

PSU Living Lab Program: Project Profile Form

FORM INSTRUCTIONS

Please review

- Please maintain the heading structure of this form for accessibility.
 - If you are not already in contact with a member of the Living Lab team, please notify livinglab@pdx.edu with your desire to pitch, participate in, or support a Living Lab project.
 - If you are PSU staff pitching a project, contact livinglab@pdx.edu to begin working with a member of the Living Lab team to complete this profile form. The completed form will be used by the Living Lab team to recruit participants.
 - For faculty and students interested in participating in a project that already has a completed profile: email livinglab@pdx.edu to discuss your interest!
 - Whether you are pitching a project or participating in a project, please review the Disclaimer information below.
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PARTICIPATION DISCLAIMER

By agreeing to participate in a Living Lab project, you (staff, student, or faculty):

1. Grant the Living Lab program at Portland State University (PSU) the non-exclusive right to, without changes to the content, copy, display, and distribute the content created as part of this Living Lab project and to make this work available online.
2. As per PSU policy, consent to being photographed (if your name will not be used in connection with the likeness*). If you do not wish to be photographed, you can choose to opt-out so as not to be within the camera's range.

*If you will be identified, or would like to be, an additional consent/release form is required.

PROJECT OVERVIEW

Briefly describe the vision and purpose of this project.

Project title

Analysis and Reporting for the PSU Transportation Survey

Project overview

Portland State's Transportation & Parking Services (TAPS) department is seeking partners to assist with the annual PSU transportation survey, in one or more series of projects. This project seeks to create a framework for future survey reports and includes an equity analysis of the survey results. Project opportunities include expanding or taking over a variety of roles with the annual survey, such as: data analysis; data visualization; reporting; developing recommendations for revisions to the survey, and more. TAPS will continue to manage the process of sending out the survey and collecting data.

Intended time period for project and/or date when project pitched

This project is being pitched in Spring/Summer 2020. We are hoping to launch projects during the 2020-2021 school year, but the timeline is flexible for developing a one-off or ongoing partnership.

PROJECT PARTNERS

Who is the staff and departmental partner or audience for this project?

Project Contact(s) & Title(s) & Full Department Name(s): (1) Clint Culpepper, Transportation Options Manager, Transportation & Parking Services; (2) Amanda Wolf, Program Analyst, Campus Sustainability Office

Email(s): (1) clint@pdx.edu; (2) wolf@pdx.edu

PROJECT INFORMATION

Indicate all themes that apply to this project by placing an X next to reach relevant theme:

Energy Water Purchasing Waste Food Land Use Transportation Climate Action Social
 Community Wellbeing Other: *(please describe)*

Project Background & Context

What challenge, opportunity, or need does this project relate to or fill? Include or comment on how this project builds on prior work.

The annual transportation survey is a tool to learn about commuting behaviors and transportation modes used by the PSU community, including students and employees. Data and results from the survey are used to identify challenges and opportunities faced by community members when determining how they will get to campus; barriers to greater usage of alternative transportation modes; and greenhouse gas emissions associated with these commute patterns for internal and external reporting on PSU's climate commitments. The transportation survey is also an important tool for TAPS employees and PSU leadership when advocating on behalf of the PSU community with the Portland Bureau of Transportation (PBOT) and other organizations. The PSU Campus Sustainability Office (CSO) will also support this project.

The PSU transportation survey has been conducted for many years, led at first by the Campus Planning Office and now by TAPS. Knowing how community members currently or are likely to get to campus drives many important processes on campus, from allocating budget for and creating commuter and transit benefit programs, to driving physical infrastructure and construction planning. Beyond these transportation and planning uses of the survey, it is also a key tool in PSU's climate commitments. Data from the annual survey feeds into PSU's greenhouse gas emissions (GHG) assessment as PSU works towards the goal of carbon neutrality by 2040. Specifically, data on transportation modes is used to calculate commute carbon emissions.

The transportation survey is done in Qualtrics and is sent to a sample of students and employees (both faculty and staff) in partnership with University Communications and the Office of Institutional Research and Planning (OIRP). Response data is combined with demographic information from OIRP to expand the full picture and opportunities for analysis. TAPS currently uses Excel to perform analysis as it allows for greater flexibility than the built-in analysis features on Qualtrics.

Within and beyond this annual process, there are ample opportunities for faculty and students to inform changes to the survey and conduct analysis and reporting, on a one-off or ongoing basis. TAPS is very interested in engaging with PSU academics in all of this work, as there are various student learning opportunities and research possibilities. Partnership also helps build awareness of transportation programs on campus and creates accountability.

Contribution to Sustainability at PSU

Describe how the project supports PSU's and/or your departments' sustainability goals and plans.

Encouraging, incentivizing, and advocating for the use of alternative commute modes brings together affordability, community health and well-being, and sustainability goals. The transportation survey is a key tool for understanding how PSU can better serve the needs of students, faculty, and staff as they determine the best way to travel to and from campus.

Within the sustainability contributions, there is an environmental justice and equity component. The analysis and report should heavily feature the analysis of equitable access to transportation programs that PSU currently offers. While an existing analysis exists for TriMet's network, it would be useful to analyze the network as it applies to PSU. The same analysis should be done for the region's bicycle network and how it applies to PSU students and employees.

Outline of Project Details

Describe tasks and activities involved in the project. Common tasks include research or literature review; data collection; design, proposal, and recommendations development, and more.

At this time, we are open to defining project details based on the interests and needs of faculty and students. We can build out one or more projects to integrate into an existing course; design for an independent study; formulate as a capstone project; and more. Here are some potential research questions, topics of focus and deliverables that may define this work:

- *Taking over analysis and reporting:* students and faculty could take over annual data analysis and reporting. This could involve a class taking this on as a project every winter term, or a lab group conducting this work for research.
- *Focus on process and methods:* how can TAPS improve and streamline the transportation survey to best meet campus needs? What methods should be used to analyze and report on the survey?
- *Focus on reporting:* what should be presented? What questions are important to answer through analysis? How should analysis be presented? What can be shown through simple analysis and charts v. presented with additional storylines?
- *Focus on refining analysis:* TAPS would like to find one or more academic partners to take on data analysis, including but not limited to determining mode split and demographic analysis. This work could take the form of basic analysis or be expanded to explore questions like, what populations are being left out or underrepresented? Why do different populations use certain modes?

- *Focus on “stages of change”*: TAPS is working with a consultant to see where folks lie in a “stages of change” behavior and framework. Data analysis from the transportation survey can help inform this work.
- *Potential deliverables*: deliverables will be defined in the context of any one project to align with academic requirements of students (i.e. term project; thesis; research report)
 - An annual transportation survey report available to the public
 - Excel files used for analysis
 - Graphs, charts, tables
 - Quantitative and qualitative analysis
 - Recommendations for improving the survey and survey process; recommendations to TAPS and CSO on better survey the transportation and commuting needs of the PSU community

Anticipated Outcomes

Describe the desired outcomes of this project, including qualitative and quantitative outcomes.

- Outcomes:
 - Develop a replicable process for analysis and reporting
 - Establish an equity analysis of transportation programs at PSU
 - Provide feedback, alter, expand commuter survey & process
 - Understand commuter habits among the PSU community, both annually and over time
 - Help TAPS advocate for changes to city-wide programs that better serves PSU community

Required Deliverables

Indicate specific deliverables, such as photographs; prototypes; etc. All Living Lab projects require a written and verbal form of communicating project process and outcomes.

See potential deliverables above under outline of project details. We will define required deliverables once a project is formulated.

Ideal Project Start and Completion Date

Indicate the optimal timeline for the project, including any time-sensitive aspects.

While there is no pressing need to launch this work by a specific date, it’s important to keep in mind that the survey is conducted every fall, so winter quarter would be a great time to conduct analysis and reporting, either as a one-off project or an annual project. TAPS wants to empower students and faculty to take ownership of this work and/or otherwise use the transportation survey data for special research and data analysis projects.

Special Considerations

List special equipment, liability considerations, access restrictions, etc.

This work can be done remotely to accommodate online and remote learning during the COVID-19 pandemic. We will work with faculty and student partners to develop and agree to data sharing and data management standards and expectations.

Potential Information Sources

Specify documents, links, literature, contacts or other sources to inform project work.

TAPS and CSO will provide project participants with copies of any relevant internal resources, such as the transportation survey questions for [students](#) and [employees](#) and a copy of survey data.

Other higher education examples to draw inspiration from:

- [UW Campus Transportation Survey](#) serves as an example of a report from an urban campus
- The [UC Davis Campus Travel Survey](#) serves as an example of a report to strive towards and as a academic-operational partnership that can be possible through this project
- Other examples from urban campuses include: [San Francisco State University](#); [UCLA](#); [ASU](#)

PSU transportation and sustainability resources include:

- The [TAPS website](#) contains information on the different transportation programs available to PSU students, employees, and visitors. These programs are informed by commuter patterns and needs.
- The [sustainability website](#) includes a page on [sustainable transportation and alternative commuting](#), and will soon have information about greenhouse gas emissions in the [sustainability dashboard](#)

Student & Faculty Qualifications

Describe desired experience, background and skills that project participants should have in order to successfully complete the project.

Because this work can be broken into discrete sub-projects or phases, we are open to working with students, faculty, and/or courses from a variety of disciplines. We envision the following disciplines and interests/experience to be most relevant and critical to the success of this work:

- Urban studies & planning
- Transportation planning
- Transportation equity
- Experience with summarizing data and with quantitative and qualitative data analysis
- Experience with GIS and other mapping and data visualization tools
- An interest in the intersections of sustainability and transportation

Budget & funding (if any)

List known funding sources, and/or projected resource needs for the project.

We encourage project work to be done using software and computer programs available to students and faculty at no cost through the University, OIT, and/or your academic unit. If there are programs you would like to use but do not have access to, reach out to your project partners to discuss a potential budget.