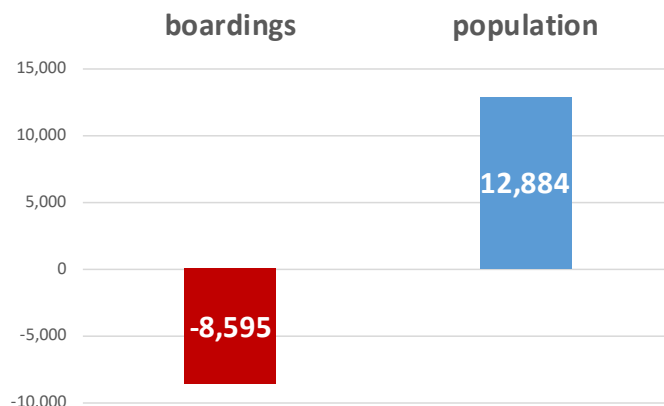
2. Regionally, transit ridership is on the decline. In 2018, TriMet reported 3% fewer average boardings over the previous year, or 8,595 less trips, despite the tri-county area adding 12,884 people. This problem is particularly acute at Marquam Hill, which experiences travel times double the network average for the last mile of hill bound bus service.

U.S. Census reported a 1% decline in Portland transit ridership from 13% to 12%.

3. Transit barriers: According to census respondents, the leading barrier to taking transit is length of commute and this is an issue that has not been resolved. TriMet's last mile to Marquam Hill can take, including transfers, up to 25 minutes.

4. Regionally, biking is at its lowest rate in 12 years. U.S. Census reported a 1% decline from last year to 5%.

TriMet boardings
and tri-county population
2017 to 2018 change



	average daily ons	tri-county population
2018	312,128	1,825,650
2017	320,723	1,812,766
change	-8,595	12,884
percent change	-3%	1%

PROGRESS 2018

All 2018 recommendations were launched prior to this report. Level of completion evaluated below. Some 2019 recommendations are a continuing phase of a multi-year strategy, such as promoting telecommuting.

TRANSIT: Add off campus parking where Park and Rides are at capacity or unavailable to reduce travel time.

A new facility opened at Portland Opera House. More are under evaluation. Park and Rides were added to Trip Plans.
complete

BIKING: Identify a central site for showers and lockers.

In 2018, OHSU piloted bike valet and showers on Marquam Hill and is currently building a new badge access bike facility on Marquam Hill that is within the lowest elevation garage and closest to the Terwilliger bike lane. **complete**

CARPOOL: Educate users on alternatives to driving when ride share is unavailable via trip plans and other resources.

Ride share programs integrated into employee trip plans, now distributed to over 2,000 people.
complete

DRIVING: To benchmark a narrow annual goal, the method of defining the single occupancy rate should be refined.

Within the census, people are now asked about their arriving mode, leaving mode, their primary and their secondary. In addition to the census, OHSU collects license plate scans, daily sales and follows traffic counts.
complete

TELECOMMUTE: Promote flexible telework. Encourage employees to work off site at high congestion times.

Following 2018's census, OHSU leadership added telecommuting to the institution's 2025 Priorities.
complete

WALKING: Increase engagement with MyCommute.

Walking wayfinding was piloted during the 2018 Tram shutdown and on-street facility concerns were addressed with PBOT. Multiple events were launched to promote active modes and over one hundred people earned prizes.
complete



2019 CENSUS RECOMMENDATIONS

Previous findings informed the OHSU TDM Strategy Dashboard.
2019 Recommendations inform the future course of TDM strategies.
Associated strategies are noted after each recommendation.

OHSU TDM Strategies

POLICY

- P0.1- Goals, Performance Measures, and Monitoring
- P0.2- Active Workplace Culture and Training
- P0.3- Staffing Support
- P0.4- Telecommuting
- P0.5- Housing Assistance
- P0.6- Daily Services and Amenities

TRANSIT

- T.1- Transit Service Improvements
- T.2- Access to Transit Improvements
- T.3- Regional Water Taxi Service
- T.4- Downtown Tram/Gondola Connection

PEDESTRIAN

- PN.1- Pedestrian Access Improvements
- PN.2- Pedestrian Safety Program
- PN.3- Pedestrian Rewards Program

BICYCLE

- B.1- Bike Access Improvements
- B.2- Bike Parking Improvements
- B.3- Bike Share Program
- B.4- Bike Rewards Program

SHARED MOBILITY

- SM.1- Employee and Patient Lyft Program
- SM.2- Internal and Dynamic Carpooling
- SM.3- Enhanced Car Share Program

PARKING

- P.1- Permits and Daily Pricing
- P.2 - Employee Parking Operations
- P.3 - Patient Parking Experience
- P.4- Valet Parking Service
- P.5- Parking Safety and Security
- P.6- Carpool Parking Program
- P.7 - Expand Parking Supply
- P.8- Facility Access Control and Enforcement
- P.9 - Data Collection/Reporting

PROGRAMS/ COMMUNICATIONS

- PC.1- Mobility Communications
- PC.2- Daily Financial Incentives
- PC.3- Commute Challenges
- PC.4- Employee Commute Platform
- PC.5- Wayfinding Improvements

Working off site: Promote and support telework, compressed work weeks and flexible schedules. Elevate promotion in a variety of channels including online, print, at meetings and orientation. 2019 census: Telework is strongly favored and replaces driving. **PO.4**

Community partners: Support regional network improvements. OHSU works with partners such as Metro, PBOT, TriMet and ODOT. Plans that support OHSU's goals include Southwest in Motion, Central City in Motion, the Division Transit Project, Portland's Bike Plan and PedPDX. 2019 census: Employees are most affected by external barriers. **T.1, T.2**

Marquam Hill: Enhance connections through shuttles, faster transit, ride share, and bike and walk facilities. Since 2018, OHSU has launched real time arrivals and a badge-on system for shuttles. A car share pilot was tested. On-street bike and walking wayfinding was piloted during the 2018 Tram shutdown. 2019 census: Marquam Hill's last mile is a challenge for congestion, travel time and sense of safety. **T.4, PN.1, B.1**

Off peak: Support off peak options by expanding carpool and off peak transit. Following previous feedback, OHSU advocated successfully for expanded off peak transit service. Scoop access and usage has steadily grown since 2018. Both Scoop and TriMet depend on ridership so the 2019 challenge will be to sustain and accelerate the momentum. 2019 census: Scoop is rated highly by users but a large potential population of drivers could still improve their commute experience and save money. **SM.1, SM.2, SM.3**

Communications: Enhance outreach via trip plans. In 2018: 1.) Trip plans launched; Distributed to over a thousand employees. 2.) OHSU.edu/visit overhauled; Dozens of new wayfinding pages added (one for each facility). 3.) Nine transportation program cards designed; Distributed. For 2019, upgrade trip plans and enhance marketing content. 2019 census: Employees increasingly rely on Transportation and Parking as their commuter resource via a variety of channels. **PC.1, PC.2, PC.3, PC.4, PC.5**

Campus community: Events, commute champions and forums. Since 2018, events and challenges were launched in-person and on MyCommute. OHSU launched a communication platform called OHSU Now. By elevating Commute Champions, OHSU can encourage first person experts to assist peers with information that may not require a centralized communicator but would benefit from in-person encouragement. 2019 census: While top down communication has improved, employees still seek peer-to-peer engagement. **PC.3**

Active campus: Increase access to lockers, showers, secure bike parking, e-bike share and policies supporting active commutes. New facilities launched at Rood Family Pavilion and Casey Eye Institute. Valet piloted at Student Center. 2019 census: Facilities that help keep property safe and help people arrive clean and ready for work are essential to commuter decision. **PO.2, B.1, PC.5**

EXPERIENCE RESULTS

Respondents rated their primary commute experience by their journey (the transportation network and non-OHSU services) and the destination (on campus facilities and resources).

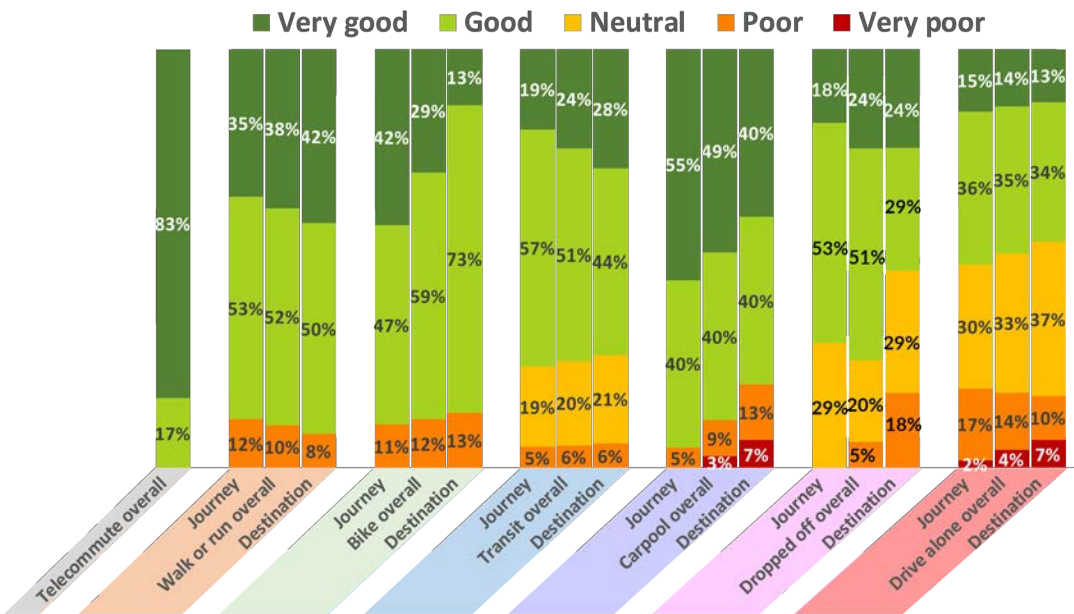
As with last year's survey, **telecommute rated highest**. This feedback supports OHSU's institutional goal of increasing working off site.

Bike and carpool rated higher for destination than journey. However biking also tied drive alone for least number of people reporting a very good destination experience. Employees who bike continue to ask for conveniently located showers, locker rooms and badge access facilities.

Transit and Dropped Off rate higher for journey than destination. This supports feedback that people enjoy transit if the travel time is reasonable. If the travel time isn't reasonable, transit is likely no longer their primary mode.

COMMUTE EXPERIENCE

Marquam Hill, South Waterfront, Lower Marquam



Drive alone: More rate positively than negatively however it rates lower than any other mode, particularly carpool.

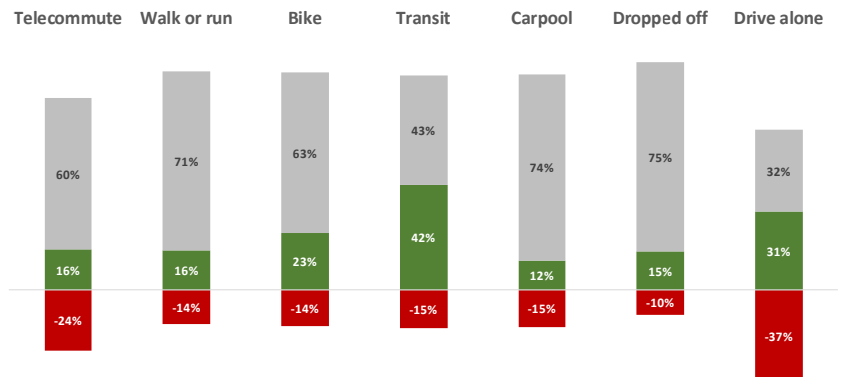
Commuters who don't drive alone consistently report a more positive experience on their journey to work. Sharing positive experiences may help support alternatives to driving alone.

OHSU has a significant influence in how people choose their transportation options. The biggest influences:

37% say OHSU causes them to drive less while 42% say OHSU causes them to take transit more.

OHSU, according to respondents, has a positive influence on walk, run, bike transit and drop offs and negative influence on telework, carpool, and driving alone.

OHSU has a variety of programs, facilities, policies, rewards and locations that may affect your use of a travel mode.



- I use this mode LESS often in part due to OHSU factors
- OHSU factors do not affect how often I use this mode
- I use this mode MORE often in part due to OHSU factors

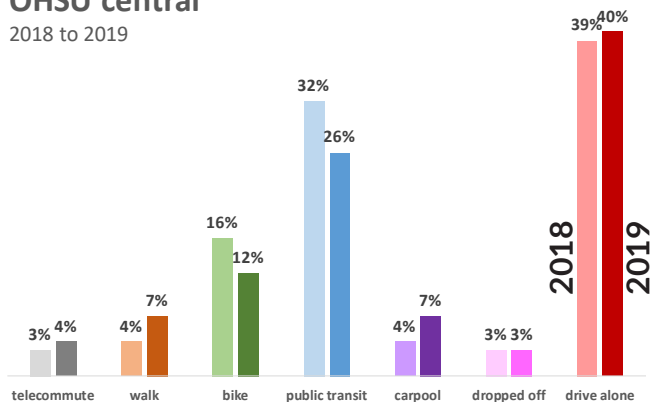
OVERALL RESULTS

ECO population: 14,294
Respondents: 1,785

Overall results combine the 11 work zones surveyed. Responses corrected for sample weight.
“Central work zones” combines Marquam Hill, South Waterfront, Lower Marquam, and Market Square/Fifth Ave.

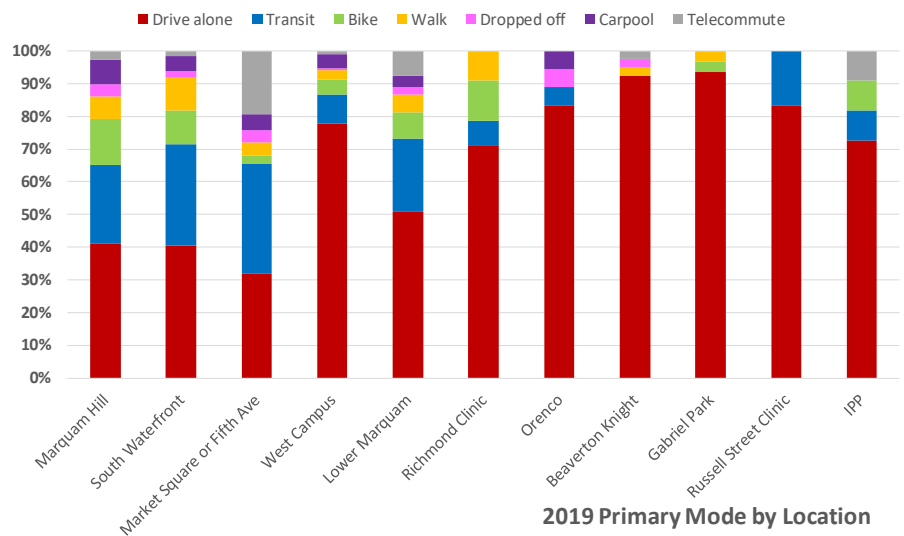
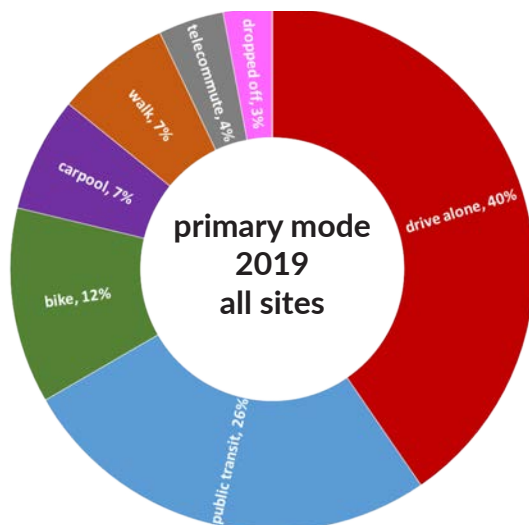
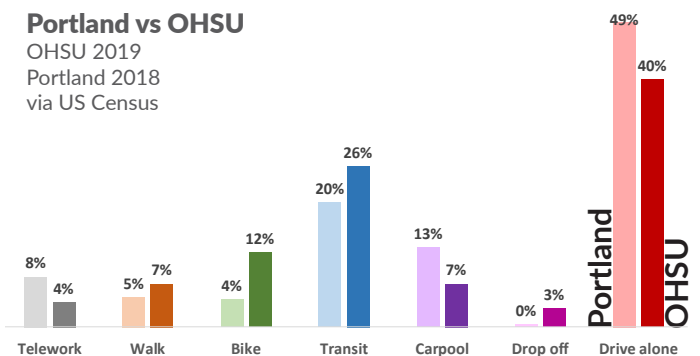
OHSU central

2018 to 2019



Portland vs OHSU

OHSU 2019
Portland 2018
via US Census



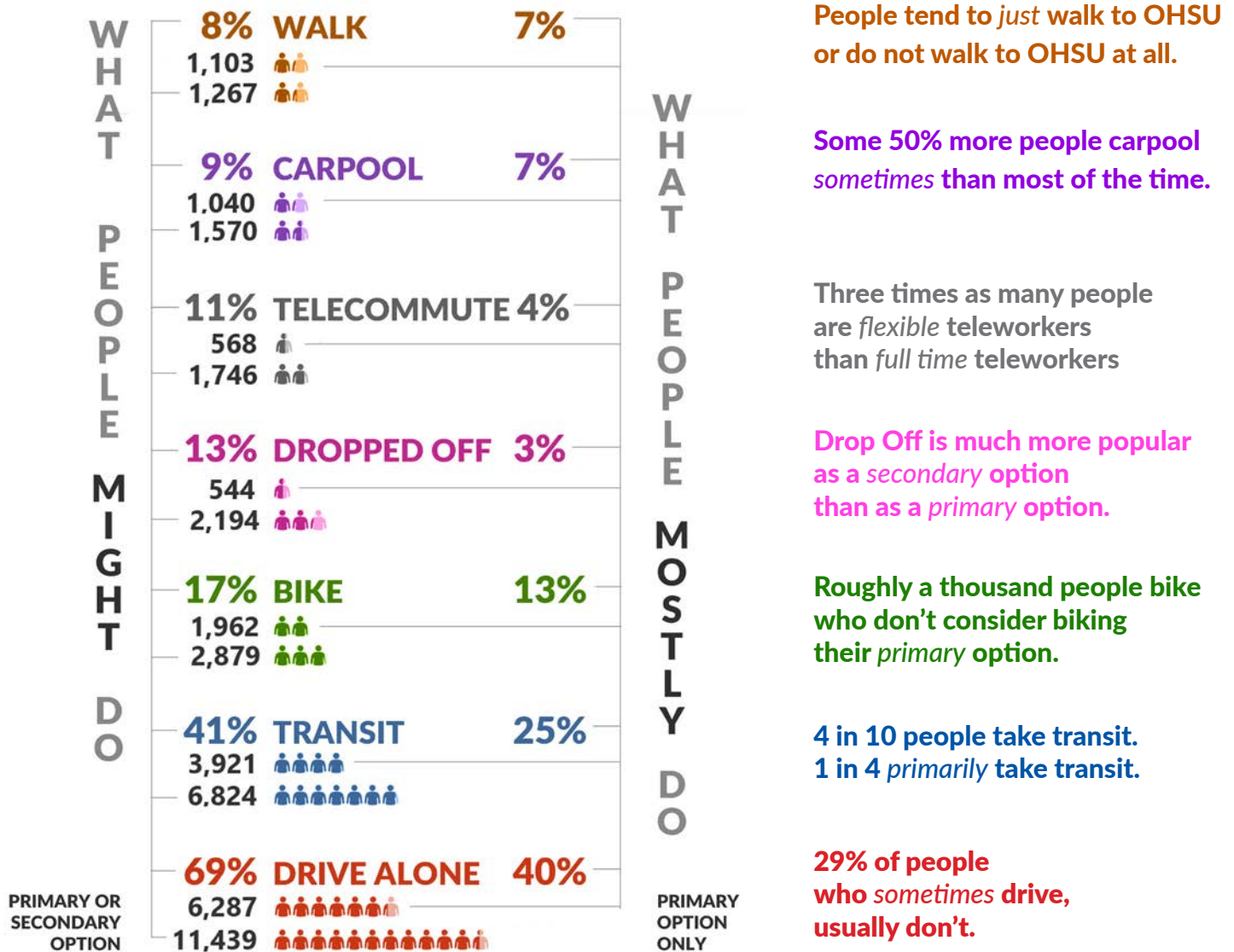
	Marquam Hill	South Waterfront	Market Square or Fifth Avenue Building	West Campus	Marquam Plaza or Marquam II	Richmond Clinic	Orenco	Beaverton Knight Cancer Institute	Gabriel Park	Russell Street Clinic	IPP
Population	12012	2204	1121	534	249	143	113	108	48	32	17
Telecommute	3%	2%	19%	1%	8%	0%	0%	3%	0%	0%	9%
Walk	7%	10%	4%	3%	5%	9%	0%	3%	3%	0%	0%
Bike	14%	10%	3%	4%	8%	12%	0%	0%	3%	0%	9%
Transit	24%	31%	34%	9%	22%	8%	6%	0%	0%	17%	9%
Carpool	7%	4%	5%	4%	4%	0%	6%	0%	0%	0%	0%
Dropped off	4%	2%	4%	1%	2%	0%	6%	3%	0%	0%	0%
Drive alone	41%	40%	32%	78%	51%	71%	83%	93%	94%	83%	73%

OVERALL RESULTS

Knowing how many people choose an option *some of the time* helps us understand who could take an option *more often*, given the right conditions.

HOW PEOPLE TRAVEL TO OHSU

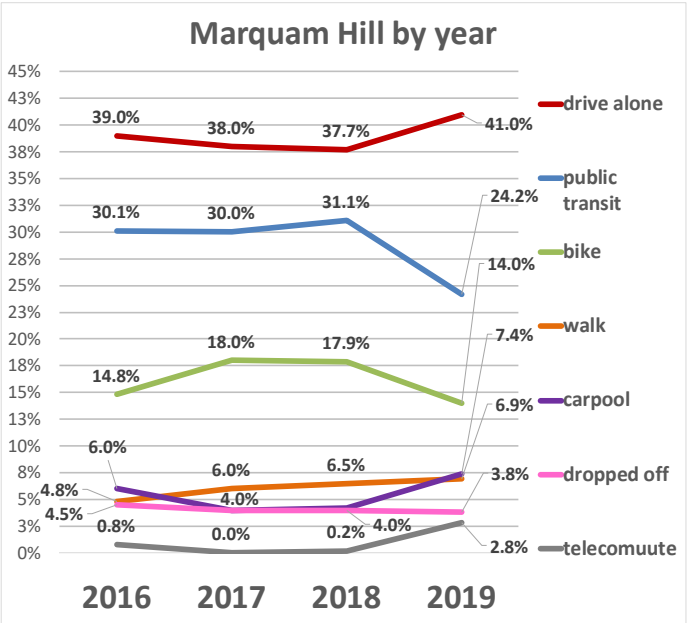
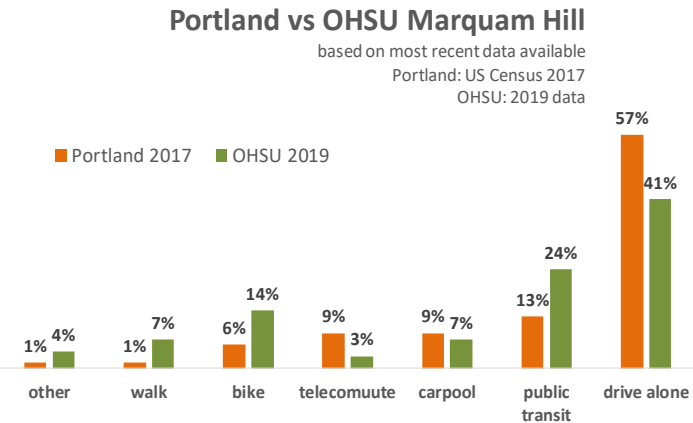
2019 CENSUS, ALL SITES



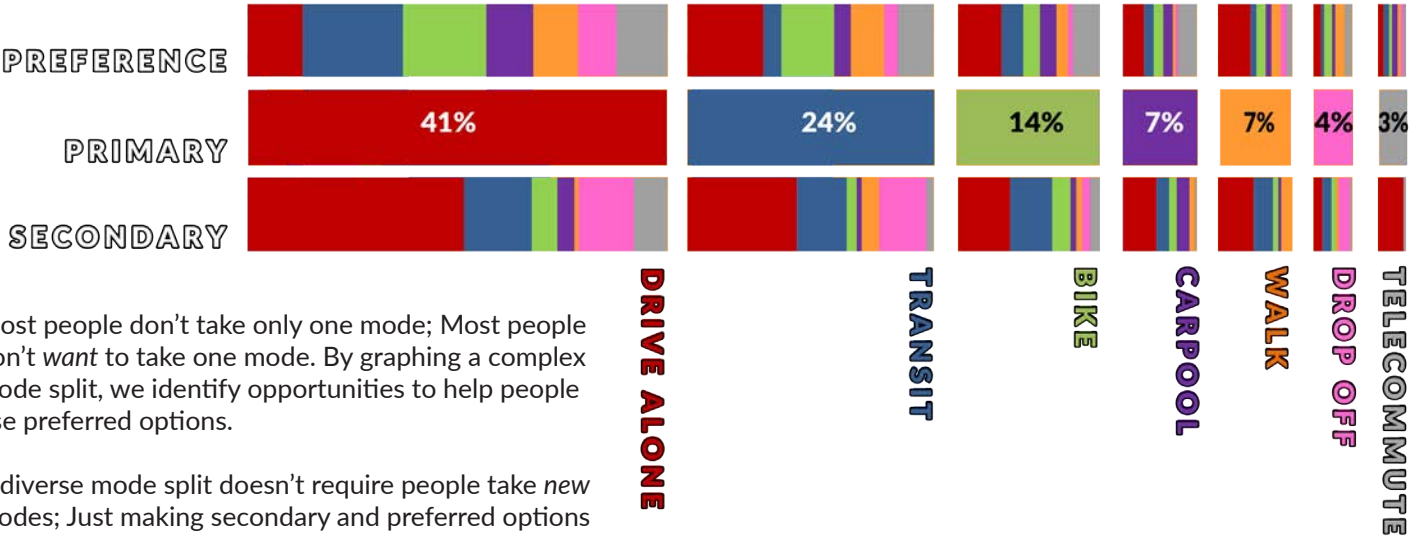


Marquam Hill is the highest elevation campus in Portland with 24/7 operations--making alternatives to driving a challenge.

Historically, Marquam Hill has outpaced regional non-driving. However, setting a high bar means year by year, alternative trips are a challenge to grow and sustain.



	TELECOMMUTE 3%		WALK 7%		BIKE 14%		PUBLIC TRANSIT 24%		CARPOOL 7%		DROPPED OFF 4%		DRIVE ALONE 41%	
	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred
Telecommute	10%	17%	0%	11%	7%	31%	3%	26%	3%	44%	8%	42%	8%	24%
Walk or run	0%	17%	15%	17%	4%	13%	7%	24%	7%	6%	8%	50%	1%	21%
Bike	0%	17%	7%	17%	13%	19%	4%	38%	10%	22%	15%	42%	6%	39%
Public transit	0%	33%	26%	11%	30%	25%	20%	13%	17%	22%	31%	17%	16%	47%
Carpool	0%	33%	4%	11%	4%	19%	2%	12%	17%	22%	0%	17%	4%	22%
Dropped off	0%	17%	0%	11%	6%	6%	19%	10%	0%	6%	39%	0%	13%	18%
Drive alone	90%	33%	48%	61%	37%	50%	44%	55%	45%	50%	31%	42%	51%	26%



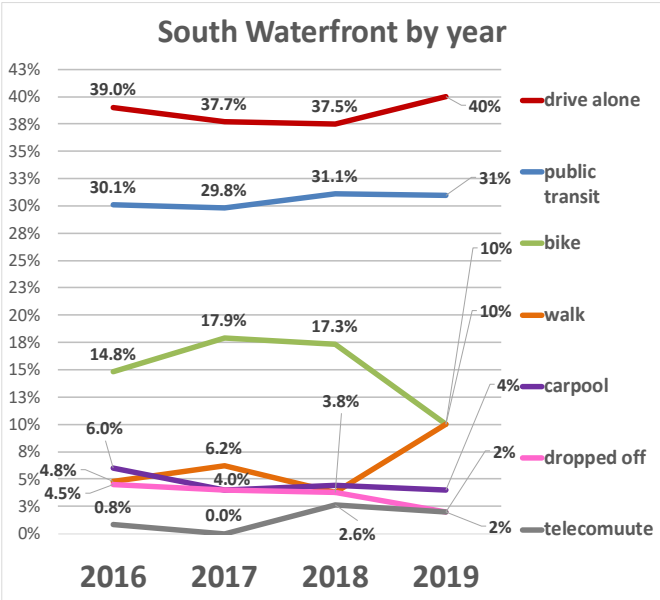
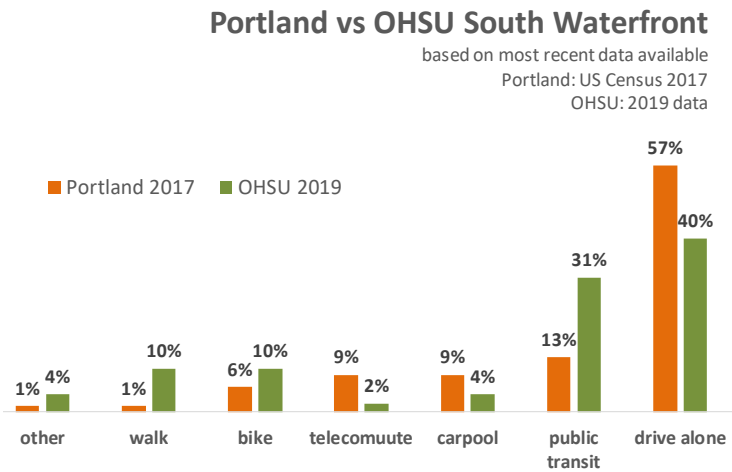
Most people don't take only one mode; Most people don't want to take one mode. By graphing a complex mode split, we identify opportunities to help people use preferred options.

A diverse mode split doesn't require people take new modes; Just making secondary and preferred options possible with greater frequency.

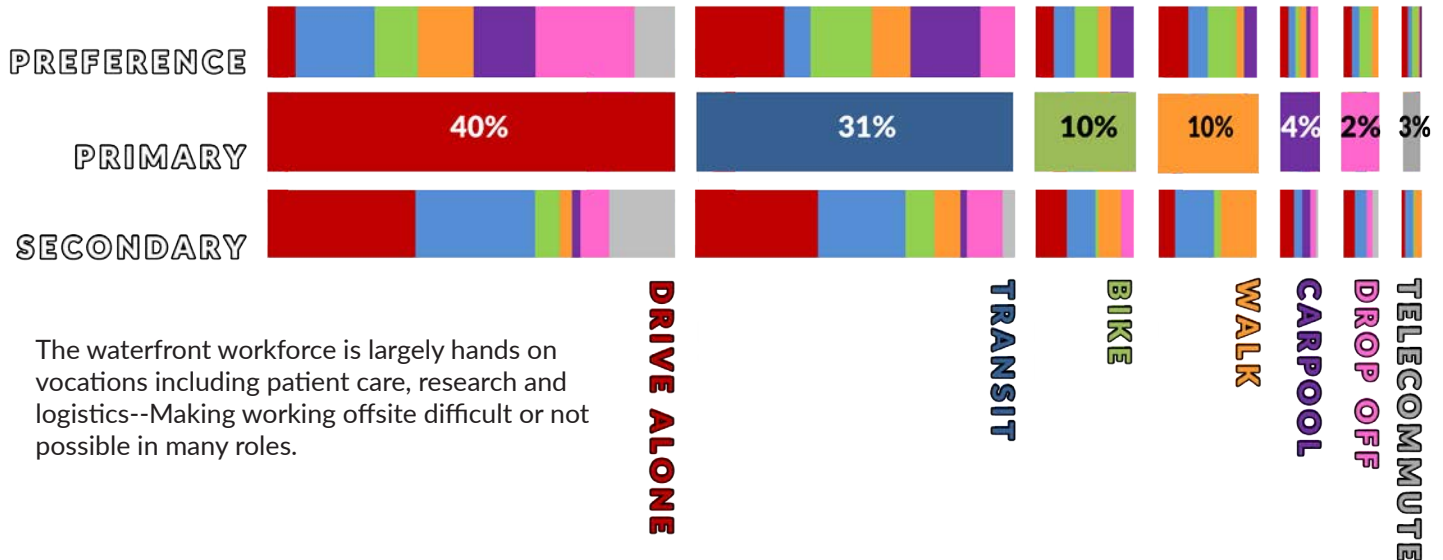
SOUTH WATERFRONT

ECO population: 2204
 Respondents: 326
 Each respondent represents 7 people
 Margin of error: 5%

South Waterfront skews higher than the city average for walking and biking but lower than OHSU overall, despite a flat campus with developed infrastructure. Since 2018, 3 buildings, 2 parking garages, 1 bike parking facility and 1 shower facility have opened in South Waterfront.



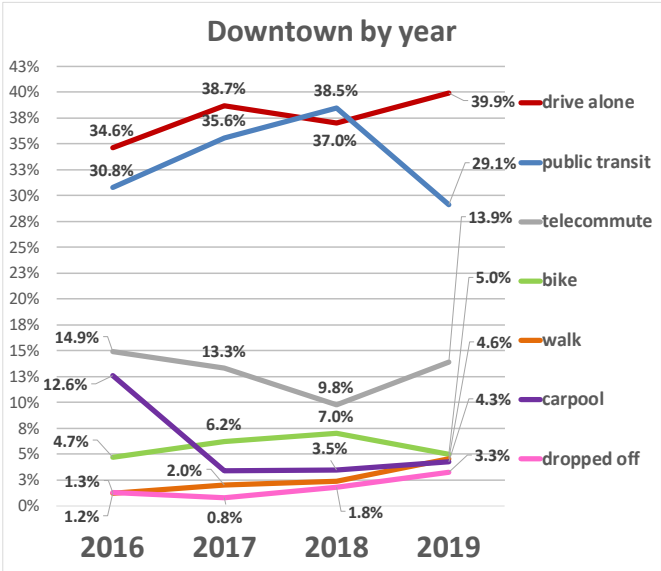
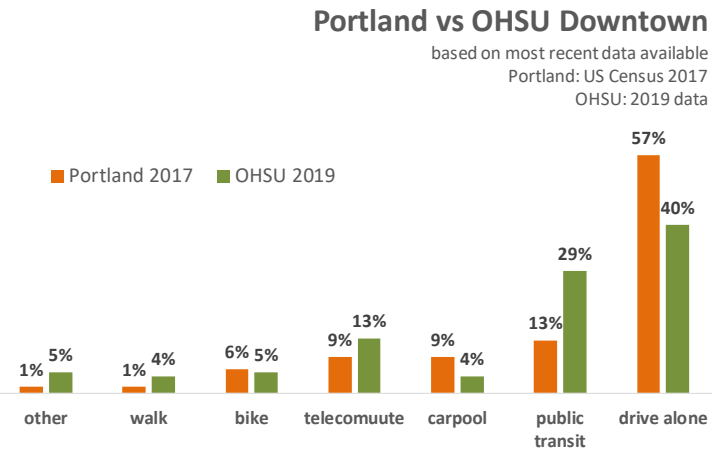
	TELECOMMUTE 2%		WALK 10%		BIKE 10%		PUBLIC TRANSIT 31%		CARPOOL 4%		DROPPED OFF 4%		DRIVE ALONE 40%	
	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred
Telecommute	40%	67%	0%	0%	0%	0%	4%	0%	7%	0%	17%	0%	16%	33%
Walk or run	40%	28%	37%	6%	23%	22%	8%	22%	0%	17%	0%	11%	3%	45%
Bike	0%	25%	7%	22%	3%	40%	9%	35%	0%	10%	0%	20%	6%	35%
Public transit	20%	28%	40%	15%	29%	36%	27%	15%	21%	17%	33%	12%	29%	64%
Carpool	0%	10%	0%	10%	0%	40%	2%	40%	21%	21%	0%	0%	2%	50%
Dropped off	0%	60%	0%	0%	13%	0%	11%	20%	14%	20%	17%	0%	7%	80%
Drive alone	40%	25%	17%	23%	32%	32%	38%	51%	36%	21%	33%	14%	36%	23%



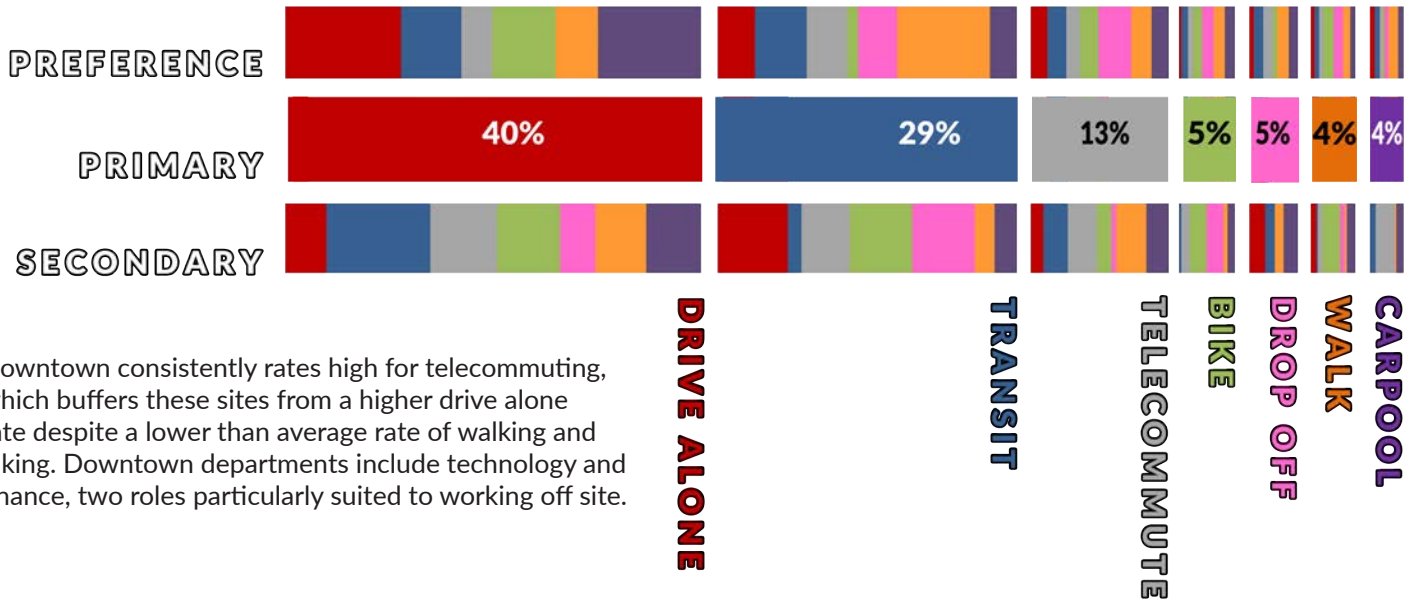
The waterfront workforce is largely hands on vocations including patient care, research and logistics--Making working offsite difficult or not possible in many roles.



Downtown was considered as two work zones where OHSU distributes parking permits and provides shuttle service: 1.) Market Square Building / Fifth Avenue Building, and 2.) Marquam Plaza / Marquam II Building.



	TELECOMMUTE 13%		WALK 4%		BIKE 5%		PUBLIC TRANSIT 29%		CARPOOL 4%		DROPPED OFF 5%		DRIVE ALONE 40%	
	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred	Secondary	Preferred
Telecommute	25%	23%	4%	15%	4%	15%	42%	23%	13%	8%	0%	13%	34%	15%
Walk or run	26%	34%	2%	26%	2%	32%	17%	53%	1%	28%	6%	18%	26%	21%
Bike	13%	31%	13%	38%	8%	25%	54%	6%	0%	6%	0%	32%	32%	31%
Public transit	21%	32%	1%	17%	1%	15%	12%	30%	4%	15%	7%	15%	53%	30%
Carpool	20%	29%	8%	20%	4%	29%	20%	16%	5%	17%	10%	15%	28%	51%
Dropped off	4%	56%	4%	33%	8%	33%	54%	22%	0%	11%	0%	0%	18%	0%
Drive alone	11%	29%	6%	14%	0%	7%	61%	21%	0%	14%	11%	7%	21%	57%



Downtown consistently rates high for telecommuting, which buffers these sites from a higher drive alone rate despite a lower than average rate of walking and biking. Downtown departments include technology and finance, two roles particularly suited to working off site.



Transportation and Parking
3310 SW US Veterans Hospital Rd.
Portland, OR 97239
ohsu.edu/visit

Prepared by:
John Landolfe
Transportation Options Coordinator
landolfe@ohsu.edu