

Transportation Electrification Oregon DOT and Public Charging Infrastructure

Amanda Pietz

Oregon Department of Transportation
Policy, Data and Analysis Division, Administrator

Joint Committee on Transportation
February 9, 2023

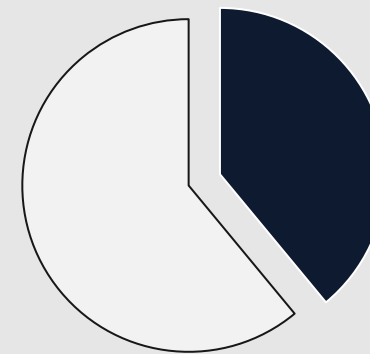


Climate Change and Extreme Weather

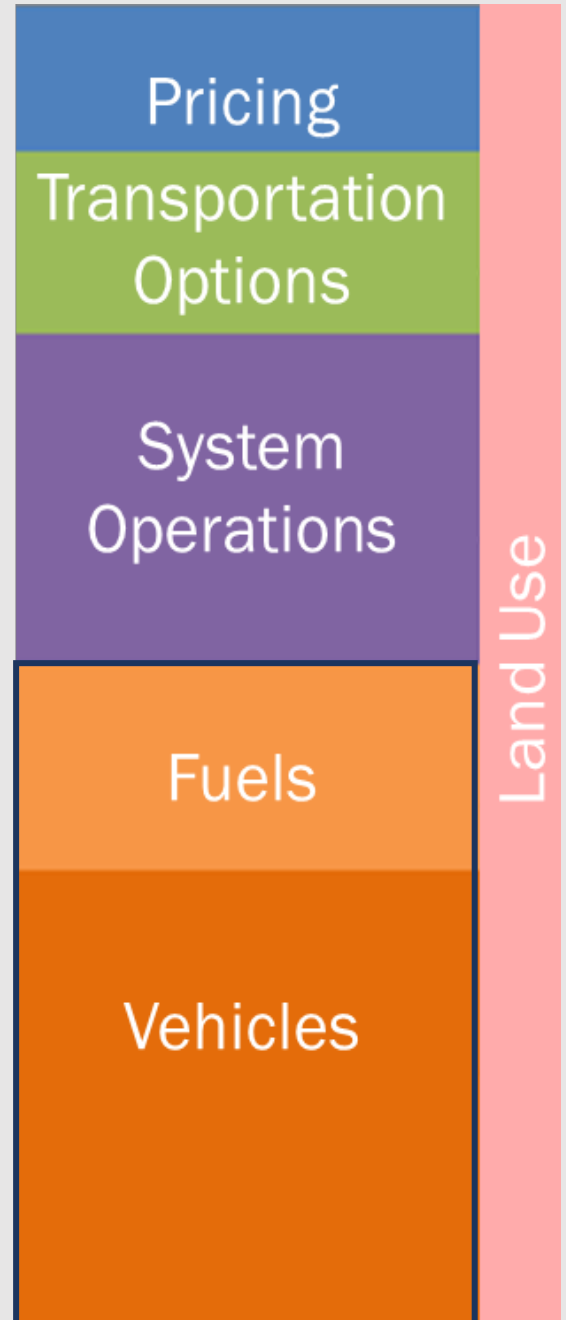
- Significant impacts to people's lives, economy, emergency response, etc.
- Understand risks and vulnerabilities
- Help to prepare: Adaptation Roadmap



Addressing GHG Emissions



- Transportation Sector
- Other Sectors



Electrifying the Transportation System



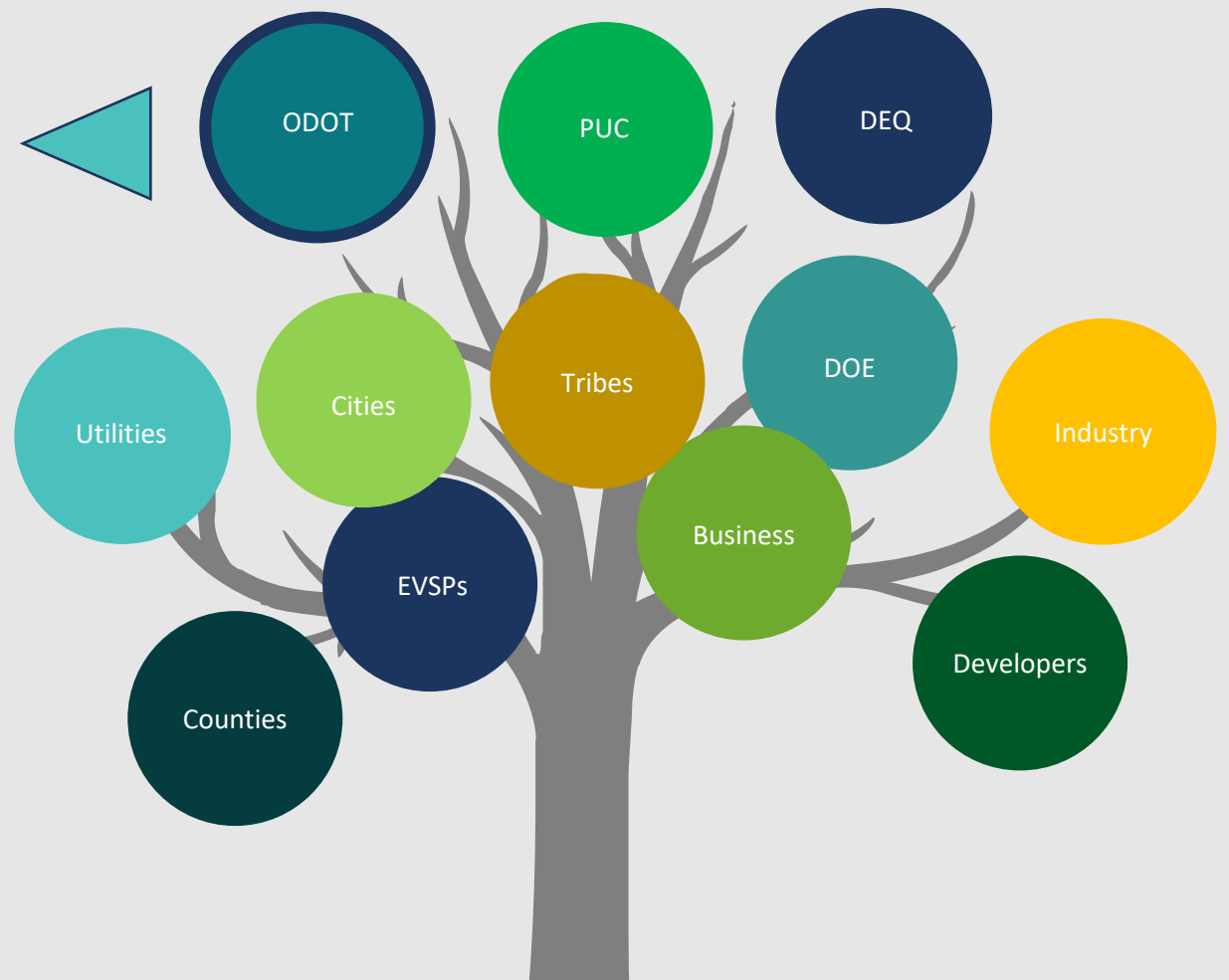
Public sector roles in transportation electrification

- Help achieve climate goals.
- Ensure access for everyone.
- Share data and understand needs.
- Create alignment.

Working Together to Deploy Charging Infrastructure

Oregon Department of Transportation

- Convenes state agencies, implementers, EV drivers, etc.
- Identifies public charging needs and opportunities.
- Deploys public EV charging infrastructure.
- Forms partnerships.



ODOT's Approach to Investing in Public Charging Infrastructure

Light-duty



Focused investments. Technology is ready and utilization increasing rapidly.

Corridors, rural, BIPOC, workplace, multi-unit dwellings.

Med & Heavy Duty



Emerging. Lower use today but new regulations will increase use soon. Infrastructure needed five years ahead.

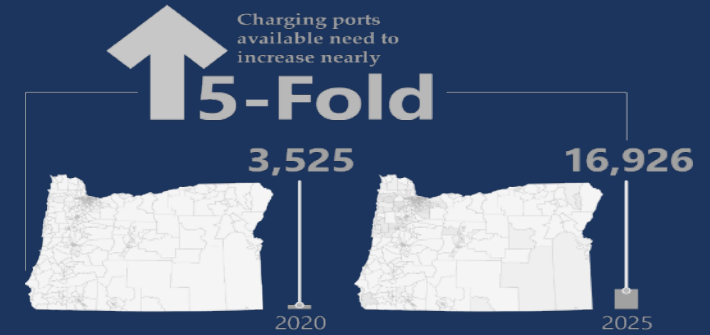
Highest use corridors (e.g. I-5), pilot en-route charging hubs, future proof light-duty sites.

E-micromobility



Opportunistic. Rapid growth. Mostly served by at-home charging but should be enabled at charging stations.

Add 110v outlets to public charging sites, remove other barriers to increase overall use.



Transportation Electrification Infrastructure Needs Analysis (TEINA)





OTC Commits:

\$100+ million for EV Charging

- Two-thirds of funding comes from IJA
- Focused on charging along corridors
- Additional funds support charging statewide

National EV Infrastructure (NEVI)

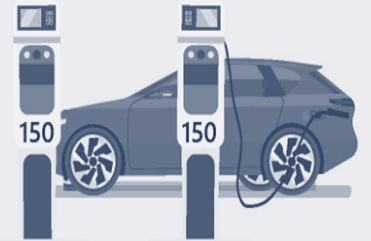
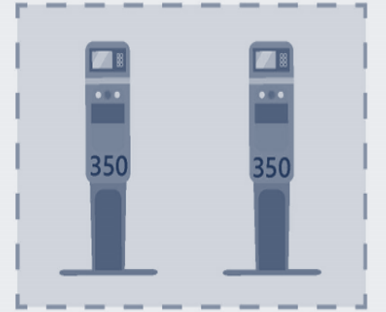
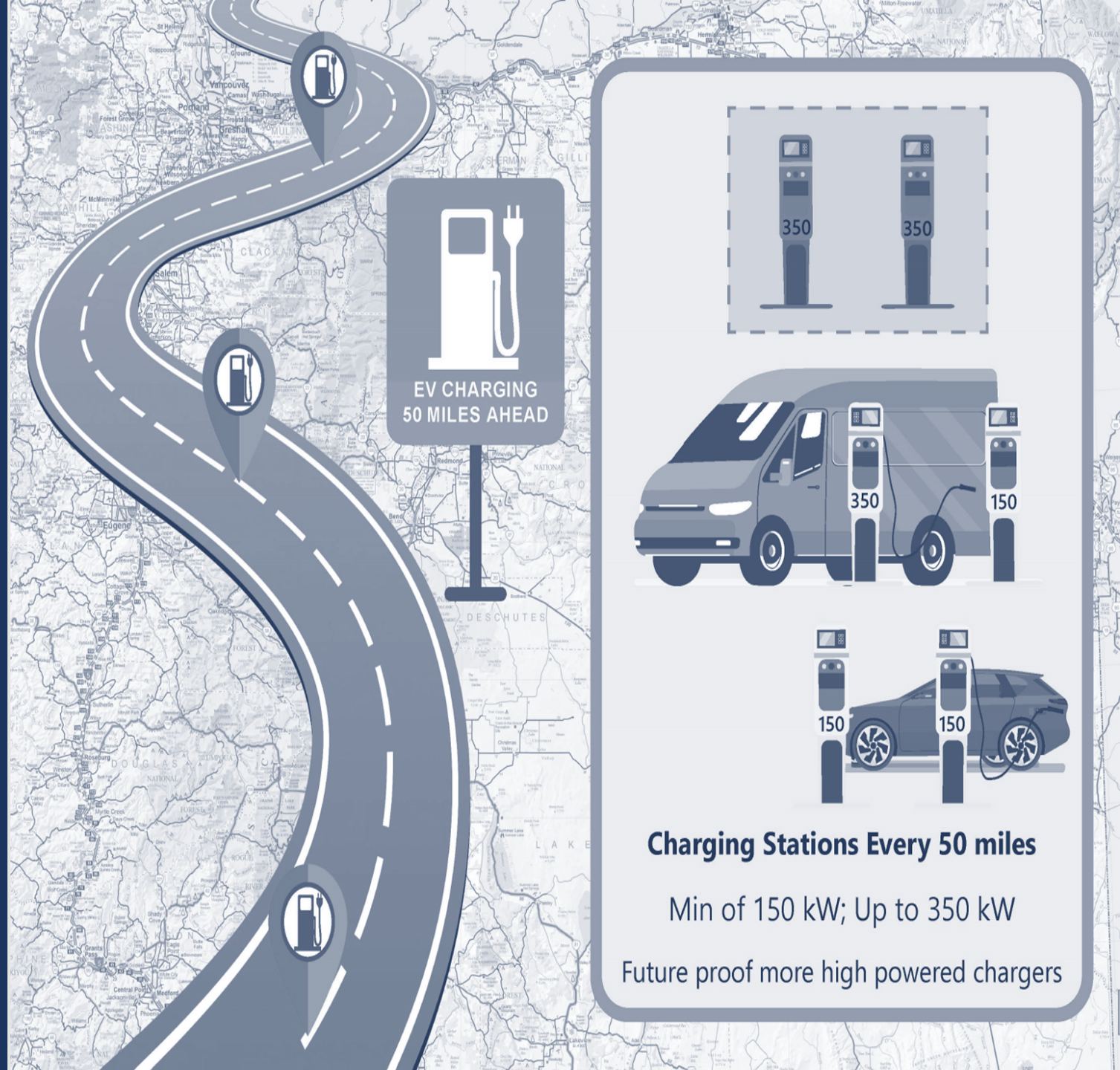
Focused on charging for cars and trucks

Specific Federal Requirements:

- Along Federally-Designated Alternative Fuel Corridors.
- Every 50 miles.
- Within one mile of the road.

Opportunities we will pursue:

- Add low-voltage chargers for e-bikes.
- Pull-through design for freight trucks and other MHD vehicles.
- Future proofing with higher wattage chargers for MHD vehicles.

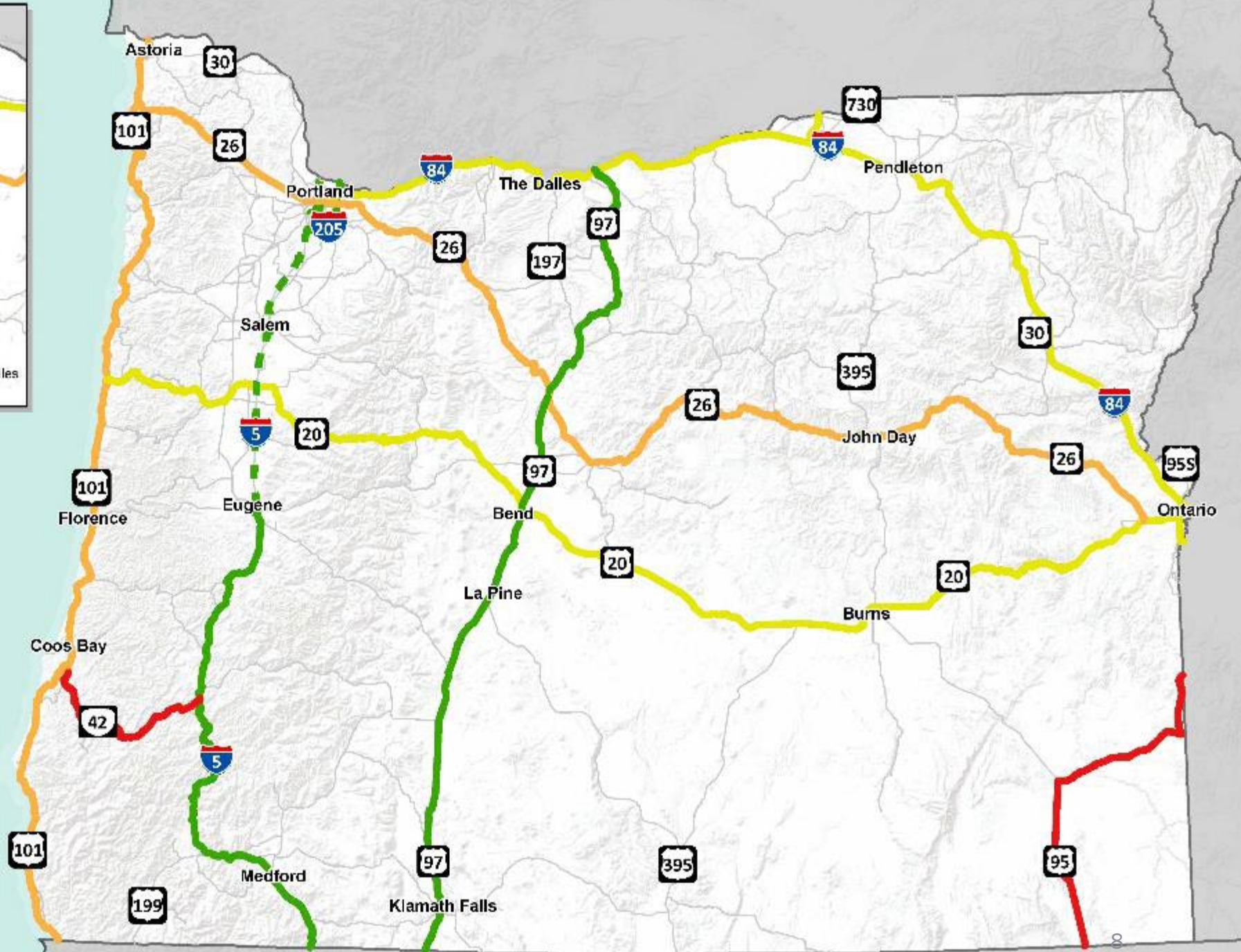


Charging Stations Every 50 miles

Min of 150 kW; Up to 350 kW

Future proof more high powered chargers

NEVI Alternative Fuel Corridors



Community Charging Rebates program



Targets EV charging in communities throughout Oregon

\$8 million to support the installation of Level 2 EV charging stations at strategic locations, particularly multi-family housing and public parking sites.



Investments reimbursed through rebates

\$4,250 - \$5,500 per plug, up to 75% of eligible costs.



Timeline

Funding released in rounds. First round to launch in June 2023.



Centers equity

70% of funds are reserved for projects in disadvantaged and rural communities. Companion outreach and education program will focus efforts in these priority communities.

TEINA 2022: ZEV Charging Deployment Strategy

“One Stop Shop” to support EV charging planning in Oregon, including:



Information & Guidance

- EV charging basics.
- Best practices in design.
- Supportive policies and programs.



Resources

- Cost estimates.
- Funding sources.



Planning Support Tools

- TEINA Dashboard (User-friendly Excel Model).
- Infrastructure Planning Tool (Interactive GIS Map.)

TEINA 2022: Electric Micromobility

Objective: to better understand the electric micromobility sector and outline actionable strategies for promoting sector's growth

Study includes:

- Overview of e-micromobility.
- Industry snapshot.
- Centering equity.
- Benefits and barriers.
- Policy recommendations and actionable strategies.



Medium- and Heavy-Duty Charging

- Identify & develop partnerships.
- Convene key players.
- Support at NEVI sites (when possible).
- Apply for federal grants.
- Medium- and Heavy-Duty Incentives Report.



RESOURCES

- [Transportation Electrification Infrastructure Needs Analysis 2021 \(TEINA\)](#)
- [Electric Micromobility in Oregon](#) (November 2022)
- [Medium Heavy Duty Incentives Report](#) (December 2022)
- [National Electric Vehicle Infrastructure Program Online Open House](#)
- [Hydrogen Pathway Study](#) (April 2022)

THANK YOU!

