

To: Steve Mital, Director of the Office of Sustainability; Gwen Bolden, Director of Parking and Transportation; Emily Eng, Planning Associate at Campus Planning and Real Estate; and Ann Schreer, Sustainable Transportation instructor.

From: Kelly Groth, Hope Neelson, Qianyu Sui

Subject: 2013 University of Oregon Commuter Survey: Implementation and Analysis

Date: March 15, 2013

I. Executive Summary

With assistance from the University of Oregon (UO) Office of Sustainability and Campus Planning and Real Estate, three graduate certificate students conducted the University of Oregon's 2013 Commuter Survey as a part of the Oregon Leadership in Sustainability (OLIS) Sustainable Transportation Course. The commuter survey is to be conducted every three years to gather data from faculty, staff, and students in regards to their mode(s) of transportation to and from the UO Eugene campus.

The commuter survey will inform the UO Climate Action Plan (CAP) update in Spring 2013 as well as assist the UO's Office of Sustainability, Parking and Transportation, and Campus Planning and Real Estate departments in gaining insights into employee and student commute behavior to and from the UO. The survey data may be used to identify ways to improve UO transportation programs and infrastructure and ultimately reduce greenhouse gas emissions.

The 2013 UO Commuter Survey was distributed to a total of 5,700 University employees and students, with 1,243 completing the survey. Among the entire respondents' primary travel mode to campus, 28% drive alone, 22% bike, 18% walk, 12% ride the bus (not including EmX), 5% get dropped off, 5% use carpool, 4% use other means, 3% ride EmX, and 1% use park & ride. Recommendations are made in this report to encourage further reduction of driving alone to campus and improve other options of transportation including carpool and park-and-ride services.

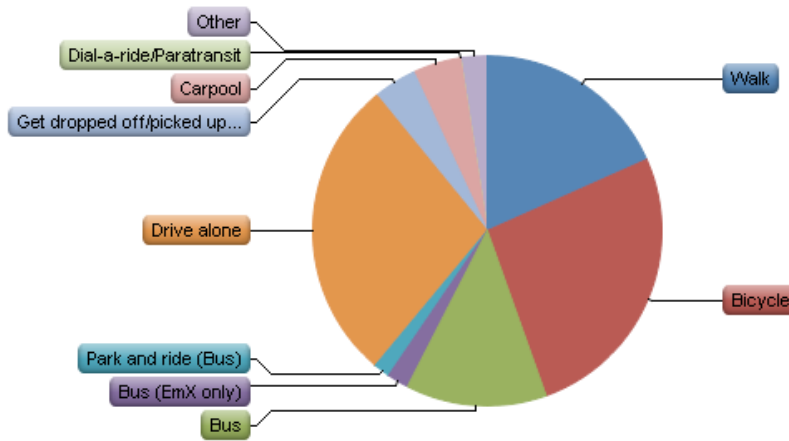


Figure 1.1, total commute mode split of all University respondents

II. Introduction, background, problem statement

Providing effective and sustainable transportation options for over 30,000 students, faculty and staff is a priority for the University as it focuses on reducing greenhouse gas emissions while providing infrastructure to accommodate and discourage commuting of single occupancy vehicles (SOVs). The research team created and distributed a survey questionnaire and analyzed the data collected to present recommendations for a campus-wide sustainable transportation system and encourage students, faculty, and staff to commute using other modes of transportation.

The research team worked closely with UO's director of the Office of Sustainability, Steve Mital; Planning Associate for the Campus Real Estate and Planning, Emily Eng; and Sustainable Transportation director, Ann Schreer; to create and distribute a questionnaire in UO's Qualtrics survey software that can be easily updated and distributed by UO staff in the future (Appendix A).

The team's deliverables to the aforementioned University staff are: conducting the 2013 UO Commuter Survey, analyzing Survey results and offering key findings and recommendations for future Commuter Survey implementation processes as well as for UO transportation policies and programs.

III. Methods and Survey Implementation

2013 Survey Questionnaire

Questions from previous campus surveys including the 2009 Commuter Survey, 2010 Housing Survey, and 2009 Transportation Survey, were reviewed and compiled into a the 2013 Commuter Survey. Upon review and discussion with Steve Mital and Emily

Eng, a total of 31 questions were used in the final 2013 survey.

Sample

We created a random sample of 20% of 24,000 students (4,800 sample size) and 20% of 4,500 faculty/staff (900 sample size) to provide a statistically representative sample of the entire UO commuting population. Of 5700 surveyed, 1,243 university members responded: 65% students and 33% staff/faculty.

Incentives

To encourage potential survey respondents, we obtained two \$50 Duck Store gift certificates, one \$25 gift certificate for a rental item from the Outdoor Program, one free weekend of a bike rental from the Bike Barn, and 10 free bike lights.

IRB/HCS

Conducting a survey through the University requires an exemption or approval from the Institute Research Board (IRB). Because the survey data was to be used internally, and would not be used in any thesis or dissertation. Instead the survey qualified as a "Program Evaluation" project not requiring us to apply for exempt status. The IRB determined that the project did not meet the federal regulatory definition of research with human subjects and therefore did not require IRB oversight. Addition of gender and age questions to the commuter survey would not invalidate our exemption from the IRB, since the intent of the research purpose had not changed.

Survey Distribution

Qualtrics

After a second review of the selected questions were approved by Emily Eng, all questions were entered into Qualtrics. Logistics of questions were determined mainly on responses to each commute mode. For instance, if a respondent answered their primary mode of transportation to campus was driving alone, the next question sets to appear would ask the respondent "What are the top reasons you drive alone to campus? What would cause/encourage you to try an alternative to driving alone to campus?" Those who did not select driving alone would not be asked to answer those specific questions, and would move on to another question set.

After further review on question set logic from Steve Mital, the survey was ready to be distributed. Emily Eng requested for the final survey to be housed on her account, allowing her to edit and distribute a similar questionnaire for future Commuter Surveys. She was also able to generate raw data from the report for future reference.

Distribution of Survey

To distribute the survey, we requested a complete list of student emails from Andrea Larson in UO Institutional Research, and staff and faculty emails from Kerry Davis in UO Human Resources. To provide a statistically representative sample of the entire campus population, it was decided to select of a random sample of 20% of 24,000 students (4,800 sample size) and 20% of 4,500 faculty/staff (900 sample size).

To create an unbiased selection of emails for the survey, we generate a random sample of the email addresses in Excel (Appendix D).

Although Qualtrics allows for the survey to be emailed from its website, previous surveys emailed through the Qualtrics system resulted in a large number of bounce-backs due to email services perceiving the survey as spam. To reduce the amount of email failures, it was decided that Steve Mital would distribute the final survey through the Office of Sustainability.

IV. Key Findings and Graphs

Overall Findings

Of the entire surveyed group, 28% of campus commuters' primary mode of transportation was driving alone. Biking to campus was the second most popular at 26%, and walking came in third at 18%. Staff and faculty account for 63% of the population who primarily drive alone.

Figure 2.1, top three options of encouragement to not drive alone.

When respondents were asked what would encourage them to try an alternative transit mode to driving alone, 33% listed more frequent bus service, 30% listed 'nothing', while 28% listed 'other'. A guaranteed free ride home to accommodate unplanned trips accounted for 19%, while 17% said help in finding people to carpool would suffice. Those who answered 'other' comments included suggestions for an on-campus shuttle (especially in rainy weather), extended bus route, and improved safety along routes to school. Other concerns included lack of frequent bus service or routes, personal

schedule constraints, and lack of carpool knowledge or availability.

The majority of those who answered “drive alone” as being their primary mode of transportation selected biking (41%) as their secondary mode of transportation, while riding the bus was second 20% and walking was 7%. EmX was listed at 4% and park-and-ride was listed at 5%.

Of the 1,243 surveyed respondents, 77% of students and 65% of faculty and staff own a smartphone, which could be utilized in future cases of searching for alternative transportation modes in commuting – and will be discussed in *Recommendations*.

Finally, a “sweet spot” of time taken to commute was the same for both students and faculty, at 10-14 minutes, 34% for students and 32% for staff and faculty. While 23% of students take 5-9 minutes to commute, 21% of faculty and staff took 15-19 minutes. Lane Transit District (LTD) could target this as an ideal transit time for in their average trip length.

University of Oregon Student Commute Distribution

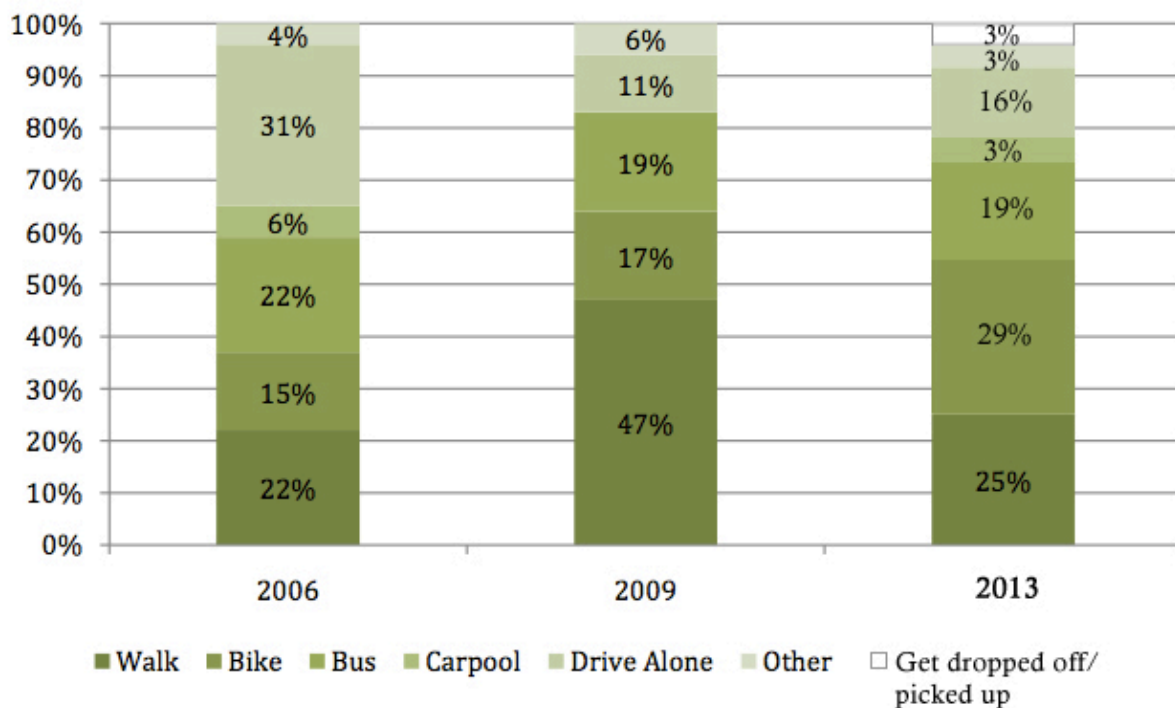


Figure 2.2, comparison chart of past student commute modes

Students

The number of students who primarily commute to campus by bicycling has increased to 29% (up from 17% in 2009), while 18% primarily drive alone to campus. Students walking to campus accounted for 25%, riding the bus accounted for 19%, and 16% drive alone.

The results of students traveling to campus the same day they responded to the survey were different: bicycling and walking tied for first place at 24%, drive alone followed at 18%, and riding the bus was listed at 16%.

Only 16% of students drove alone and of those members, the majority (90%) does not have a UO parking permit. Instead, 85% of those students used the parking meters on 15th Avenue between University and Agate Street instead of purchasing a permit.

Students who primarily drive alone to campus answered that living in distant areas where lack of bus services were offered, infrequent bus operating hours, and lack of carpool information were some of the as barriers to why they cannot depend on any other mode of transportation. A distribution of available carpools and carsharing programs on campus is necessary to foster behavior change.

University of Oregon Employee Commute Distribution

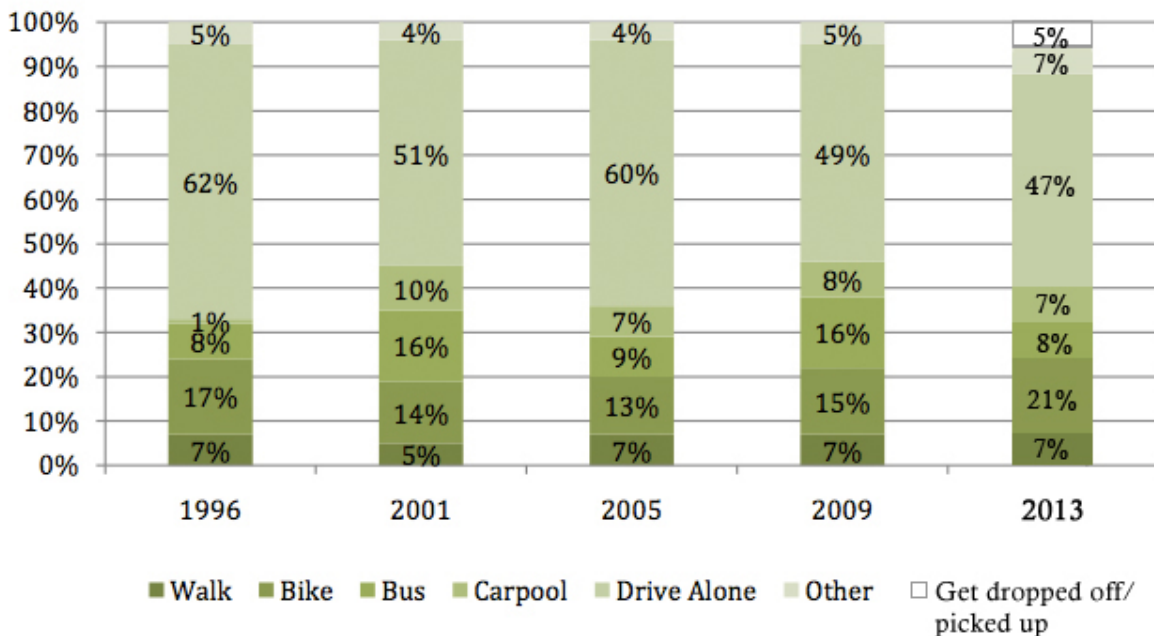


Figure 2.3, comparison chart of past University employee commute modes

Faculty and Staff

The primary commuting mode of faculty and staff is driving alone (24%), followed by bicycling (22%), and riding the bus (16%). The top three reasons for those who drive alone to campus are: the need to make regular trips before/after classes/work (54%), convenience (49%), and unplanned or unanticipated trips (33%).

The percentage of staff and faculty driving alone to campus was 47%, followed by 21% biking and 8% taking public transit.

Of the 294 faculty and staff who primarily drive alone, 64% have a UO parking permit. The majority of these respondents (75%) said they do NOT ever park at the pay-to-park meters on 15th Avenue, which shows that most commuters have permits and visitors are most likely those who use the meters.

Figure 2.4, second mode of commute split of University employees

V. Recommendations

The UO CAP aims to reduce greenhouse gas emissions to a climate-neutral level by 2050, which can be achieved by reducing the amount of SOV commuters on campus. While reducing these indirect emissions may seem difficult and even cost-prohibitive to incentivize faculty, staff, and students to stop driving, there are effective and rather inexpensive ways to encourage use of other modes of transportation.

1. Improve outreach and education of available transportation options on campus. These cost-effective tactics can include a monthly e-newsletter distribution or campus dashboard including available transportation options on and around campus. Simply creating a more user-friendly “Commuter Services” tab that displays all modes and options on campus (Bikes & Bike Sharing Program, Bus, Valley Vanpool, Zipcar, Rideshare, etc) will allow for better communication of available transportation.

Barriers to students, faculty, and staff taking advantage of carsharing and carpooling can be eliminated by effectively advertising available resources (AlterNet rideshare). Incorporation of all transportation-related services and programs provided on campus (LiveMove, OP Bike Barn) into the newsletter or campus dashboard will help create a comprehensive list of available options.

Other technological improvements could include design of a smartphone app including a live-time arrival for LTD bus services, a map of safe bike routes and directions, as well as available carsharing and carpools. NextBus offers such technology, and has worked with several universities (including City College of New York and Western Kentucky University) to create comprehensive, user-friendly apps¹.

Another service provided on the app could be the contact center for LTD's Emergency Ride Home program, further ensuring a convenient and guaranteed way home if needed. One of the main reasons people drive alone to campus is the security in knowing they have a car in case of emergencies, and this program could potentially increase the number of employees who decide to commute using alternative modes of transportation.

2. Consider implementing a peer-to-peer car-sharing program for (like Relay Car Sharing). Zipcar and WeCar locations are not evenly distributed throughout Eugene, staff and faculty would benefit most from this network. Students are also more likely to use Relay Car Sharing, catered to younger people. Lack of carpool knowledge or availability

3. Use individualized marketing tactics to provide incentives and education to faculty and staff members who primarily drive alone to campus. These could include:

A. Provide discounts to those who participate in a bike-sharing program or Park & Ride services operated by LTD. Since UO has collaborated with LTD in their Park & Ride service to encourage university members to park their personal vehicles and transfer to public transit, meet with carpool, or ride a bike to campus, continuing to develop a well-advertised bike-sharing program in conjunction with Park & Ride will benefit more SOV riders.

B. Offer Pay-As-You-Drive (PAYD) auto insurance to those who drive less than 8,000 miles per year.

C. Provide free parking passes to employees who take advantage of alternative transportation modes including walking and biking, van or carpooling, public transportation, or peer-to-peer carsharing programs. University of California, Irvine

¹ NextBus University Transit. <http://news.nextbus.com/category/hot-transit-topics/university-transit/>

offers such incentives to faculty and staff members².

4. Safety for pedestrians and bikers was a large concern in the comments section of the survey. Improvement to pedestrian/bike lanes, improving the lighting at bike parking area, and providing showers for bike commuters are some areas UO can focus on to encourage more bicycle commuters. Also, bicycling infrastructure around the campus could be improved to accommodate the 41% of primary drive-alone commuters who listed bicycling as their secondary mode.

5. Expand LTD service and improving routes/timetables in specific areas. According to the comments of single occupancy vehicle riders, one the most effective initiatives to encourage a secondary travel mode is more frequent bus schedules and making bus stops more accessible, etc. Of the respondents who drive alone to campus, 33% listed more frequent bus service as the needed encouragement to reduce their need to drive.

6. Recommendations for Future Surveys

Use the 2013 Commuter Survey on Qualtrics as the baseline for future periodic commuter surveys. Continue survey as a “living document” and share updated data with Gwen Bolden, Emily Eng and Steve Mital. To improve the next survey suggestions include: when determining status at the UO, allow for students to select general “student status,” then create question logic to have students to select specific year of study; insert empty answer field when asking respondents what their gender is; in order to utilize GIS mapping techniques and investigate potential alternative commuting solutions, ask for respondents’ ZIP codes.

VI. Conclusion

Solutions to reducing the amount of University employees and students who drive alone to campus can begin with the improvement to advertisements of available transportation options on and around campus. Creating an interactive, user-friendly web portal that offers UO staff, faculty, and students varying options of transportation will provide a comprehensive list of all services on campus. Creating a mobile app for bus services, bike routes, and nearby carsharing and carpools would also greatly increase the accessibility and use of these transit modes.

If the current bus infrastructure is improved upon and made easier to access, people will be more willing to make a change from their primary mode of driving alone. The UO should work with LTD to expand service and improve routes in specific areas to provide faculty and staff with alternative transportation options, encouraging them to

² Faculty/Staff Incentives: Sustainable Transportation Permits. <http://www.parking.uci.edu/at/incentives/employee.cfm>

decrease their reliance on personal vehicles. Using the 2013 Commuter Survey and future surveys can address specific areas that lack efficient bus services and routes.

Appendix A

UO Commuter Survey 2013

Q1 What is your status at the University?

Freshman (1)

Sophomore (2)

Junior (3)

Senior (4)

Law Student (7)

Graduate Student – Master’s or Certificate (8)

Graduate Student – Doctoral (9)

Non-matriculated Student (13)

Graduated/Not Affiliated (10)

Faculty (11)

Staff (12)

If Graduated/Not Affiliated Is Selected, Then Skip To End of Survey
If Faculty Is Selected, Then Skip To Are you full-time or part-time?
If Staff Is Selected, Then Skip To Are you full-time or part-time?

Q2 I am:

- A resident of Oregon (1)
- A resident of a state other than Oregon (2)
- An international student (3)

Q3 Are you full-time or part-time?

- Full-time (1)
- Part-time (2)

Q4 Do you own or have access to a motor vehicle (i.e. car, SUV, or truck) at your residence? This includes vehicles you may borrow from roommates or others living in your household.

- I own a motor vehicle (1)
- I do not own a motor vehicle but have access to one that I can borrow (2)
- No (3)

Answer If What is your status at the University? Faculty Is Not Selected And What is your status at the University? Staff Is Not Selected

Q5 Do you live on campus?

- Yes (1)
- No (2)

Answer If Do you live on campus? No Is Selected Or What is your status at the University? Faculty Is Selected Or What is your status at the University? Staff Is Selected

Q6 How many days per week do you normally travel to campus?

- Less than 1 day per week (8)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)

Answer If Do you live on campus? No Is Selected Or What is your status at the University?
Faculty Is Selected Or What is your status at the University? Staff Is Selected

Q7 TODAY, how did you travel to campus?

- Walk (1)
- Bicycle (2)
- Bus (3)
- Bus (EmX only) (4)
- Park and ride (Bus) (5)
- Drove alone (6)
- Got dropped off by car (7)
- Carpool (8)
- Dial-a-ride/Paratransit (11)
- Other (12) _____

Answer If Do you live on campus? No Is Selected Or What is your status at the University?
Faculty Is Selected Or What is your status at the University? Staff Is Selected

Q8 TODAY, how did you or will you leave campus?

- Walk (1)
- Bicycle (2)
- Bus (3)
- Bus (EmX only) (4)
- Park and ride (Bus) (5)
- Drive alone (6)
- Got picked up by car (7)
- Carpool (8)
- Dial-a-ride/Paratransit (11)
- Other (12) _____

Answer If Do you live on campus? No Is Selected Or What is your status at the University?
Faculty Is Selected Or What is your status at the University? Staff Is Selected

Q9 What is your PRIMARY mode of travel to and from campus?

- Walk (1)
- Bicycle (2)
- Bus (3)
- Bus (EmX only) (4)
- Park and ride (Bus) (5)
- Drive alone (6)
- Get dropped off/picked up by car (7)
- Carpool (8)
- Dial-a-ride/Paratransit (11)
- Other (12) _____

Answer If Do you live on campus? No Is Selected Or What is your status at the University?
Faculty Is Selected Or What is your status at the University? Staff Is Selected

Q10 What is the distance from your residence to campus?

- Less than 1 mile (1)
- 1 to 2.9 miles (2)
- 3 to 5.9 miles (3)
- 6 to 9.9 miles (4)
- 10 to 19.9 miles (5)
- 20 to 29.9 miles (6)
- 30 to 49.9 miles (8)
- 50 miles or more (7)

Answer If Do you live on campus? No Is Selected Or What is your status at the University?
Faculty Is Selected Or What is your status at the University? Staff Is Selected

Q11 How long does it take you to get to campus one-way using your PRIMARY mode of travel?

- Less than 5 minutes (1)
- 5-9 minutes (2)
- 10-14 minutes (3)
- 15-19 minutes (4)
- 20-24 minutes (5)
- 25-29 minutes (6)
- 30-44 minutes (7)
- 45-60 minutes (8)
- More than 60 minutes (9)

Answer If Do you live on campus? No Is Selected Or What is your status at the University?
Faculty Is Selected Or What is your status at the University? Staff Is Selected

Q12 Do you have a secondary mode of travel to campus (i.e. you travel this way at least once per month)?

Yes (1)

No (2)

Answer If Do you have a secondary mode of travel (i.e. you travel t... Yes Is Selected

Q13 What is your SECONDARY mode of travel to and from campus? (IF you have more than one secondary mode, please choose only the mode used most frequently.)

Walk (2)

Bicycle (3)

Bus (4)

Bus (EmX only) (5)

Park and ride (Bus) (6)

Drive alone (7)

Get dropped off/Picked up by car (8)

Carpool (9)

Dial-a-ride/Paratransit (12)

Other (14) _____

Answer If What is your primary mode of travel to and from campus? Drive alone Is Selected

Q14 What are the top reasons you drive alone to campus? Select up to two (2) that apply.

More convenient (1)

Need to make regular trips before or after classes/work (examples: grocery store, internship, children's school.) (2)

May need to make unplanned/unanticipated trips (example: pick sick children up from school) (3)

Other (4) _____

Answer If What is your primary mode of travel to and from campus? Drive alone Is Selected

Q15 What would encourage/cause you to try an alternative to driving alone to campus?
(Choose up to 3 options)

Guaranteed free taxi to accommodate unanticipated/unplanned trips (2)

Help finding people to carpool with (3)

A rental bicycle provided by the university (5)

More covered bike parking (6)

More bike lockers (9)

More bike cages (15)

More frequent bus service (8)

Higher gas prices (11)

Higher cost for a parking pass (12)

Nothing (13)

Other (14) _____

Answer If What is your PRIMARY mode of travel to and from campus? Drive alone Is Selected
Or What is your PRIMARY mode of travel to and from campus? Carpool Is Selected
Or What is your PRIMARY mode of travel to and from campus? Get dropped off/picked up by car Is Selected

Q16 Approximately, how many miles per gallon does your vehicle get? (The Office of Sustainability uses this information to estimate total annual greenhouse gas emission from all faculty/staff and student commutes.)

Less than 10 mpg (1)

10-14 mpg (2)

15-19 mpg (11)

20-24 mpg (3)

25-29 mpg (4)

30-34 mpg (5)

35-39 mpg (6)

40-44 mpg (8)

45-50 mpg (9)

More than 50 mpg (7)

Answer If Do you own or have access to a motor vehicle (i.e. car, S... I own a motor vehicle Is Selected

Q17 Approximately how many miles is your vehicle driven per year? (Pay-as-you-drive insurance can save money for those who drive less than 8,000 miles per year. The Office of Sustainability will use this information to estimate total number of UO faculty/staff/students for whom this may be useful. No personal information from this survey will be shared with insurance providers or any other vendors.)

- 0-3,999 miles (1)
- 4,000-7,999 miles (2)
- 8,000-11,999 miles (3)
- 12,000-14,999 miles (4)
- 15,000 or more miles (5)

Answer If Approximately, how many miles do you drive in a year? (Th... 0-3,900 miles Is Selected Or Approximately, how many miles do you drive in a year? (Th... 4,000-7,900 miles Is Selected

Q18 Pay-as-you-drive insurance can reduce insurance premiums for those whose vehicles are driven less than 8,000 miles per year. Would you be interested in receiving more information on pay-as-you-drive insurance? (No personal information from this survey will be shared with insurance providers or any other vendors. Responses to this question will help the Office of Sustainability understand whether there is significant interest in this new pay-as-you-drive insurance model at this time.)

- Yes (1)
- No (2)

Q19 Once on campus, how do you normally get around (to class or for meetings)? Select all that apply.

- Walk (1)
- Bicycle (2)
- Skateboard (3)
- Drive my personal car (4)
- Drive a university car/van/truck (5)
- Electric utility cart (6)
- Bus (EmX only) (7)
- Access Shuttle (12)
- Other (13) _____

Q20 How far are you willing to WALK on campus (to get to classes, lunch, meetings, etc) before using another mode of travel (i.e. bike, car)?

Less than 1/4 mile (1)

About 1/4 mile (i.e., Duck Store to EMU) (2)

About 1/2 mile (i.e., Duck Store to Living Learning Center) (3)

About 3/4 mile (i.e., Duck Store to Global Scholars Hall) (4)

More than 3/4 mile (5)

Q21 Do you have a parking permit?

Yes (1)

No (2)

Answer If Do you have a parking permit? Yes Is Selected

Q22 What kind of parking permit do you have?

Student or Faculty/Staff (1)

Reserved (6)

Overnight (8)

Disabled hangtag (9)

Other type of UO permit (10) _____

I have a non-UO parking permit, for a location off campus (11)

Answer If Do you have a parking permit? Yes Is Selected

Q23 Is the parking permit for the full academic year or by term?

Full academic year (1)

By term (2)

Not applicable (3)

Q24 Do you ever park at the pay-to-park meters on 15th Avenue, between University Street and Agate Street?

Yes (1)

No (2)

Answer If Do you ever park at the pay-to-park m... Yes Is Selected

Q25 How often do you park at the pay-to-park meters?

- 3 or more days per week (2)
- 1-2 days per week (1)
- Once every two weeks (4)
- Less frequently than the above (6)

Answer If Do you ever park at the pay-to-park m... Yes Is Selected

Q26 How long do you typically park at the pay-to-park meters?

- Up to 2 hours (1)
- Up to 4 hours (2)
- Up to 8 hours (3)
- More than 8 hours (4)

Answer If Do you ever park at the pay-to-park m... Yes Is Selected

Q27 If you have a UO parking permit, do you also use the pay-to-park meters?

- Yes, when the location is more convenient (1)
- Yes, when I can't find parking elsewhere (2)
- I do not have a UO parking permit, but use the meters instead (3)
- Other (4) _____

Q28 Do you own or have access to a bicycle that you can use daily?

- Yes (1)
- No (2)
- Not Applicable - I can't/don't want to bike (3)

Q29 What is your gender?

- Female (1)
- Male (2)
- (4) _____

Q30 What is your age?

- 18-23 (1)
- 24-29 (2)
- 30-34 (3)
- 35-39 (4)
- 40-49 (5)
- 50-59 (6)
- 60 or older (7)

Q31 Do you have a smart phone?

- Yes (1)
- No (2)

Q32 Would you like a chance to win one of the following prizes? They include: One of two \$50 gift cards to the Duck Store, One \$25 gift card to the UO Bike Barn, one of 10 bike lights, or one free bike rental. If so, please enter a valid UO email address so we can notify you if you win. (name@uoregon.edu):

Q33 Feel free to leave any comments:

Appendix B

Timetable and How-To Guide

Week 1

Meet with Gwen Bolden, Emily Eng and Steve Mital establishing scope of work and timeline; determine expectations for project.

Week 2 and 3

Apply for exemption or approval from the Institute Research Board (IRB).

Request donations from programs on campus (Duck Store and Outdoor Program's Bike Barn) to be used as incentives for survey respondents. Begin drafting new survey questions.

Week 4

Type questions into Qualtrics. When adding clients into Qualtrics to allow access to the survey, we had issues with Qualtrics accepting other email addresses – even the required UO ones – in order to add people to view/edit the survey. We found that people

had to register with Qualtrics first, then Qualtrics would acknowledge their UO email and add them to the list to view/edit the survey.

Week 6 and 7

Acquire email addresses from University members for the survey, contact Andrea Larson in UO Institutional Research for student emails and Kerry Davis in UO Human Resources for staff and faculty emails.

To maintain a 20 percent randomized subset among all University members, select a random sample of 20% of 24,000 students (4,800 sample size) and 20% of 4,500 faculty/staff (900 sample size) to provide a statistically representative sample of the entire population.

UO Campus Planner and client Emily Eng asked to include questions on gender and age of respondents included in the survey, in order to provide better information on demographics related to their commuting choices. We sent an email to RCS asking if the project could still be deemed as exemption. We clarified that the survey information would still not be associated with any personal information, including names or email addresses. We were given clearance to add in questions asking respondents to indicate their gender and age.

RCS advised that addition of gender and age questions to the commuter survey would not invalidate our exemption from the IRB, as long as the intent of the research purpose has not changed. Race/ethnicity questions were still excluded.

Week 8

Meet with Steve to make final edits; discuss logistics of each question and responses. For us, this proved to be somewhat difficult since we did not use any original survey content. We decided to remove questions that were too specific (make, model, and year of vehicle). Emily requested to have the final survey housed with her, so she may have a “control survey” to base future questionnaires on and allowing for a more accurate comparison to previous surveys. In the future, all group members should have access to the survey in order to collaborate in the task of generating reports.

Steve emailed the survey out to students, faculty and staff from the Office of Sustainability February 25.

Week 9

Close survey after one week (March 5) and generate raw data from Qualtrics, sort data by subgroups (students, faculty/staff, drive alone, etc). Several subgroups and factors were applied to survey results to examine different trends. (See *III Primary Findings*). Analyze results and compare to past survey data.

Appendix C

Research Plan, sent to IRB for exemption

Persons surveyed in this study will not be subjected to physical or harmful tests. Persons in this survey will not be asked to disclose any personal or sensitive information including (but not limited to): residential address, medical history, sexual preference or gender, race/ethnicity, or mental health.

This survey will be conducted under the direction of Ann Scheerer, (Instructor/Project Advisor), and Larisa Varela, (Assistant Instructor/Project Advisor). As staff to Oregon Leadership In Sustainability (OLIS), Ann Scheerer and Larisa Varela are responsible for overseeing the work and conduct of the Principle Investigator, Emily Eng, as well as the student researchers – Kelly Groth, Hope Neilson, and Qianyu Sui.

The aforementioned members agree to not distribute or sell any personal information collected during this survey.

The survey will be sent via UO Communications to one thousand (1000) randomized members – an equal percentage of students, faculty, and staff – on February 18th, 2013. The survey will be closed March 5th, 2013. A participant of the survey will be chosen at random to receive one (1) gift card to UO Bookstore. Data will be analyzed and presented to faculty member Steve Mital and OLIS cohort on March 22nd, 2013.

Exemption from Human Research Studies

“determined that the project as described does not meet the federal regulatory definition of research with human subjects and therefore does not require IRB oversight. [...]

In the case of your project, the project does meet the definition for human subject, however, does NOT meet the definition of research as the end goal is to use the information for internal management and program evaluation purposes for UO and not to contribute to generalizable knowledge.”

Federal regulations define "research" and "human subject" as follows (as per 45 CFR 46.102):

- Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. (A graduate student thesis or dissertation would be considered to be designed to contribute to generalizable knowledge).
- Human subject means a living individual about whom an investigator conducting research obtains:
 1. Data through intervention or interaction with the individual, or
 2. Identifiable private information

Appendix D

How to generate a random sample in Excel

1. Create two empty columns in the left hand side of the spreadsheet
2. Select cell A1 and drag cursor down until all of the columns with data are highlighted (ex. cells A1:A100)
3. Enter function =RAND() into the function toolbar and press control + enter. Numbers will be generated into all of the selected cells.
4. Copy the generated numbers and paste into the next column over. The numbers pasted into the next column will be different from those in column A.
5. Select all columns with data, including those with random generated numbers. Select Data > Sort > Ascending.
6. Data should be randomized. Delete columns A and B. Select needed amount of data (email addresses, names, etc).