



2024 Northwest Transportation Conference



Oregon State University
CH2M Hill Alumni Center

Understanding Travel Behavior: 2023-24 Oregon Travel Study

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ODOT Transportation Planning Analysis Unit

March 4, 2024, 3:30pm to 5:00pm



Transportation Planning Analysis Tools

1. Use the right tool
2. At the right time
3. To answer the right questions

*The real value comes
from the analyst, not
the tools.*



Transportation Planning Analysis “Toolbox”

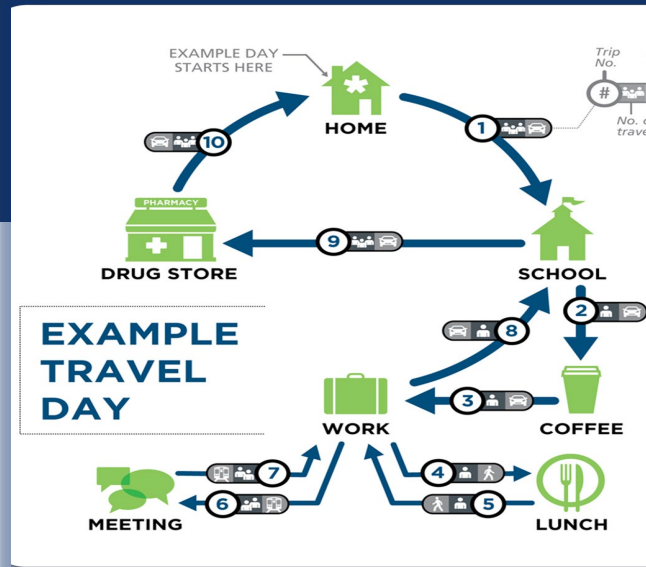
*Identifying the questions
to be answered or
developing effective
solutions is key to
successful analysis.*



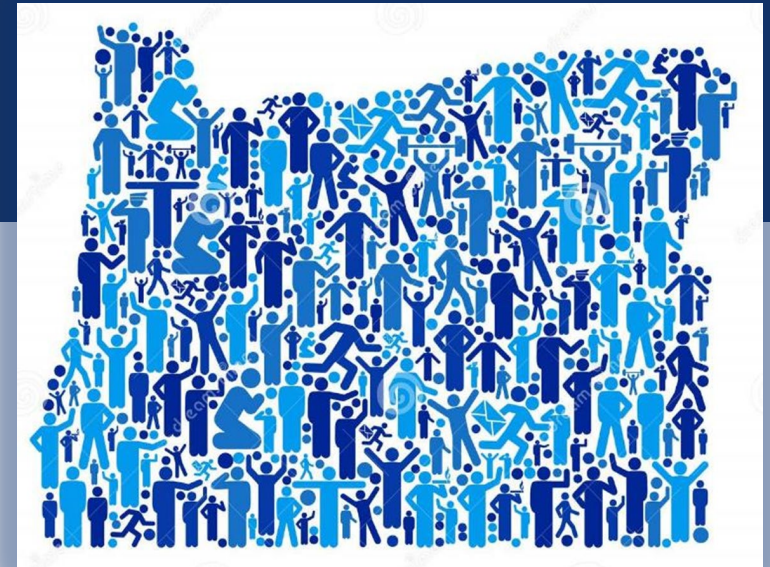
Overview



Description of the Data



Overview of the Oregon Travel Study

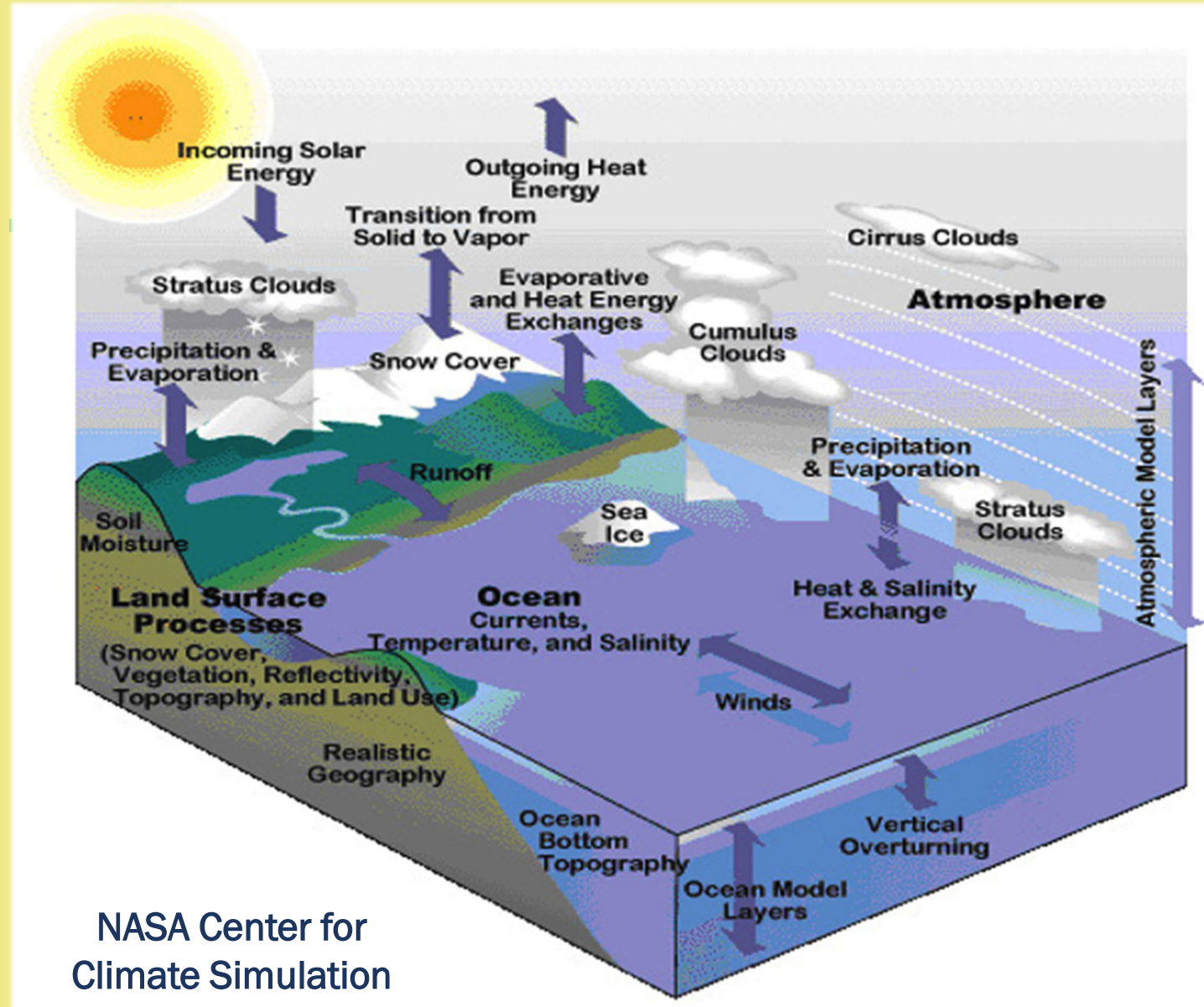


Challenges and Opportunities

Modeling is Complex

Weather is a good analogy for travel modeling:

- Data is expensive, hard to come by
- Patterns are represented by many sub-models
- New patterns reveal themselves over time



Travel Models Focus on Households



- Need data that accurately and comprehensively portrays travel at the person level within the context of the household and geographic environment.
- Travel surveys are the only source of this information
- Does not include commercial travel – business travel and freight movement



OREGON
TRAVEL STUDY

<https://oregontravelstudy.com/>

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PLANNING OUR FUTURE TOGETHER

Help us understand the changing needs of Oregon

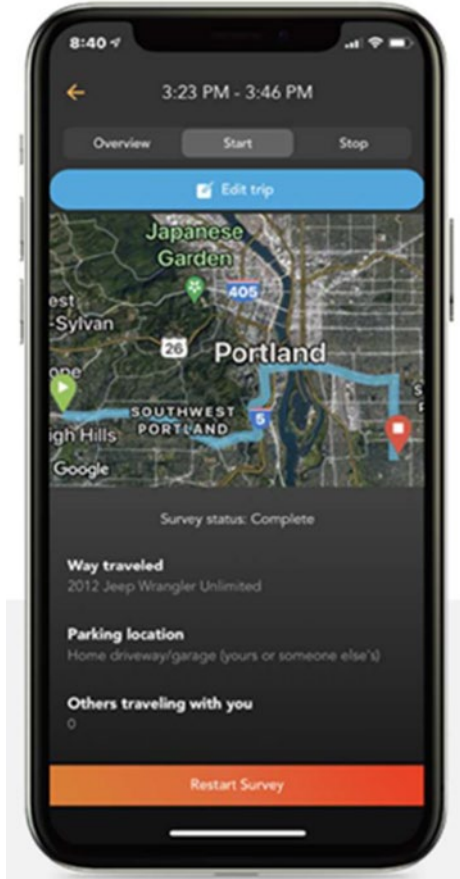
PARTICIPATE

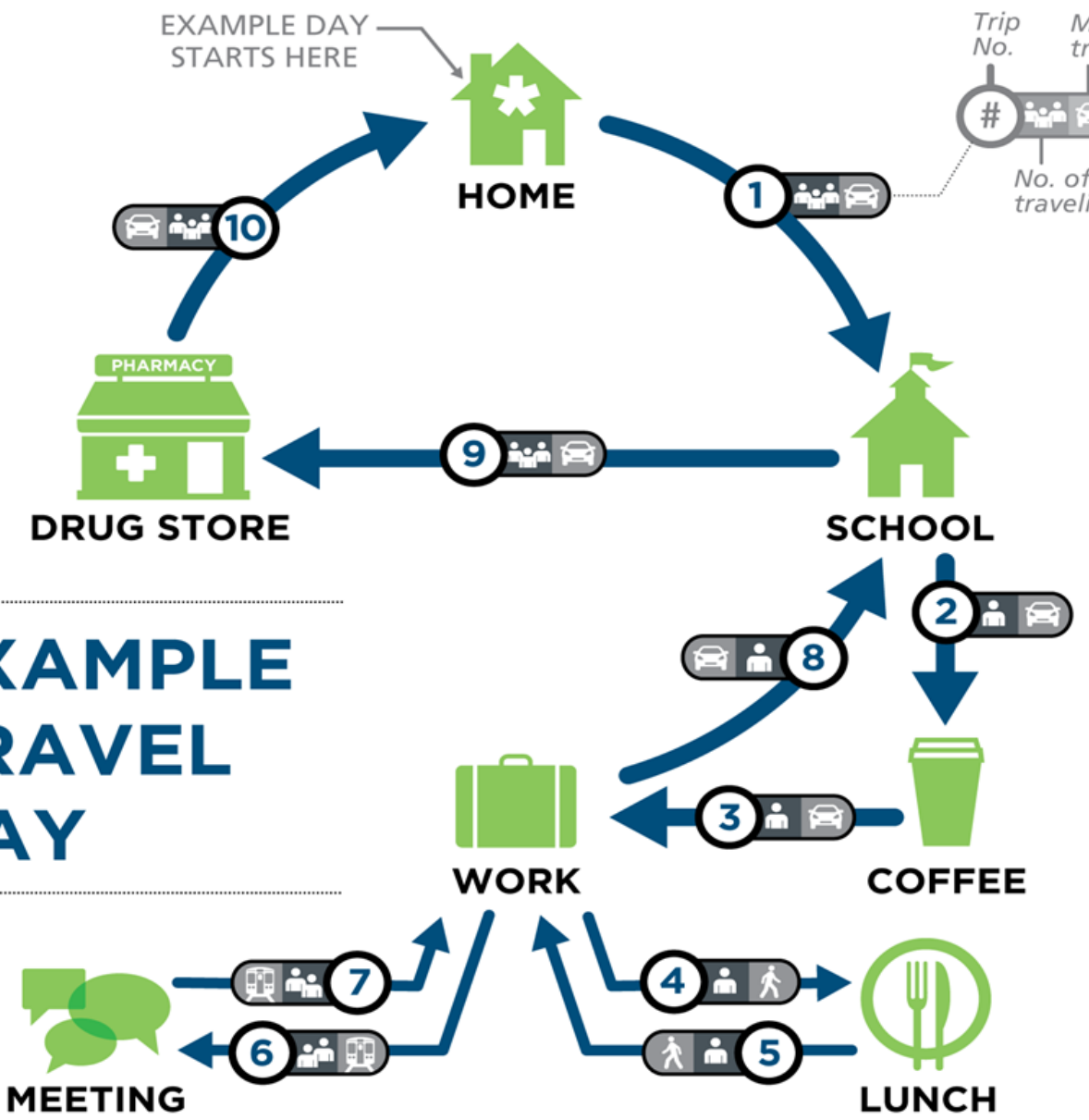
Data collected Fall 2023 and Spring 2024

Collection Primarily Smartphone-Based

- Smartphone app-based data collection provides:
 - Detailed demographic information
 - Detailed trip paths/routes, locations, and travel times
- Week-long travel periods provide:
 - Greater/more geographic coverage in trip data
 - Captures data for less-used travel modes (Uber/Lyft)
 - Higher volume of data per person/household

rMove - used by over 100,000 survey participants in 12 languages.





A day in the life of a participant

EXAMPLE TRAVEL DAY

Example Travel Day Trips

- Trip 1: Drive children to school
- Trip 2: Stop to get coffee at convenience store
- Trip 3: Drive to work
- Trip 4: Walk across street to lunch
- Trip 5: Walk back to work
- Trip 6: Take subway to a meeting
- Trip 7: Take subway back to work
- Trip 8: Drive to pick up children at school
- Trip 9: Stop at drug store
- Trip 10: Drive home

Random Data Collection Process

RECRUITMENT



Mailed Invitation Materials

- **Address-based sampling** used by drawing a random sample of addresses from all residential addresses in the survey region.
- An invitation letter is sent followed by 1 or 2 reminder postcard(s).

DATA COLLECTION



75%

SMARTPHONE



20%

ONLINE



5%

CALL CENTER

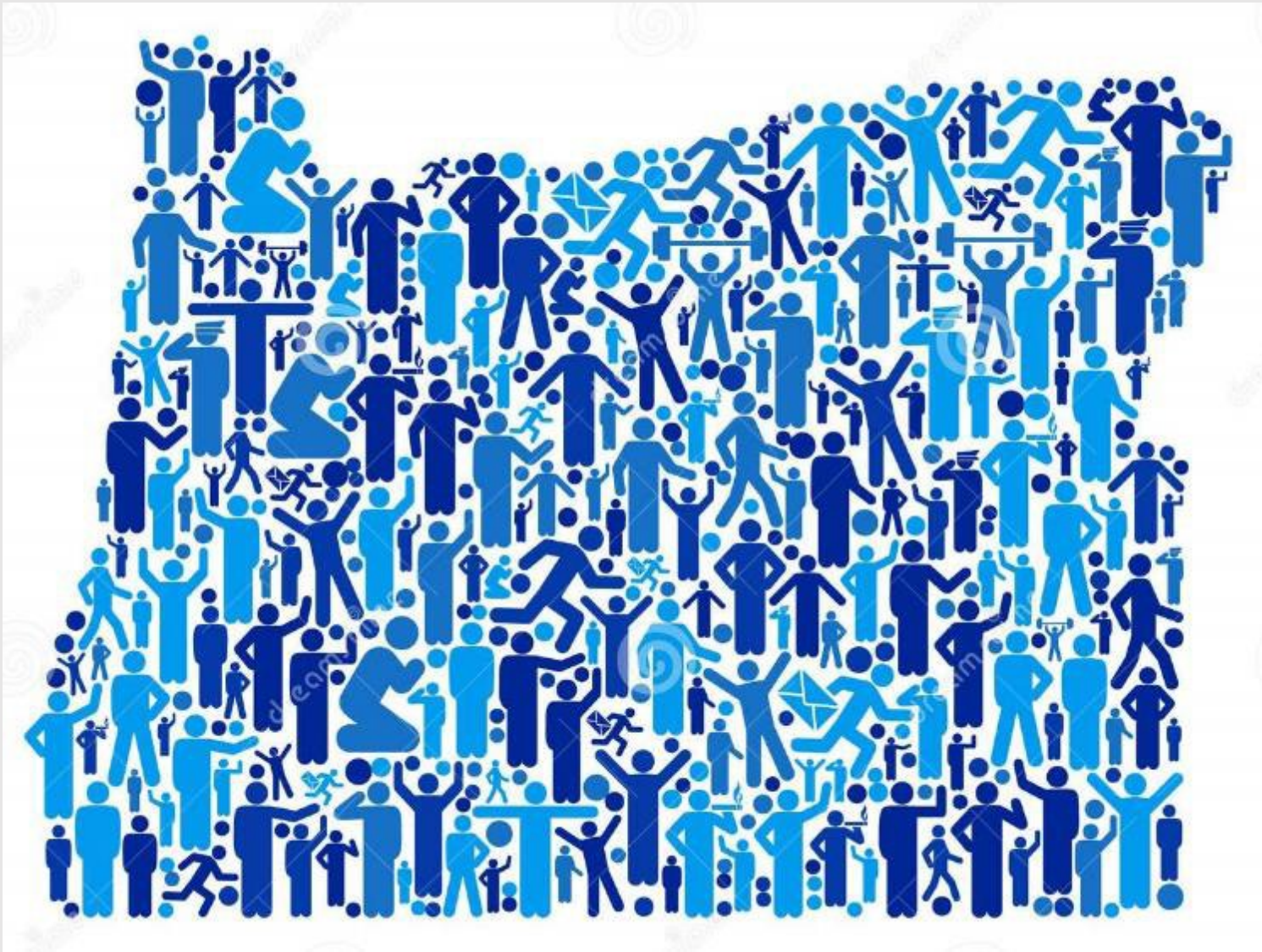
Approximate shares by participation mode

DATA ANALYSIS

Data from all three participation methods is combined into a single weighted dataset.

- Allows for the full sample to be used in all analysis.
- Weighting accounts for historical trip underreporting observed in online and call center participant diaries.

Accurate Demographic Representation is Key to Success



21,000 Households Must Reflect
Statewide Attributes

- Age
- Size
- Income
- Education
- Car ownership
- Bike ownership
- Presence of children
- Rural, small city, urban



Historical Underrepresentation in Travel Survey Data

Some demographic groups are considered hard-to-reach because they face significantly more barriers to participate in surveys, including:

People with low incomes

People with disabilities

People of color

People who are recent immigrants or new Americans

To address underrepresentation, we must take action to reduce these additional barriers to participation that certain demographic groups face and incentivize participation.

Also referred to as “under counted” populations

Survey Branding



Invitation Letter & FAQ

Oregon Modeling Statewide Collaborative  PO Box 293, Gastonia, OR 97027

<First and last name/City name resident>
<Street Address 1>
<Street Address 2>
<City, OR < 44444>

<Letter Date>

We're inviting you to participate in the Oregon Travel Study sponsored by the Oregon Modeling Statewide Collaborative.

By taking part, you'll help us understand how local roads, highways, public transportation, bike lanes, and sidewalks are used today, and how they can be improved to make travel better in the future. We want to hear from you even if you don't travel often. Your input will have a big impact because only a limited number of households have been invited to participate in the study. Follow the instructions below to sign up today. Your voice can shape the future of your community.


GET STARTED TODAY INVITATION ACCESS CODE: XXXXXXXXXX 

OPTION 1	 Download the smartphone app rMove™ and sign up	 Tell us about your travel for 7 Days	 Receive \$XX per adult after all adults complete the survey	
OR	 Sign up at OregonTravelStudy.com	 or call 1-888-205-7905	 Tell us about your travel for 1 Day	 Receive \$XX per household after completing the survey

You can participate in English and Spanish through the survey smartphone app, the online survey, or by calling toll-free.

ESPAÑOL - Le invitamos a completar una encuesta sobre su viaje. Al participar, nos ayuda a mejorar las opciones de transporte en su comunidad. Después de haber completado la encuesta, le enviaremos una tarjeta de regalo como agradecimiento. Para registrarse, visite OregonTravelStudy.com o llame al 1-888-205-7905.

Learn more at OregonTravelStudy.com or by calling **1-888-205-7905**



FREQUENTLY ASKED QUESTIONS

What is this study all about?
We want to learn how, when, where, and why people travel in and around Oregon. We're asking you to log your travel to help us understand regional transportation patterns. By participating you can help us plan for future transportation improvements in your community.

Why should I participate?
Your participation ensures that households like yours are represented in our regional transportation plans. Your input has a big impact because only a limited number of households are invited to participate.

How is my personal privacy protected?
We are committed to protecting the confidentiality, integrity, and security of your personal information. We take this responsibility seriously. We will not disclose or share personal information we collect from you except as required by law. Our Privacy Policy is intended to help you understand how we collect and safeguard your information. To read the study's full privacy documentation, visit OregonTravelStudy.com.

What if I don't travel much?
Any amount of travel (even if you don't make any trips) will help us improve regional transportation planning. Don't forget that short trips, such as walking the dog, count too.

What if my transportation habits during the study aren't my "typical" habits?
That's no problem - we still encourage you to participate. We'll also ask about your typical travel habits, how your travel has changed over the past year, and how you think you'll travel in the future.


How was I selected to participate?
Invited households were selected at random from the State of Oregon.

I was invited to use the study smartphone app, rMove. How does it work?
After you download rMove and sign up, rMove will log your trips for one week while you go about your daily life. Each day you'll be asked to complete a short daily survey about your travel habits as well as a trip survey about each trip you make.

What do I get for participating?
You will receive a gift card once all members of your household have reported their travel and completed their surveys. If your household participates using the smartphone app, rMove, each adult will receive a gift card after completion (e.g., a household with two adults receives two gift cards). All adult household members must complete the study to be eligible for gift cards. Households that report their travel online or by calling in will receive a single gift card.

How much time does it take to participate?
It takes about 10 minutes to sign up for the study. Once you sign up, we'll give you instructions for logging your travel and completing the study. Households that log their travel for seven days in the smartphone app, rMove, will spend about 5-10 minutes each day reporting their travel. Households that log their travel online or over the phone will spend about 10 minutes per household member reporting their travel for one day.

Who is sponsoring this study?
This study is sponsored by the Oregon Modeling Statewide Collaborative.



Learn more at OregonTravelStudy.com or by calling **1-888-205-7905**

Opportunities and Challenges



Opportunities



- Have travel patterns changed post-pandemic?
- What is the extent of telework and e-commerce?
- Fewer missed trips, more accurate information
- Reaching historically marginalized communities

Challenges

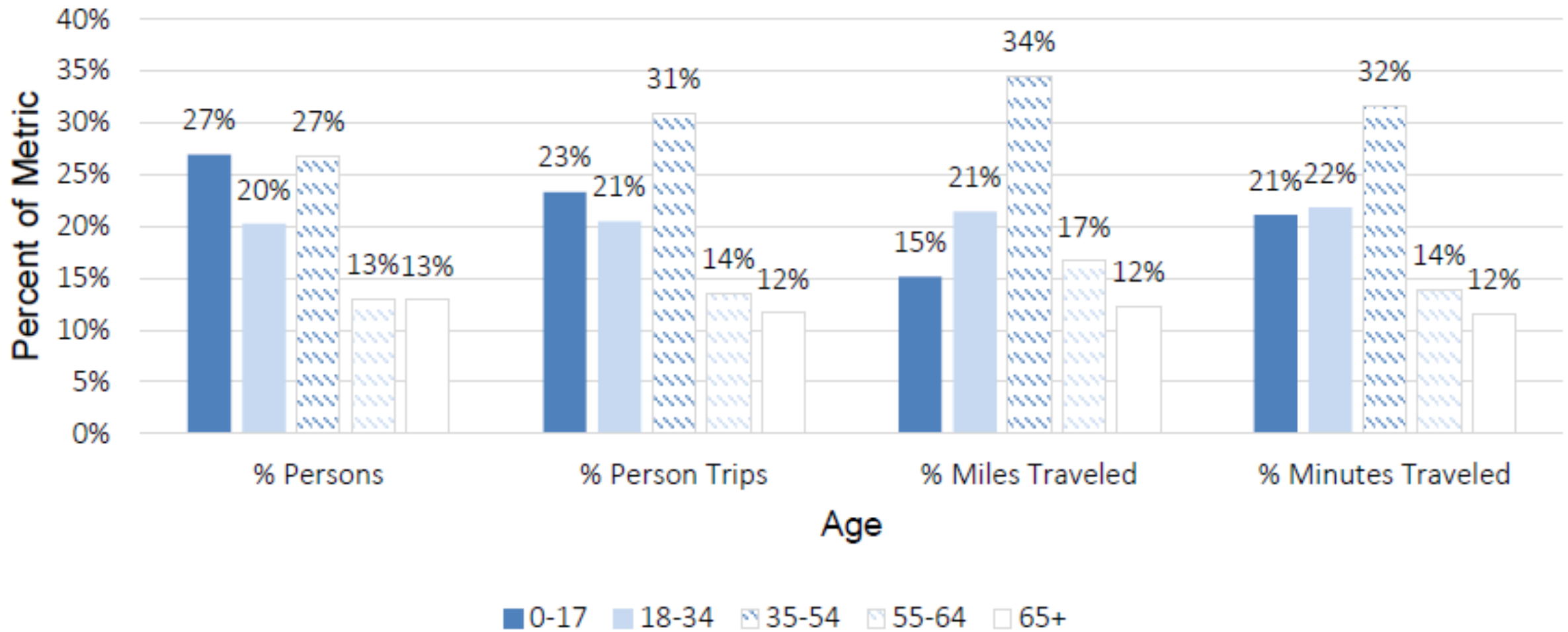


- Unwillingness to participate – wary of scams
- Respondent burden – lots of questions
- Privacy – personal, sensitive information
- Paying incentives – expensive but saves money

Data Teasers

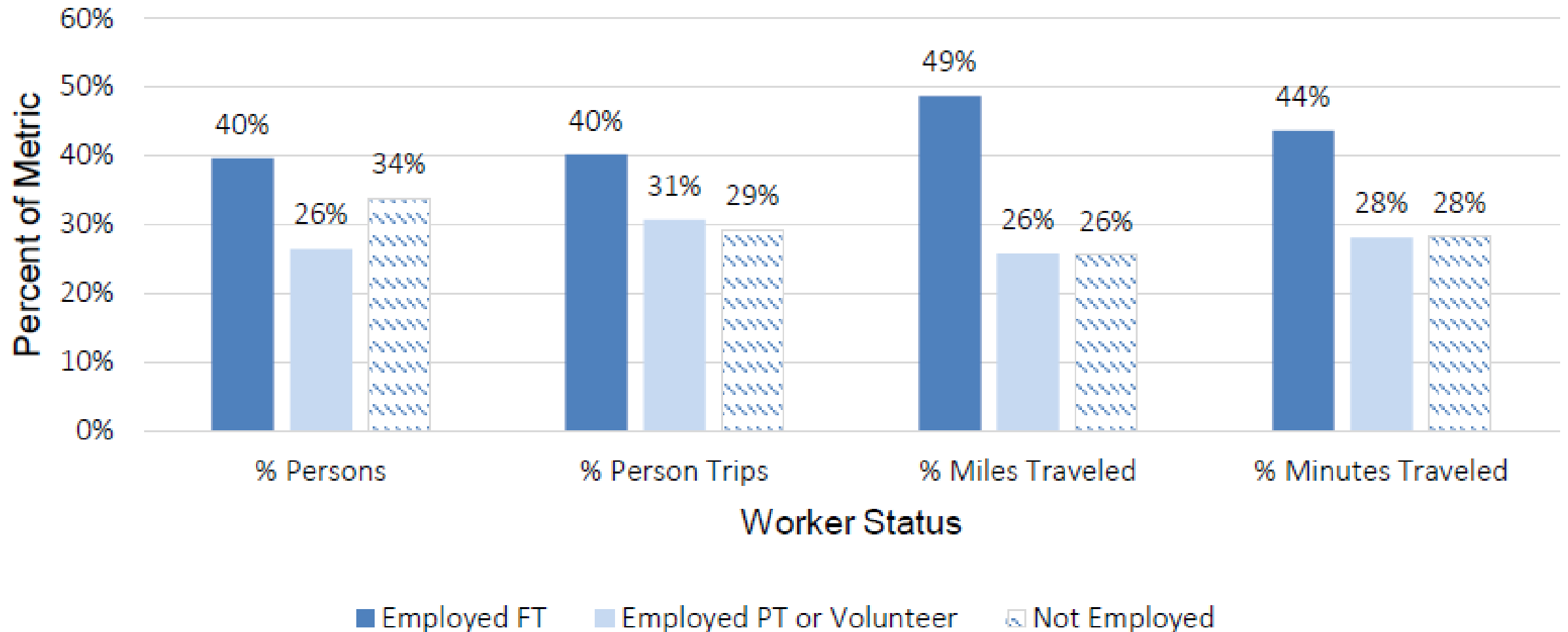
Figures taken from report on last survey: "Personal Travel in Oregon, A Snapshot of Daily Household Travel Patterns"

Figure 1-4: Person Travel by Age



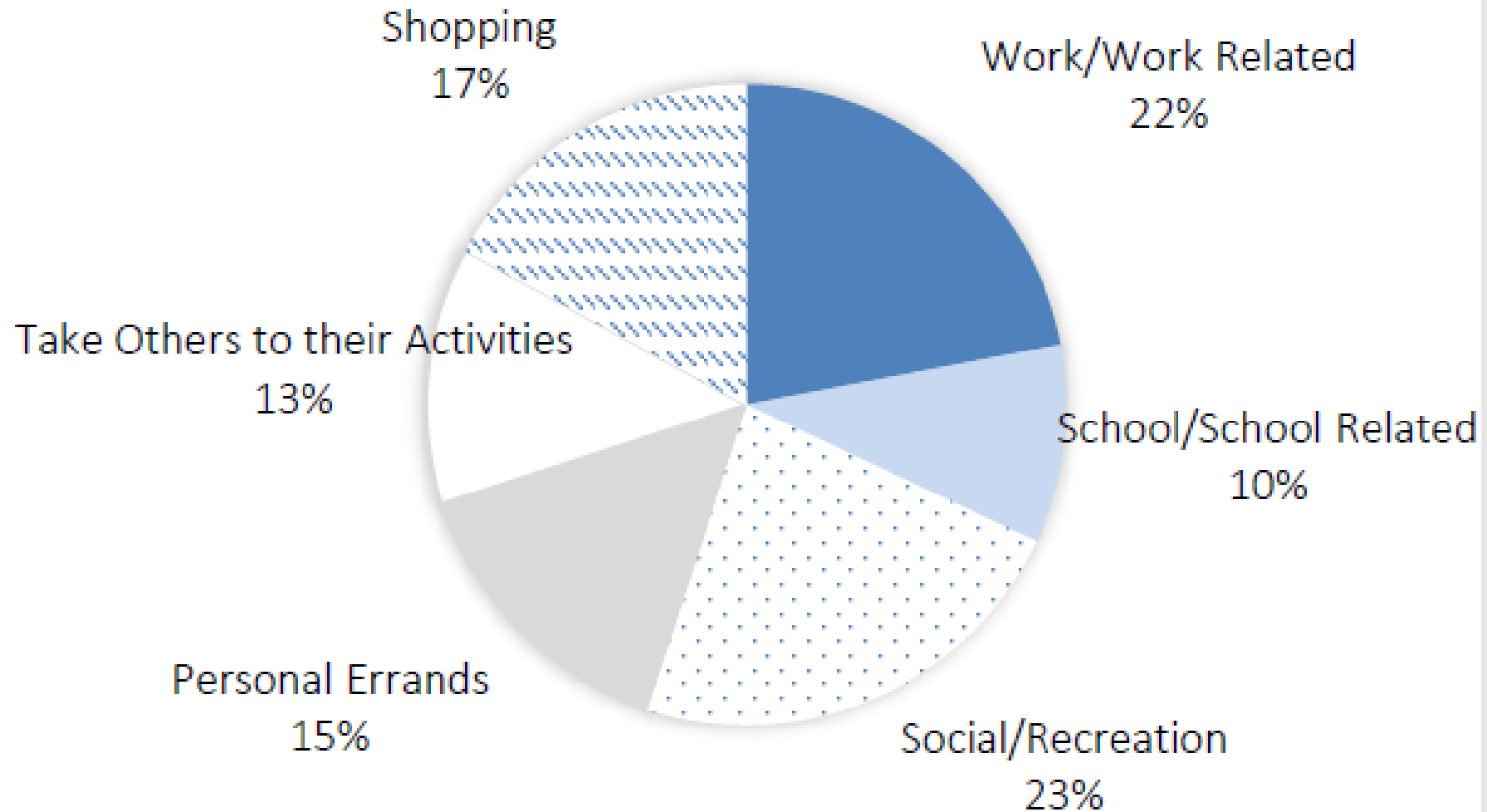
But wait, there's more...

Figure 1-5: Person Travel by Worker Status



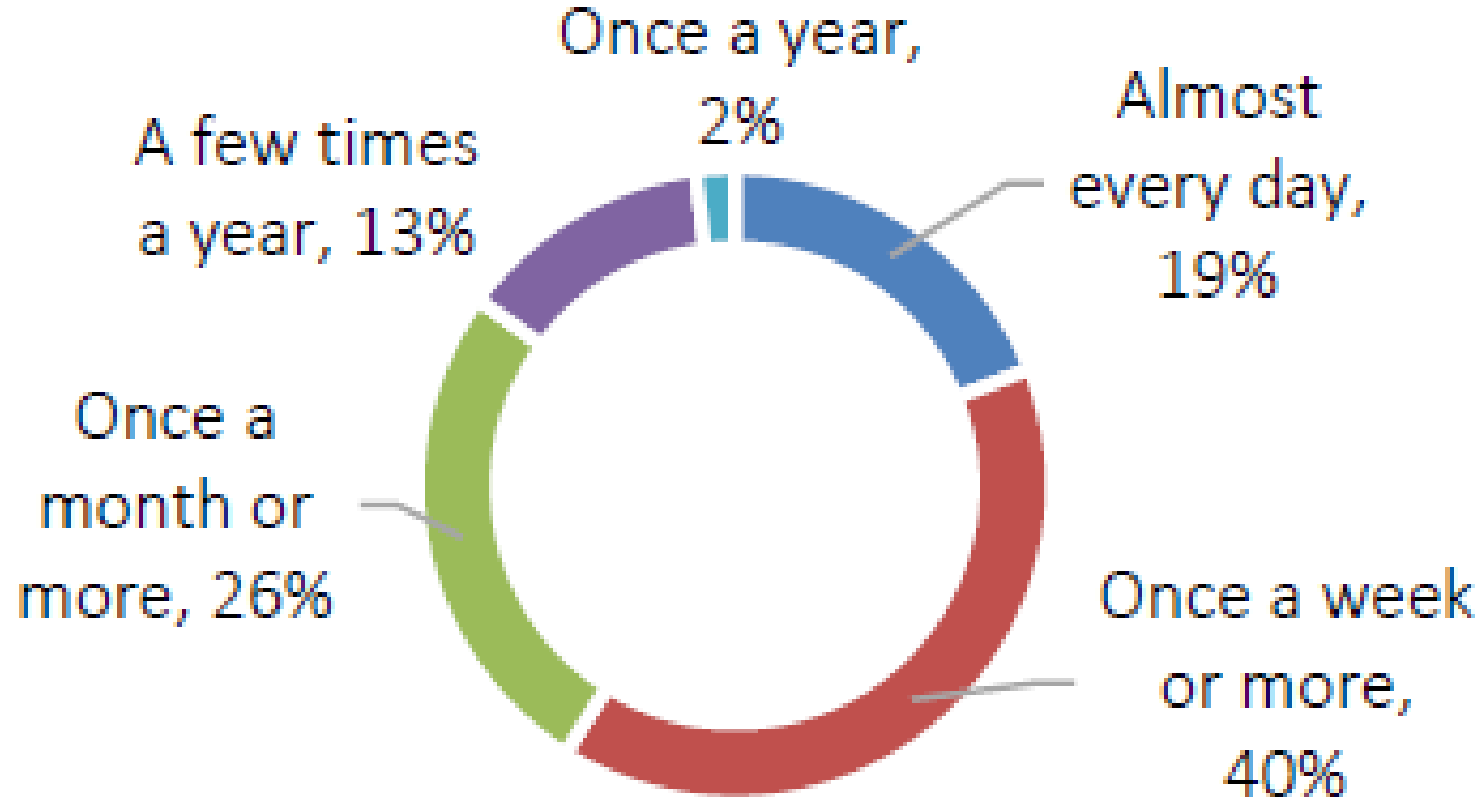
... and more

Figure 1-6: Reasons Why We Travel



... and so much more coming early 2025

Figure 2-5: Frequency of Telework in Lieu of Commute



<https://oregontravelstudy.com/>



Questions?

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