The Oregon Modeling Steering Committee (OMSC) is preparing for an upcoming survey of household travel behavior.

A Briefing for Policy Makers

- Transportation funding, operational decisions and travel forecasts used for MPO and statewide planning all depend on real-world data for accuracy. Having confidence in our travel forecasts and an understanding of traveler behavior is important, since they are the basis for many public investment decisions.

- Household travel data is an essential building block for travel models. Household travel surveys provide details about travel behavior that is lacking in other data sources.

- Since household travel activities and demographics change over time, travel surveys are traditionally conducted about every 10 years. In Oregon, the most recent surveys were conducted between 2008-2011, roughly coinciding with the 2010 Census.

- With the 2020 Census on the horizon, the Oregon Modeling Steering Committee has begun planning for the next household travel survey.

- Essential data is currently lacking or outdated in some MPO areas. Where regions are experiencing rapid growth and increasing congestion, new travel surveys are needed to identify the behavioral forces creating these patterns.

“Transportation technology is evolving at a torrential pace. Just consider innovations since the last travel surveys were conducted in 2011: Uber and other ride-hailing services have become mainstream, vehicles are increasingly connected with each other, and it seems driverless vehicles are becoming closer to reality every day.

Personal travel is heavily influenced by changes in technology. That’s why conducting travel surveys on a regular basis is so important. Surveys allow us to understand how travel habits are changing over time. They provide the analytical foundation to measure the future impacts of changing travel behavior.”

—Jeff Frkonja, Metro, OMSC Vice Chairman

- Each metropolitan area in Oregon has unique characteristics. It is important to collect region-specific information so that travel forecasts reflect distinct travel behaviors in each area.

- MPO participation in the next survey is important, so information used to make future policy and investment decisions remains analytically valid.
What information is typically collected? Volunteer participants are asked to record where, when, why, how, and with whom they travel.

How will the travel survey be accomplished? There are a variety of methods to collect household travel data, from written diaries to smartphone apps. Data collection methods and technologies are advancing every year. As part of the survey preparatory process, all modern options will be investigated and the method offering the best value for the cost will be selected.

Who will conduct the survey? Collecting and processing travel survey data is a specialized field. The OMSC is developing a plan to procure expert services for the survey. The goal is to balance the needs of OMSC partners while providing the highest return on the dollar.

What is the timeline? The preparatory process is anticipated to take approximately two to three years, as shown below. Ideally the survey will occur soon after the 2020 Census; however, the actual timing will depend on funding availability.

How much will it cost? The number of households will vary by MPO, and will be determined during the preparatory process. Cost depends on a variety of factors, such as the number of days data will be collected, the number of households surveyed, the level of customization needed for individual MPO areas, strategies used to recruit participating households, and many other considerations. Larger sample sizes are needed to develop new forecasting tools; smaller samples may be appropriate for updating current tools.

What about “big data”? Passive data extracted from a wide variety of anonymized sources such as credit card and cell phone data, administrative records, internet transactions and social media is not likely to answer all of our travel behavior questions and replace the need for travel surveys. While passive data may indicate past travel patterns, it has a limited ability to explain the essential “why” behind those patterns. Nonetheless, there may be a role for big data in helping to improve the cost-effectiveness of Oregon’s travel modeling program. The OMSC is currently examining the quality and reliability of passive data sources, to determine how they may be used to complement household travel surveys.

Since 1996, the OMSC has worked to improve the state-of-the-practice and promote state-of-the-art land use and transportation modeling in Oregon. Our mission is to ensure Oregon continues to have the right tools, skills and expertise needed to answer important questions about our transportation systems, land uses and economy.