Presented to

Washington State Transportation Commission

May 20, 2026

# MOBILITY INNOVATION CENTER

## Mobility Washington 2050

UNIVERSITY of WASHINGTON


**Bart Treece, PTP**
Director
Mobility Innovation Center
btreece@uw.edu

**Andrea Figueroa**
PhD Researcher
Human Centered Design and Engineering
afigue@uw.edu

**Susanna Lammervo**
PhD Researcher
Human Centered Design and Engineering
slamme@uw.edu

# Agenda

- Introductions
- Mobility Innovation Center overview
- Mobility Washington 2050
- Discussion

MOBILITY INNOVATION CENTER at the UNIVERSITY of WASHINGTON

# About the Mobility Innovation Center

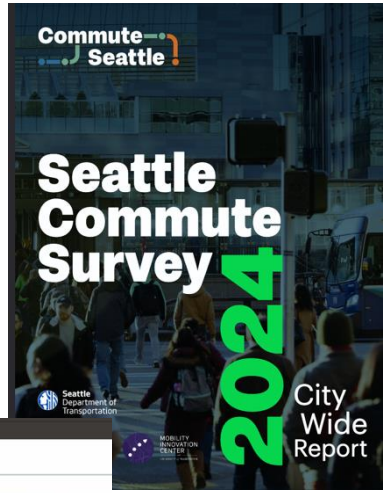
- Est. 2016 by Challenge Seattle in partnership with UW
- Challenge Seattle: Alliance of regional CEOs, led by Gov. Chris Gregoire
- Best of academia, public, private business, and non-profits to collectively address and solve mobility challenges

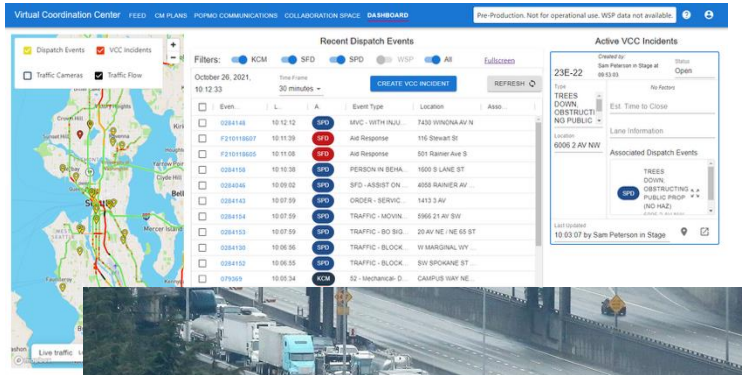
Photo courtesy: GeekWire, 2016

MOBILITY INNOVATION CENTER at the UNIVERSITY of WASHINGTON

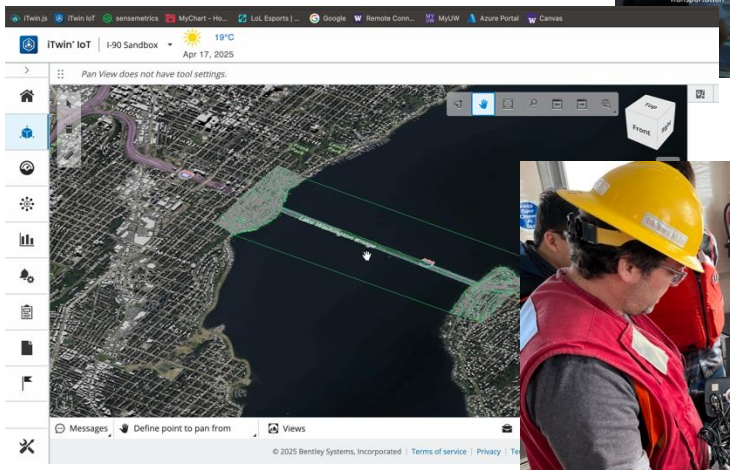
# How the Mobility Innovation Center works

- Public-private partnerships for innovative applied research
- Disrupt the traditional academic process, delivering results faster
- Research and practitioners working together



Virtual Coordination Center



I-90 Digital Twin

MOBILITY INNOVATION CENTER
at the
UNIVERSITY of WASHINGTON

# Mobility Washington 2050: The Future in Motion

WSDOT

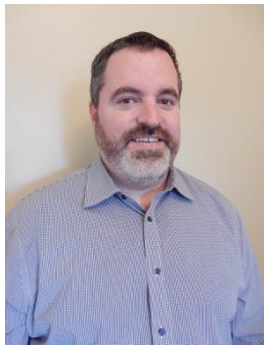
King County

CHALLENGE SEATTLE

Microsoft

BOEING

Alaska AIRLINES



MOBILITY INNOVATION CENTER at the UNIVERSITY of WASHINGTON

**Project information:**
mic.comotion.uw.edu/projects/transportation-2050-visualization-scenarios/

MOBILITY
INNOVATION
CENTER
at the
UNIVERSITY of WASHINGTON
EV
ELECTRIC VEHICLE
CHARGING ONLY
4 HOUR LIMIT
VOLTA
FREE
EV CHARGING
Mobility Washington 2050
The Future in Motion
Scroll for More

# Behind the Platform

WASHINGTON STATE OFM Office of Financial Management

DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA

WSDOT

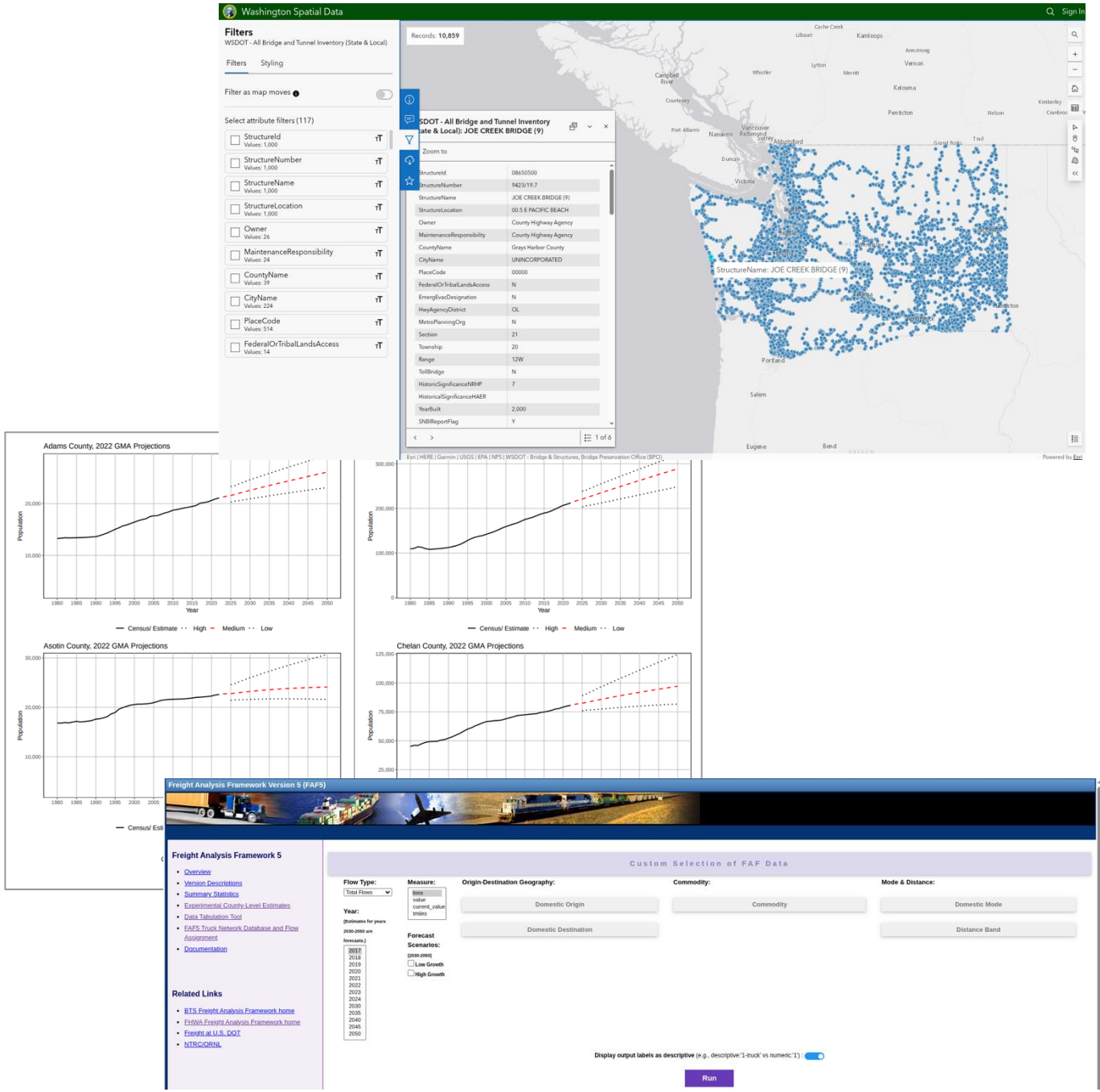
THURSTON REGIONAL PLANNING COUNCIL

FEDERAL AVIATION ADMINISTRATION

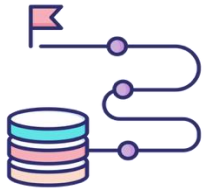
Puget Sound Regional Council

## 6 Visualizations

- Population Growth
- Traffic Forecast
- Airport Capacity
- Freight
- Bridge Condition
- High-Speed Rail



## Data-Driven



Gathering and Unifying Agency Data

Visual Design of Interactive Dashboards

## Human-Centered

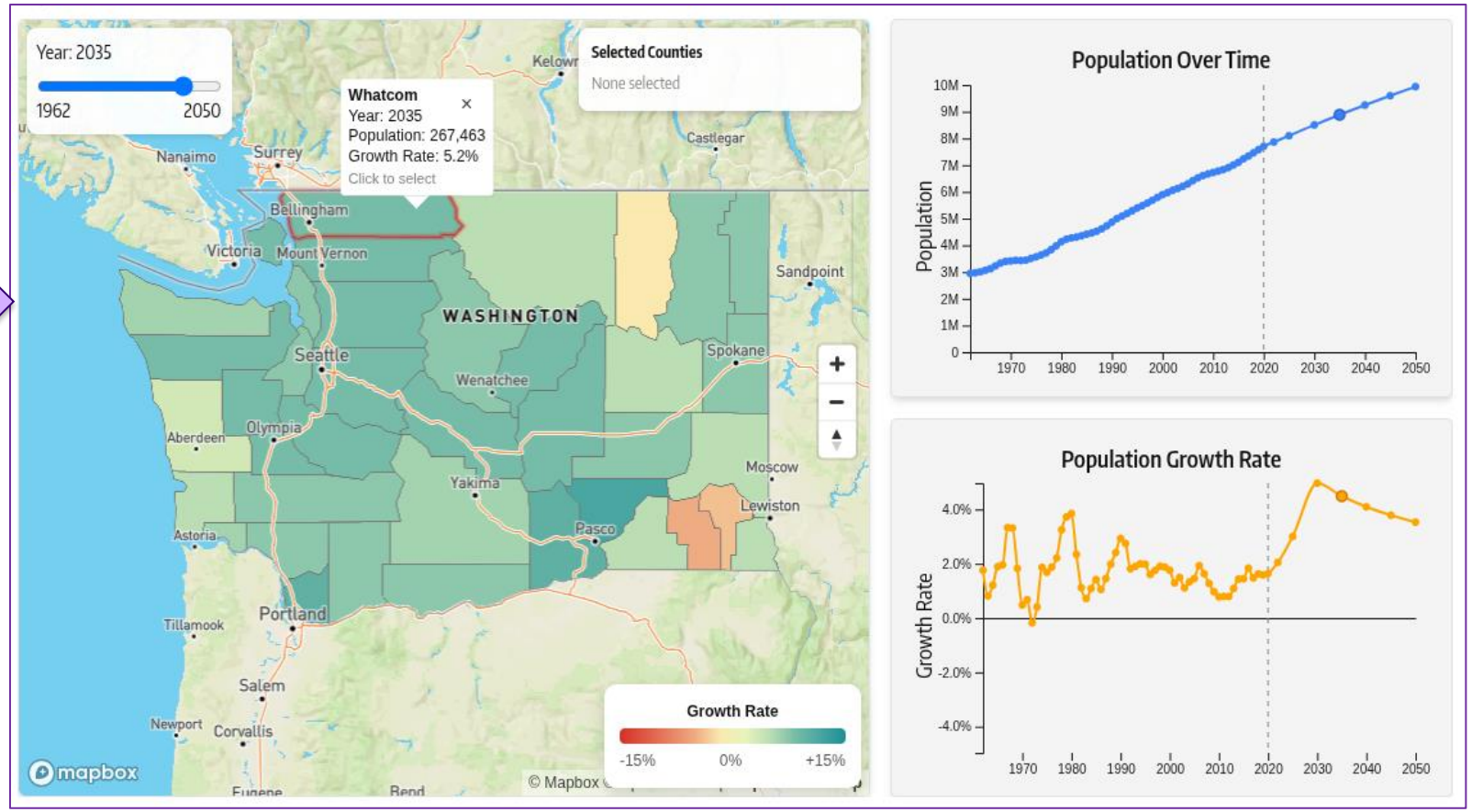
Who Are the Users?

Platform Testing with Transportation Experts and General Public

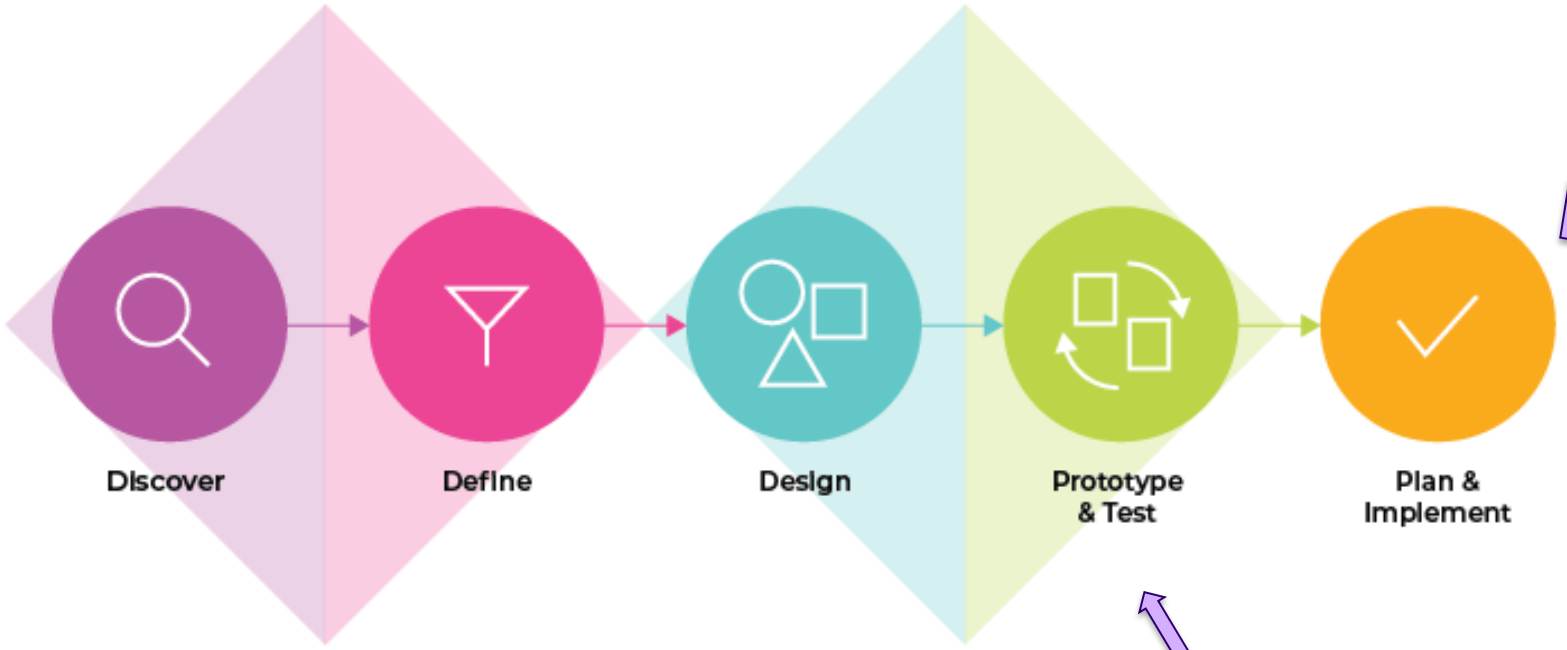
Visual Storytelling

# From Numbers to Meaning

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | id | County | Jurisdiction | Census Count o | Intercensal Estin |
| 2 | 1 | Adams | Adams County | 9929 | 10100 |
| 3 | 10 | Asotin | Asotin County | 12909 | 12700 |
| 4 | 16 | Benton | Benton County | 62070 | 62300 |
| 5 | 25 | Chelan | Chelan County | 40744 | 40600 |
| 6 | 34 | Clallam | Clallam County | 30022 | 30400 |
| 7 | 41 | Clark | Clark County | 93809 | 96800 |
| 8 | 53 | Columbia | Columbia Count | 4569 | 4600 |
| 9 | 59 | Cowlitz | Cowlitz County | 57801 | 58800 |
| 10 | 68 | Douglas | Douglas County | 14890 | 15100 |
| 11 | 78 | Ferry | Ferry County | 3889 | 4100 |
| 12 | 83 | Franklin | Franklin County | 23342 | 23500 |
| 13 | 91 | Garfield | Garfield County | 2976 | 2900 |
| 14 | 96 | Grant | Grant County | 46477 | 46100 |
| 15 | 115 | Grays Harbor | Grays Harbor Co | 54465 | 55000 |
| 16 | 128 | Island | Island County | 19638 | 20300 |
| 17 | 135 | Jefferson | Jefferson County | 9639 | 9800 |
| 18 | 140 | King | King County | 935014 | 952300 |
| 19 | 183 | Kitsap | Kitsap County | 84176 | 85500 |
| 20 | 191 | Kittitas | Kittitas County | 20467 | 20900 |
| 21 | 200 | Klickitat | Klickitat County | 13455 | 13300 |
| 22 | 207 | Lewis | Lewis County | 41858 | 42300 |
| 23 | 220 | Lincoln | Lincoln County | 10919 | 10700 |
| 24 | 232 | Mason | Mason County | 16251 | 16500 |
| 25 | 237 | Okanogan | Okanogan Coun | 25520 | 25500 |
| 26 | 254 | Pacific | Pacific County | 14674 | 14500 |
| 27 | 262 | Pend Oreille | Pend Oreille Cou | 6914 | 6700 |
| 28 | 271 | Pierce | Pierce County | 321590 | 329100 |
| 29 | 299 | San Juan | San Juan Count | 2872 | 2900 |
| 30 | 304 | Skagit | Skagit County | 51350 | 51300 |
| 31 | 316 | Skamania | Skamania Count | 5207 | 5200 |
| 32 | 322 | Snohomish | Snohomish Cou | 172199 | 179900 |
| 33 | 346 | Spokane | Spokane County | 278333 | 278700 |
| 34 | 363 | Stevens | Stevens County | 17884 | 18000 |



# Human-Centered Design Process




We are here

Copywrite 2019 | Outwitly Inc. | HCD Process

Platform testing with users

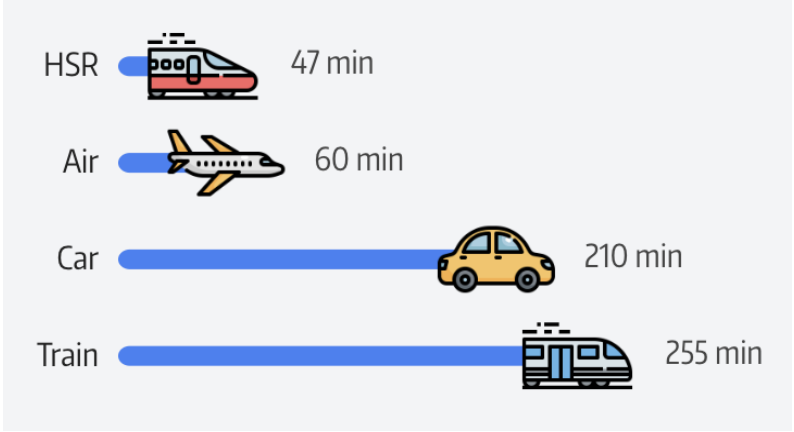
MOBILITY INNOVATION CENTER
at the UNIVERSITY of WASHINGTON

# What We Learned

Puget Sound Regional Council

WSDOT

**Credibility & Data Sources Matter**

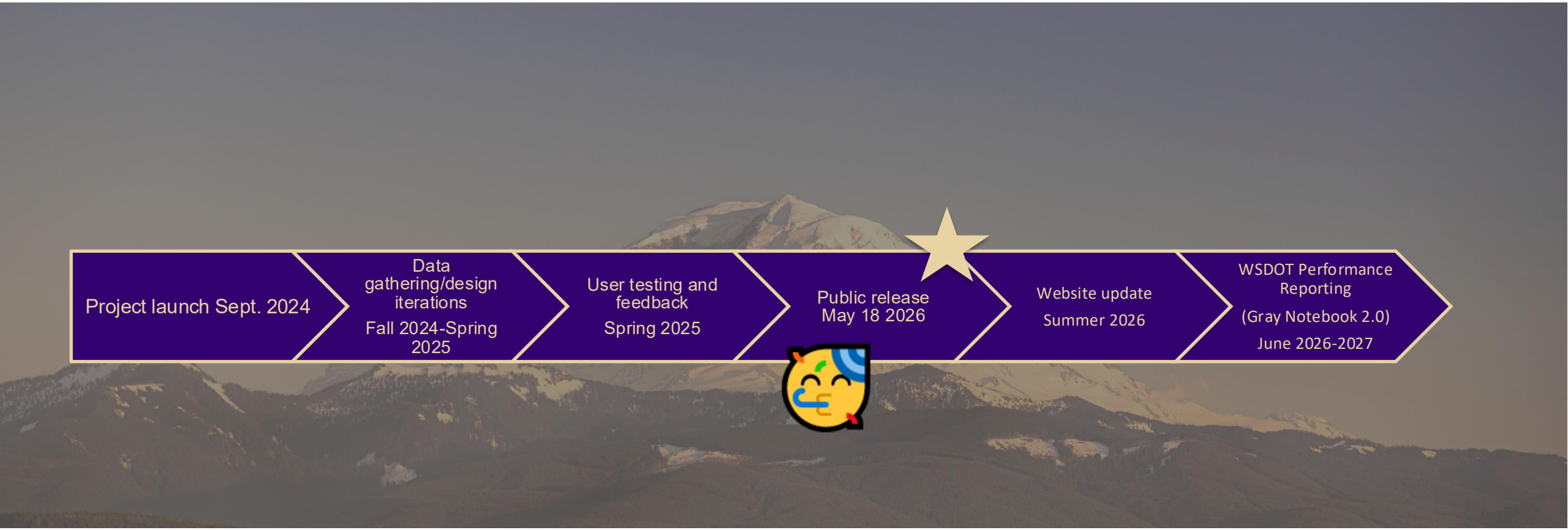



**Relatable visualizations can make 2050 feel less distant**

**Design for two audiences; Transportation experts & general public**

MOBILITY INNOVATION CENTER
at the
UNIVERSITY of WASHINGTON

# Timeline




MOBILITY INNOVATION CENTER
at the
UNIVERSITY of WASHINGTON

# Thank you!

Mobilitywa2050.org

MOBILITY INNOVATION CENTER
at the UNIVERSITY of WASHINGTON