

**Number:** 25-19

**Proposed Title: Improved Health and Safety Travel Metrics by Better Understanding  
Recreational Travel**

1. Concisely describe the **transportation issue** (including problems, improvements, or untested solutions) that Oregon needs to research.

Travel Behavior Modeling/Forecasting has long focused on peak travel times. Typically, transportation projects focus on improving travel at the worst conditions (or 30<sup>th</sup> highest hour conditions), and most consistently across the state, the worst conditions are during the weekday during the PM peak hour for Oregon. That has meant that the majority of data and tools used to forecast future travel have focused on average weekday conditions, with an emphasis on vehicle travel over active modes, like biking and walking. Up to this point, this has meant that “loop trips” for active modes have been excluded from travel forecasting. Example of loop trips include walking the dog, walking or biking for exercise, or other trips that do not have a destination and return to the starting location. These “loop trips” are not in any travel forecasts in the state. Loop trips can be some of the most important active mode trips for understanding public impacts on health (calories burned) and safety (vehicle exposure rates). The research would determine the effect of not including loop trips in future travel forecasts, and develop methods to be used to estimate future loop trip travel within the urban areas of Oregon.

2. Document how this **transportation issue** is important to Oregon and will meet the [Oregon Research Advisory Committee Priorities](#)

The State of Oregon has a unique opportunity to seize on that currently only happens once every 13+ years. The State along with each MPO in Oregon are currently investing in a once-every-13-year travel behavior survey; to be completed and delivered to ODOT and the MPOs in the Summer of 2024 - <https://oregontravelstudy.com/>. Oregon completed a survey ~13 years ago, but that survey had several critical weaknesses related to loop trips; 1) there was no passive monitoring of activity, so participants often left out, intentionally or not, short trips and trips that did not involve a vehicle, 2) when loop trips were reported, there was no trip GPS trace, so no record of how far or where the loop went, 3) the survey only covered travel on weekdays, no information on weekends or a real understanding for what loop trips looks like across the week.

All of these issues are being addressed in the 2023-24 survey, which has an app-based option that passively monitors and follows-up on all movement a person made, includes full trip GPS tracing (through the app), and runs for a full week (not one day). The state is now positioned to attempt to understand questions on loop trips through research in a way it's never been able to in the past.

3. What **final product or information** needs to be produced to enable this research to be implemented?

The final products would come in two main milestones. The first milestone product would be an evaluation of the survey data to determine how significant loop trips are in understanding travel behavior and decisions. The second milestone product is where the actual research would focus. The second milestone product would use the survey data to estimate behavior models to answer:

- Who makes loop trips and in what frequencies and by which mode
- When they make loop trips
- Where they go when they make loop trips
- Why they make loop trips – what are the main drivers they are satisfying in those loop trip decisions
- What routes they choose and why those routes were chosen (safety, quiet, visual, strenuous)

- And possibly other questions that help fully describe and allow state forecasters to understand current decision making and to use current understanding (estimated models) for forecast for future conditions/changes.

4. (Optional) Are there any individuals in Oregon who will be instrumental to the success of implementing any solution that is identified by this research? If so, please list them below.

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5. Other comments:

These opportunities for this type of rich data (at the cost of about \$6M) only come around every 13 years. Let's not miss this opportunity to make the most of the State and MPO's data purchase.

6. Corresponding Submitter's Contact Information: [1 individual]

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