

Transportation Electrification Plan Stakeholder Meeting #1



July 7, 2022

Ground Rules

We strive to create a respectful, inclusive environment that embraces diverse perspectives

1. Be present
2. Keep an open mind
3. Share your insights
4. Work with us toward a shared solution

Please hold any program-specific questions until the end

Recommendations & Requests for Meeting Participants

- Use Gallery View (icon at top right) when in group discussion
- For technical support, click the Chat icon (in tool bar at bottom), toggle to "Tag Galvin-Darnieder / E Source" as recipient, and send your message
- Please use the chat at any time to engage in the conversation or ask questions
- To raise your virtual hand to speak, click on "Reactions" in the tool bar and select "Raise Hand."
- Please keep your camera on during the meeting (icon at bottom left), though remain muted unless speaking
- E Source facilitators will change PacifiCorp, E Source, and Transportation Electrification stakeholder member participant names to first name, last initial, affiliation

Stakeholder Engagement Overview



To develop a **robust, equitable, innovative, iterative, and customer-centric transportation electrification plan** (TEP)

Objectives

- Engage underserved communities throughout our service area to support the development of an equitable TEP
- Identify localized market barriers and strategies related to advancing TE within our service area
- Identify and prioritize TE program initiatives that are supported by our stakeholders and will be integrated into the TEP

Today's Objectives

- Revisit current EV adoption and infrastructure within PacifiCorp's service area
- Inform current program offerings and stakeholder engagement strategy
- Discuss and obtain feedback on methodology and approach for mapping underserved communities



Agenda



Welcome | *9:30 a.m. PDT*

Objectives | *9:30–9:40 a.m.*

Current State of Electric Vehicle Adoption & Charging Infrastructure | *9:40–10:00 a.m.*

PacifiCorp Current Program Offerings | *10:00-10:25 a.m.*

Identifying Underserved Communities | *10:25–11:10 a.m.*

Next Steps and Questions | *11:10–11:30 a.m.*

Presenters



Kate Hawley
EV Senior Product Manager,
Customer Solutions,
PacifiCorp



Steven Alaman,
Transportation Electrification
Customer Programs Manager,
PacifiCorp



Eli Morris
Managing Director,
Applied Energy Group

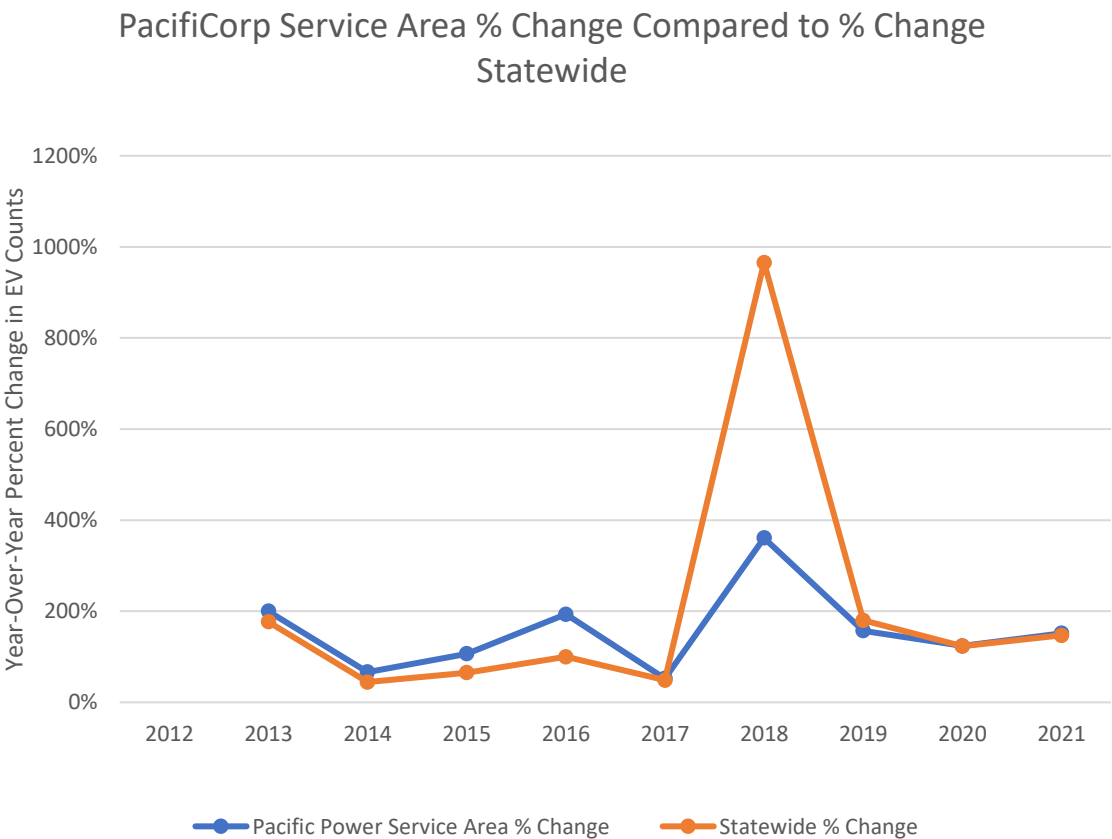
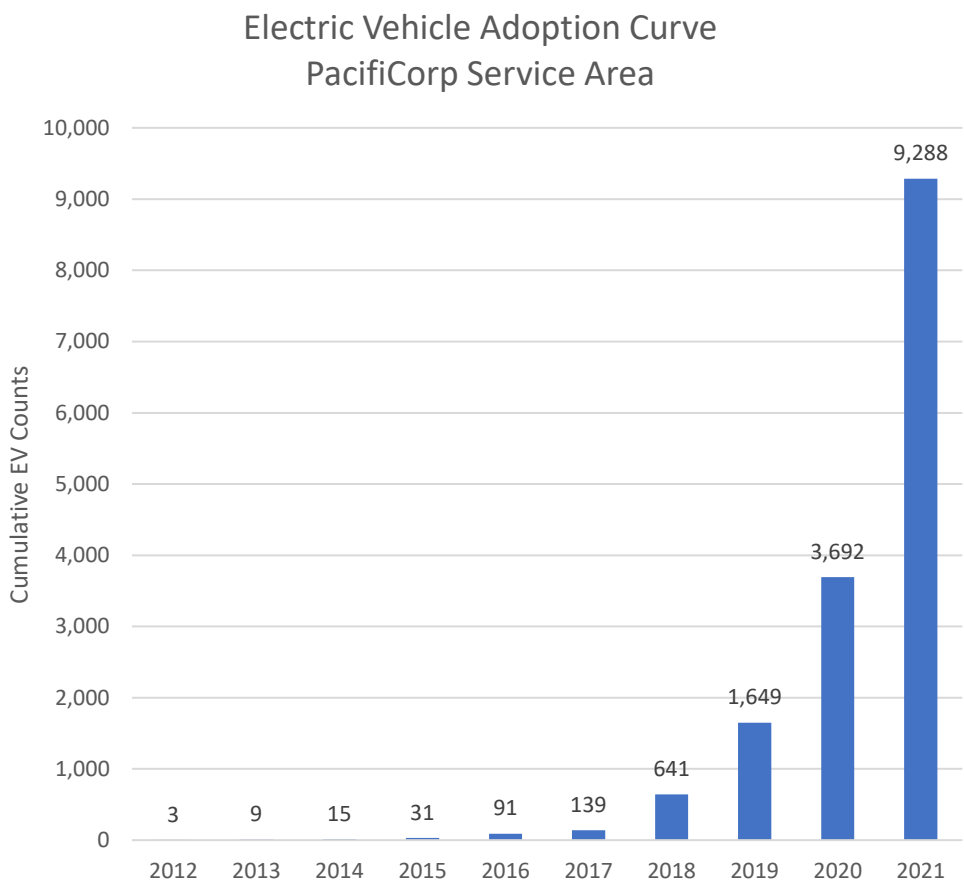


Rob Strange
Product Manager
Applied Energy Group

Current State of Electric Vehicle Adoption & Charging Infrastructure

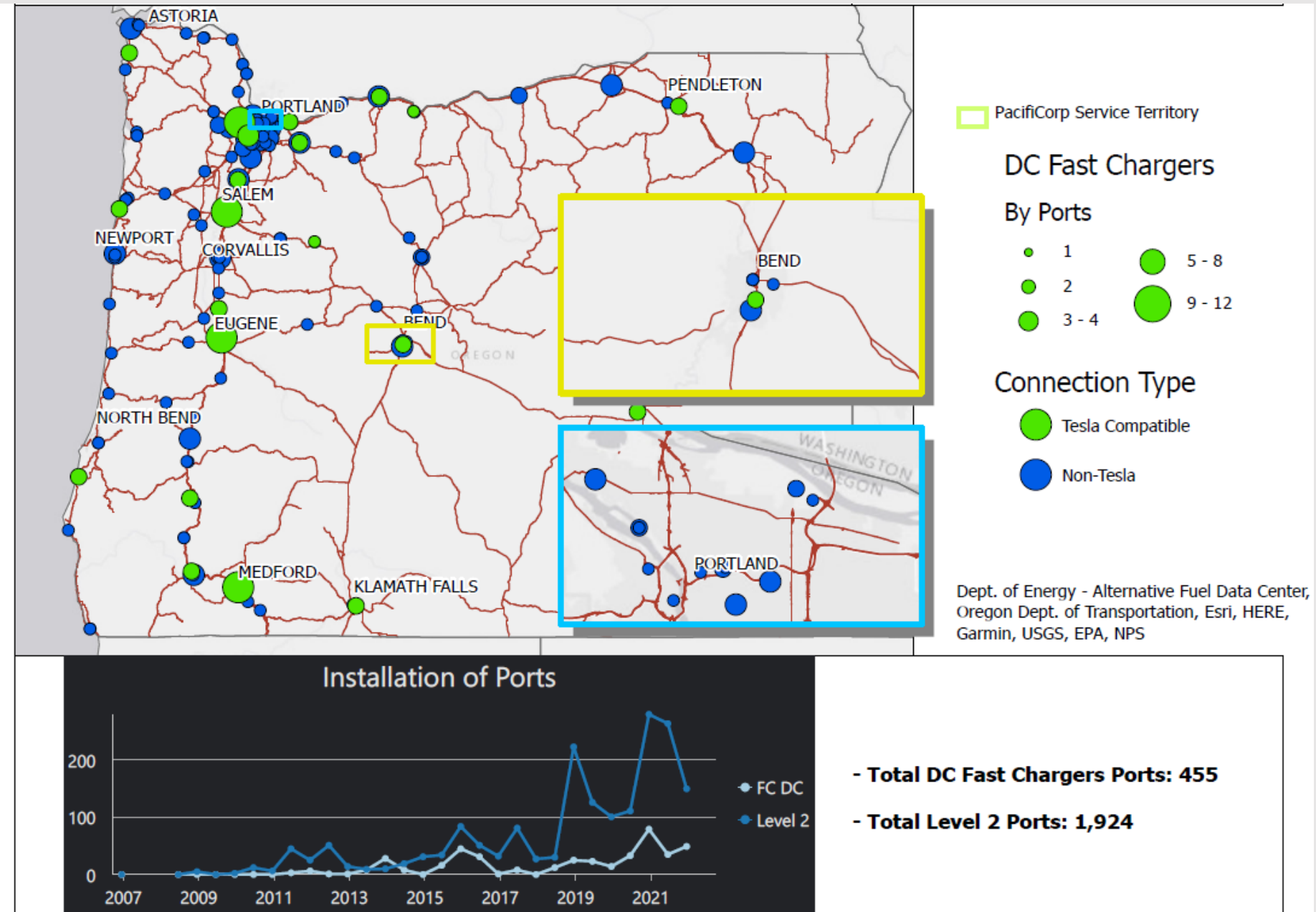


Electric Vehicle Adoption

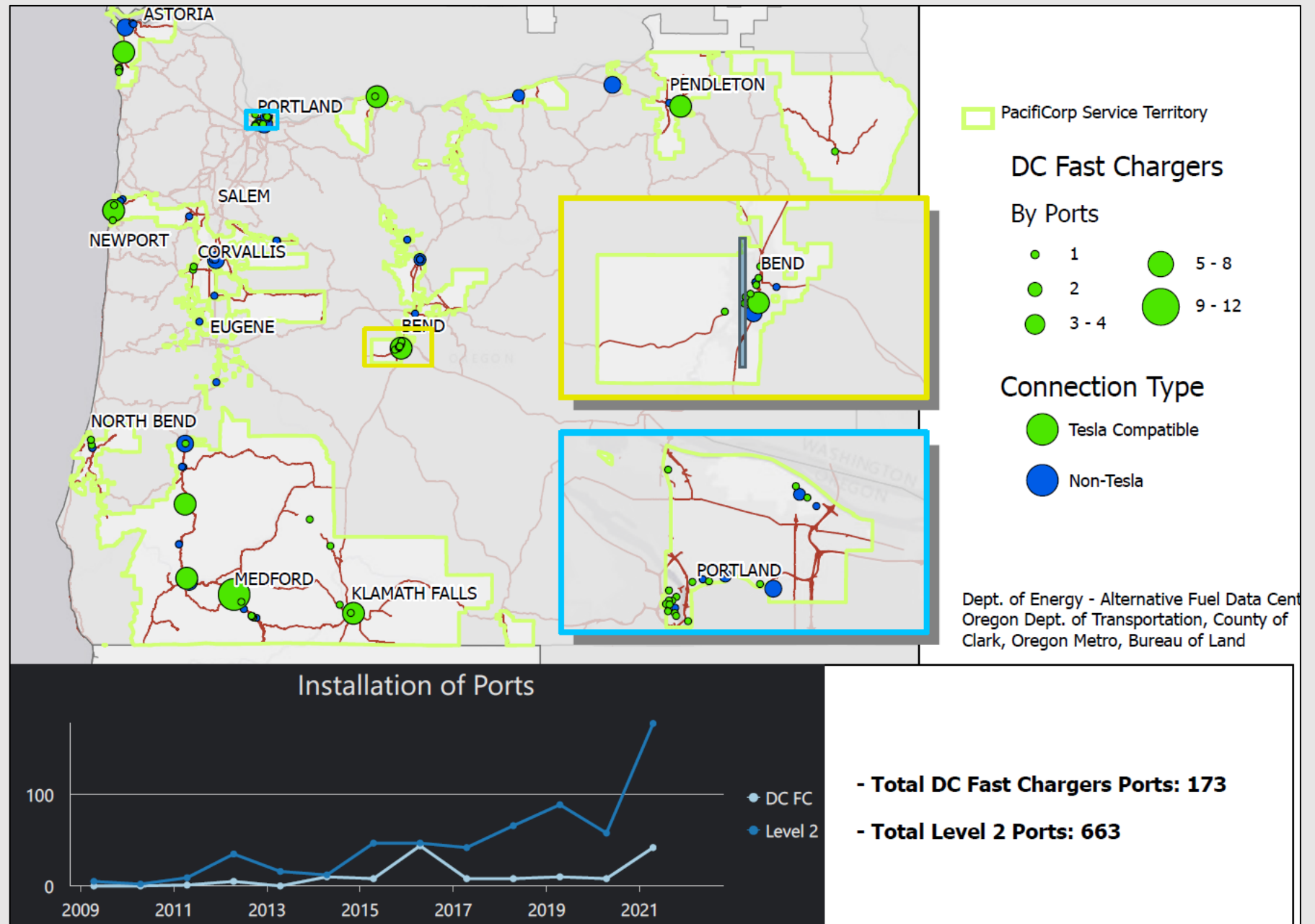


Source: Oregon Department of Energy. (2022, June 20). Oregon Electric Vehicle Dashboard. Oregon.gov. <https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx>.

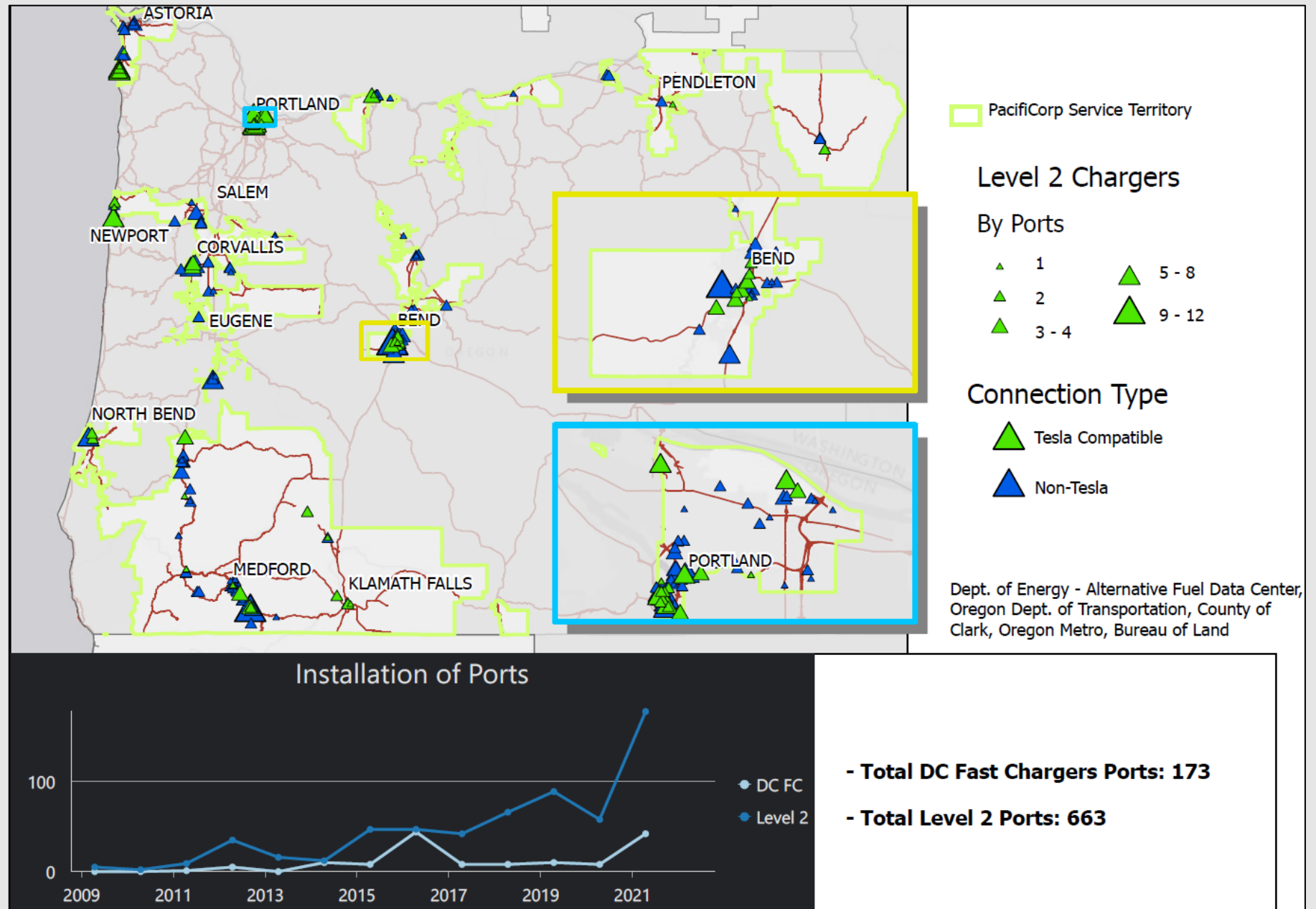
DC Fast Charging Infrastructure: Oregon Statewide



DC Fast Charging Infrastructure: PacifiCorp Service Area



Level 2 Charging Infrastructure: PacifiCorp Service Area



PacifiCorp Program Offerings



Oregon Transportation Electrification Portfolio

Pilot Programs

Phase I: Ended 2021

Public Charging Stations

PacifiCorp Stations

Fast-charging stations in Bend, Klamath Falls, Madras, Mill City, and Otis

Infrastructure Grant

Competitive EVSE Grants

All funding awarded

Outreach and Education

- Wattplan online tool
- Ride and drives
- Beacon deployment
- Technical assistance

Clean Fuel Credit Programs (Program Renews Each Year)

Outreach and Activation

Communication and Enhanced Outreach

Electric Mobility Grants

Competitive EV Partnership Grants

To support projects that advance electric transportation in underserved areas

Matching Funds

To organizations and communities applying for external grants

Grant Writing Support

To organizations and communities in need of grant writing assistance

Other Key Initiatives

Supporting Tariff Design

- Demand charge transitional rate
- TOU pilot rates
- Expansion of line extension allowance
- Tier flattening

Planning Studies

Regional Coordination

Customer Engagement

WestSmart 2.0 Grant

Phase II: Active

EVSE Residential Rebate

Residential rebate for EVSE Level 2 charging, includes low-income adder

EVSE Nonresidential Rebate

Nonresidential rebate for EVSE Level 2 charging, includes multifamily adder

Outreach and Education

- Decision-making support
- High-quality EV experiences
- Planning and studies

Charge at Home/Charge at Work

Level 2 charger rebates for Oregon homes and businesses

Homes	Multifamily properties	Businesses
Get up to \$1,000 for home charging equipment in Oregon.	Get up to \$3,000 per port for multifamily properties in Oregon.	Get up to \$1,000 per port for businesses in Oregon.
SEE REBATES	EXPLORE REBATES	APPLY FOR REBATES

- Be a Pacific Power residential customer
- Own or lease an EV or plug-in hybrid
- Will be automatically enrolled in **Time of Use** program
- Submit a rebate application within one year of the date of purchase
- **Install a qualified charger**

Income qualified customers can receive up to \$1,000 (see below).

Savings & Energy Choices

- Home energy choices
- Business energy choices
- Renewable energy
- Electric vehicles
- Customer generation
- Time of Use

Oregon rebates for multifamily EV chargers

[< Back to electric vehicles](#)

Be a leader in the clean transportation movement by offering EV charging for your tenants and employees at your apartment complex or multifamily property. Investing in charging for your parking lot has low costs and has big returns for you and the community.

It costs roughly \$5 to \$10 a day to power a Level 2 charger, and it costs nothing when the charger is not in use.



[Get free on-site help with charging. Learn about **technical assistance**.](#)

Benefit the community and the environment

When housing providers invest in opportunities that benefit the community, the investments can also have big benefits for their bottom line.

Attract and retain
tenants and employees.

Build your reputation
as a sustainable leader.

Earn points toward LEED
and other certifications.

Charge at home rebates for multifamily housing

Get up to \$3,000 per port, not to exceed 75% of total costs

[ELIGIBILITY](#) [REQUIREMENTS](#) [APPLY ONLINE](#)

- Be a Pacific Power nonresidential customer (owner or manager) of a multifamily residential building that includes three or more units.
- **Buy and install a qualified EV charger**
- Installations must be hardwired
- Submit a rebate application within one year of the date of purchase
- Max incentive is \$36,000 (total 12 ports)

[Interested in becoming a qualified product vendor? Review the **Information & Qualifications** and **EVSE Charging Equipment** details.](#)

Outreach & Education

- Ride-and-drive events
- Go Forth Mobile Showcase outreach
- Sponsored EV promotional events

Community Events



- Commercial EVSE feasibility studies
- Fleet EVSE feasibility studies
- Fleet market assessment

Technical Assistance



- PacifiCorp's EV website
- Social media EV promotion
- Bill onserts & inserts
- Press releases
- Radio advertisements
- Direct e-mail
- Dealership collateral

Customer Communication



- Cost comparison calculator
- Tax credit & incentives
- Chargeway Beacon kiosks at dealerships
- Printed and digital educational materials

Self-Service Resources



Clean Fuels Program Offerings

Grant Funding

- E-Mobility Grant Fund
- Grant Matching Fund
- Grant Writing Assistance

Outreach & Education

- Statewide Marketing Campaign
- Dealership Engagement
- Technical Assistance
- Quarterly Roundtables

Line Extension Allowances

- Nonresidential applicants, for which 80% or greater of the estimated annual load of applicants' facilities will be dedicated to serving transportation charging infrastructure
- Two times the estimated annual revenue the applicant is expected to pay the Company in a year of normal operations under cost-based service
- The applicant must advance the costs exceeding the extension allowance
- Line extension allowance costs cover electrical costs (i.e., conductor, transformers, meters and other necessary equipment to provide electricity to the customer's service entrance panel)

Key Supporting Initiatives

Supporting Tariff Changes

- Encouraging off-peak usage
- Facilitating charging station buildout in underserved areas through alternative rate structures
- Modernizing residential rates to improve charging economics

Planning
Studies

Regional
Collaboration

Customer
Engagement

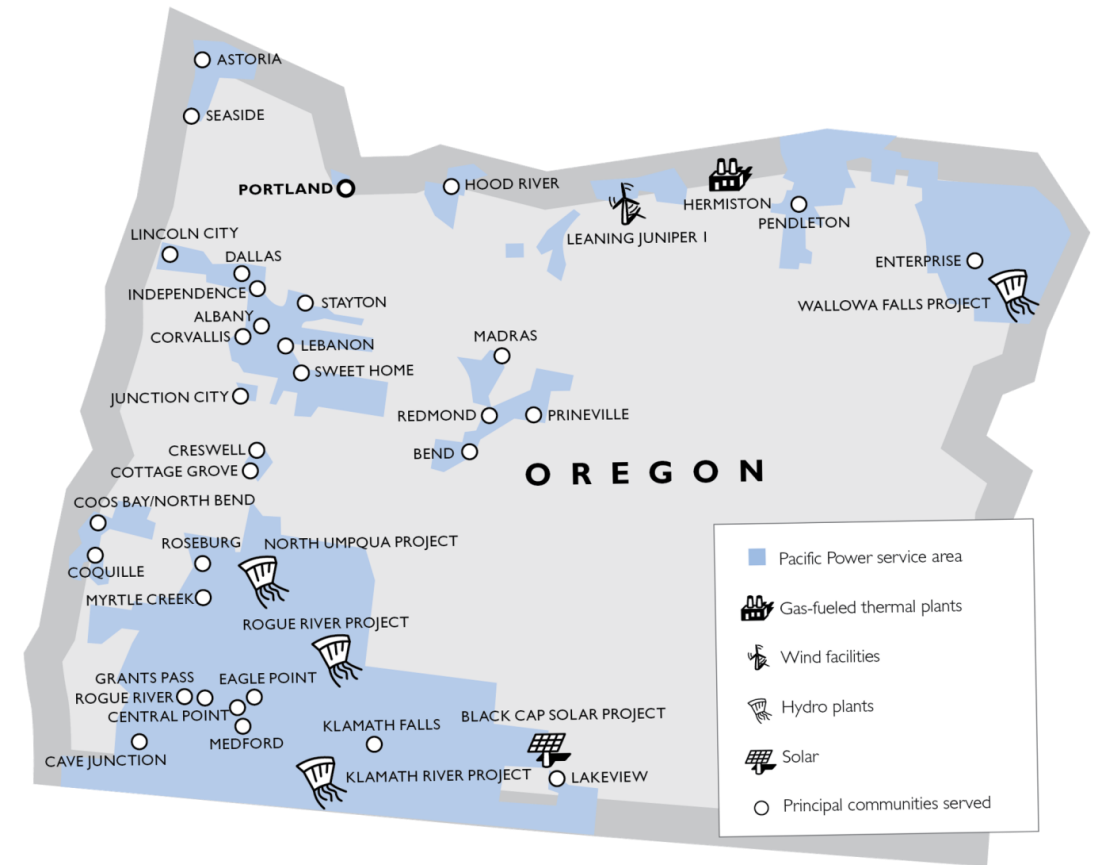
WestSmart
2.0

Identifying Underserved Communities



Understanding PacifiCorp's Service Area Characteristics

- Objective:
 - Understand how communities in PacifiCorp service area are serviced by current EVSE infrastructure
- Process:
 - Map EVSE locations by Tesla and non-Tesla
 - Create composite index to create a single factor to represent HB 2165 “Underserved Communities”
 - Overlay current infrastructure, driving considerations and underserved communities to develop an index of need



House Bill 2165 Underserved Community Definitions

Rental Housing

Residents of
Multifamily
Housing

Communities of
Color

Communities
Experiencing Lower
Income

Tribal Communities

Rural Communities

Frontier
Communities

Coastal
Communities

Communities
Adversely Harmed
by Environmental
or Health Hazards

Source: UM 2165, Public Utility Commission of Oregon Staff Report Special Public Meeting December 14, 2021, December 7, 2021; <https://edocs.puc.state.or.us/efdocs/HAU/um2165hau181610.pdf>

Underserved Community Identification

Pollution Burden

Environmental exposures weighted more heavily

Environmental Exposures:

- ♦ Diesel
- ♦ Ozone
- ♦ Particulate matter 2.5
- ♦ Traffic density

Environmental Effects:

- ♦ Lead risk and exposure
- ♦ Proximity to hazardous waste facilities
- ♦ Proximity to superfund sites
- ♦ Wastewater discharge
- ♦ Risk management plan (RMP) facility proximity

Population Characteristics

Equal weighting

Demographic Factors:

- ♦ Residents of rental housing
- ♦ Residents of multifamily housing
- ♦ Communities of color
- ♦ Communities experiencing lower incomes

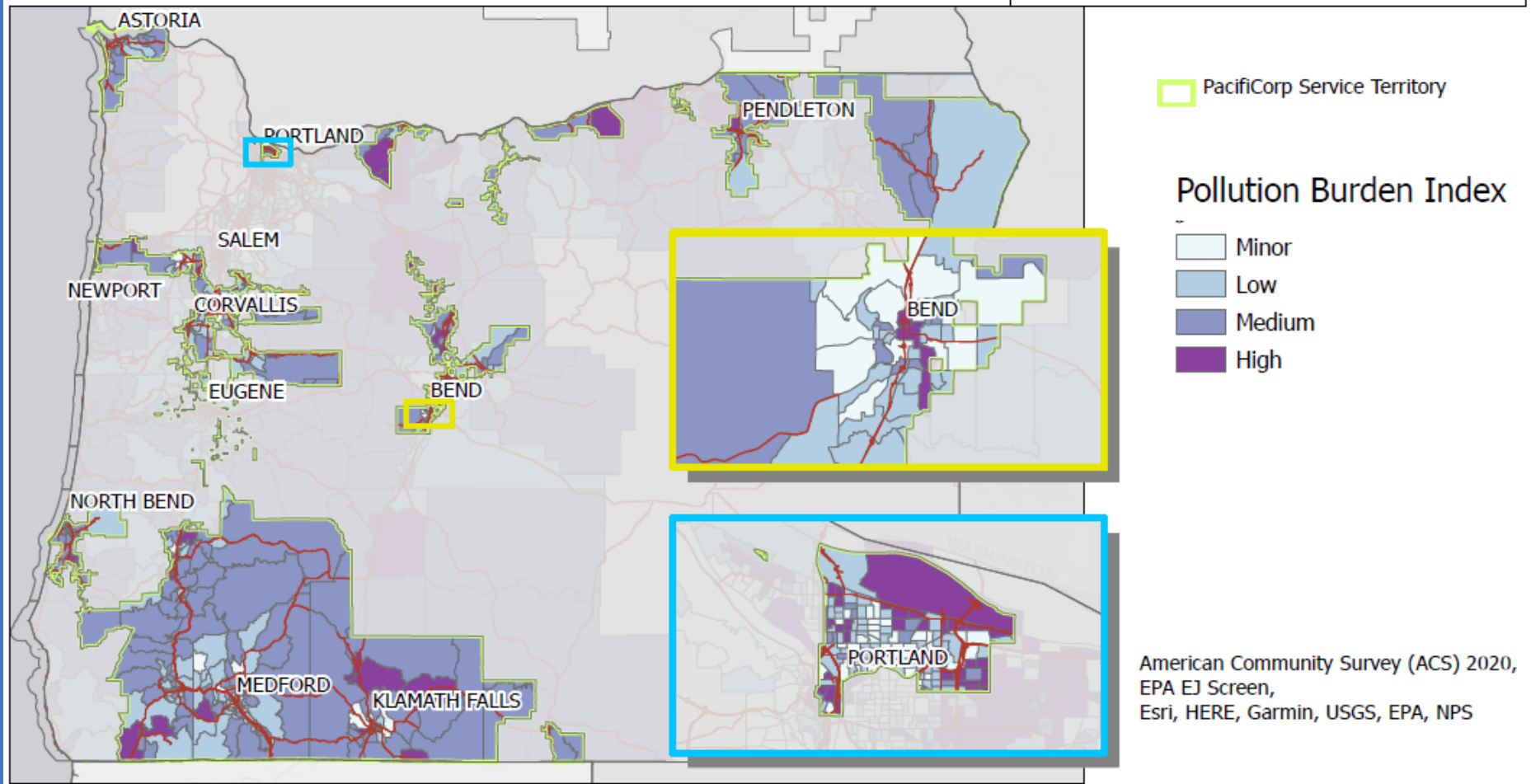
Geographic Factors:

- ♦ Tribal communities
- ♦ Rural communities
- ♦ Frontier communities
- ♦ Coastal communities

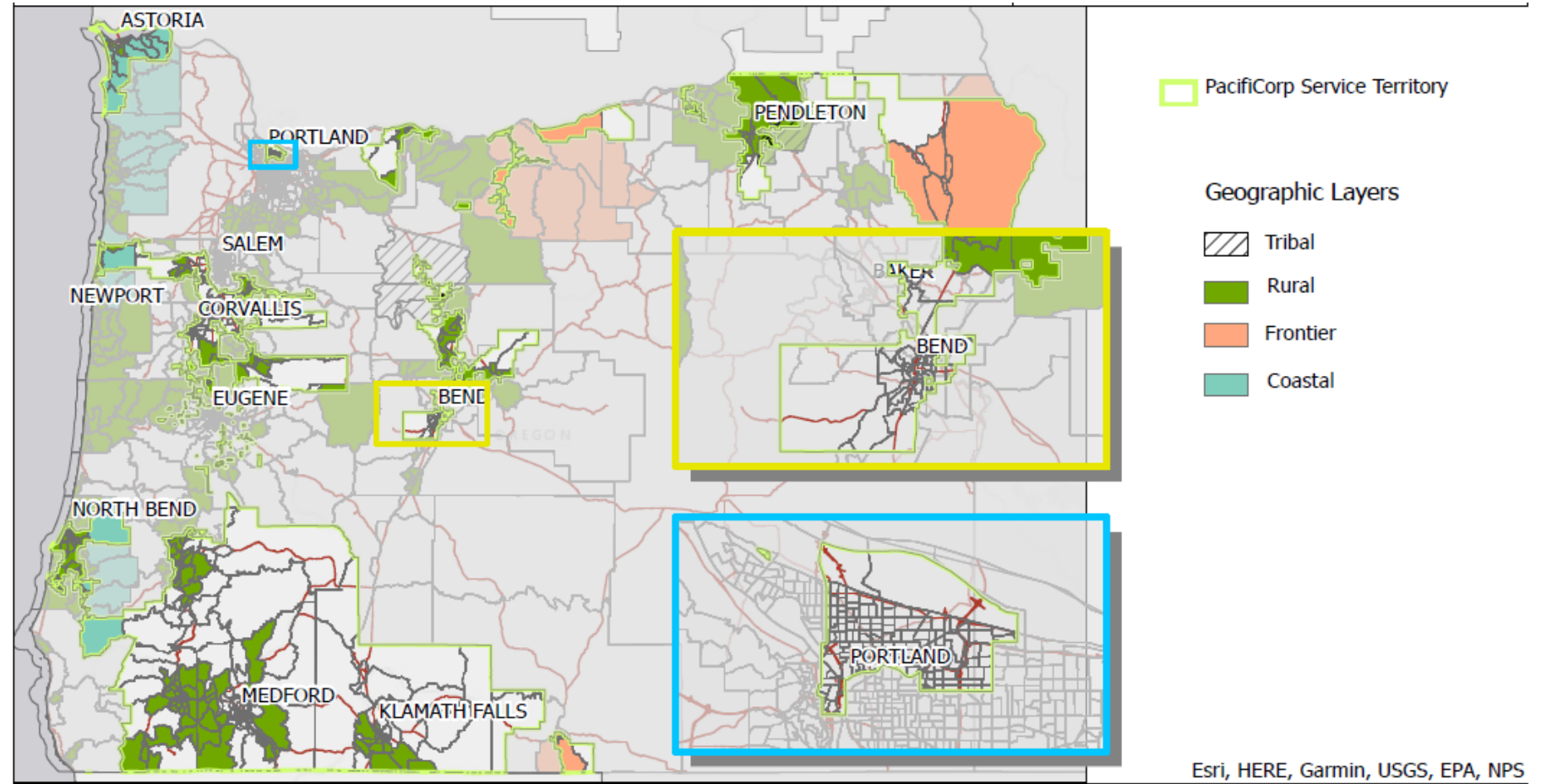
Composite Underserved Community Score

Combination of pollution burden and population characteristics (equal weighting)

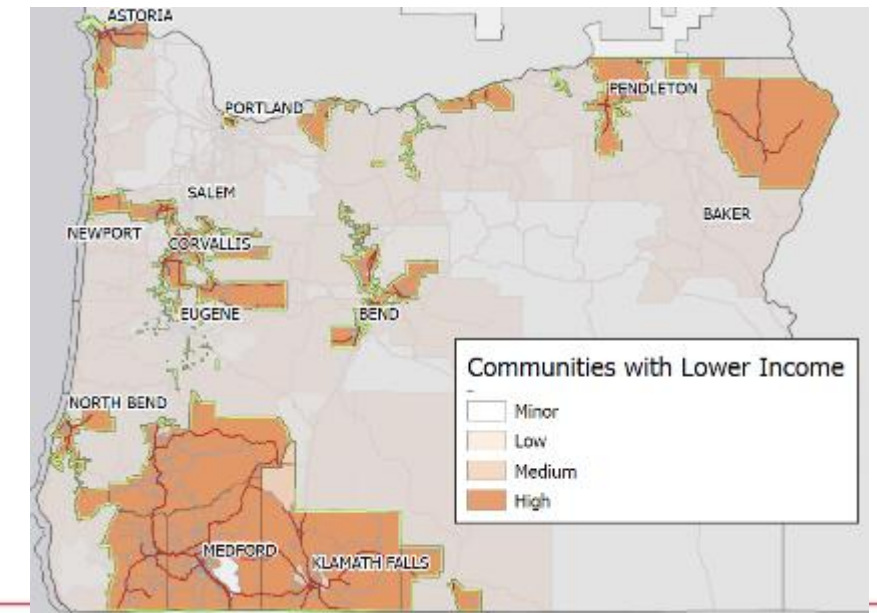
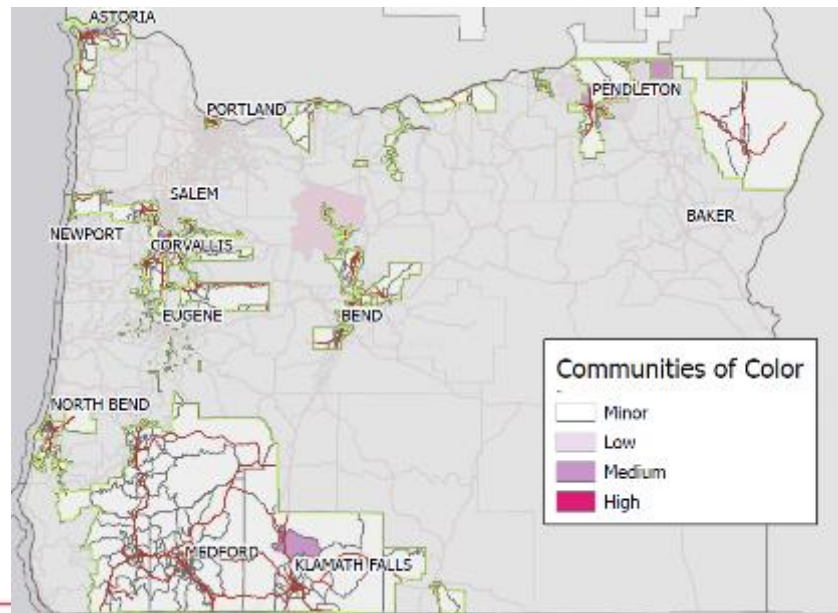
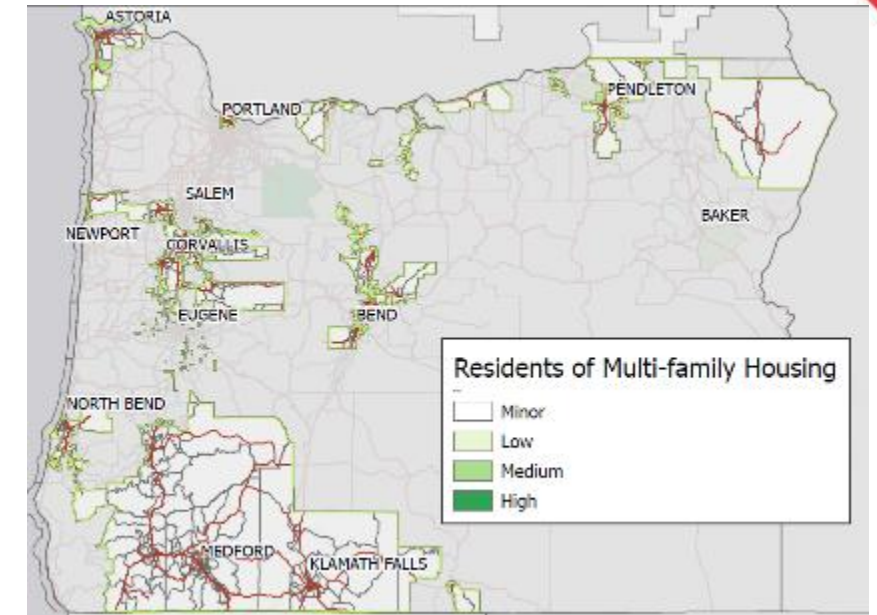
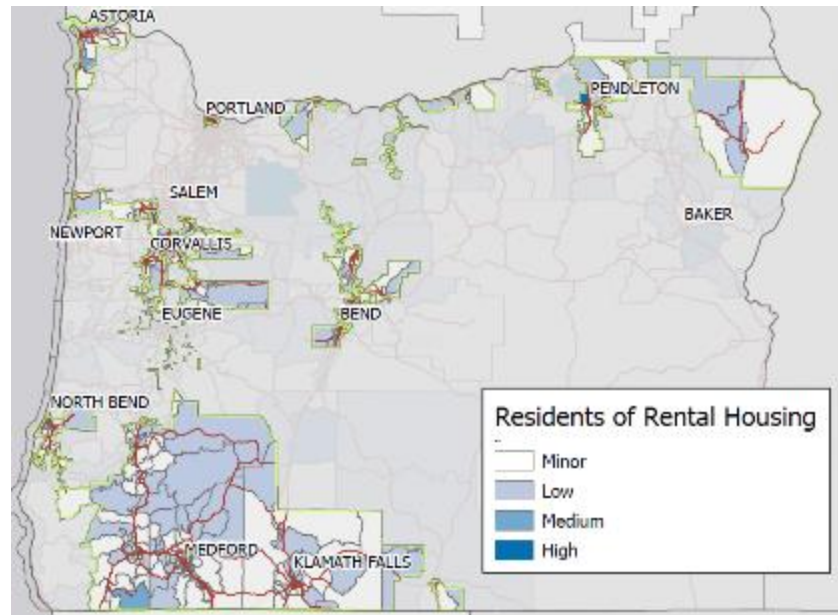
Pollution Burden: Composite Score



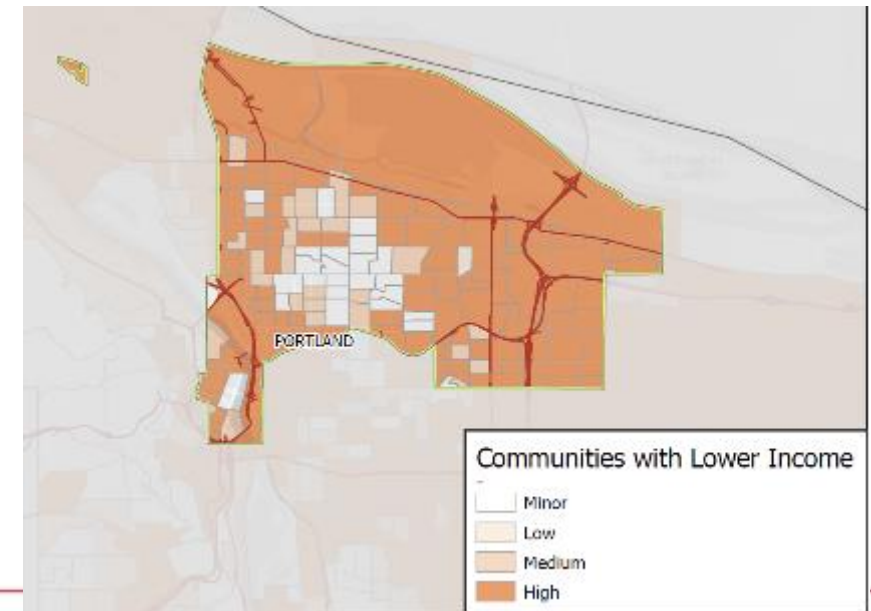
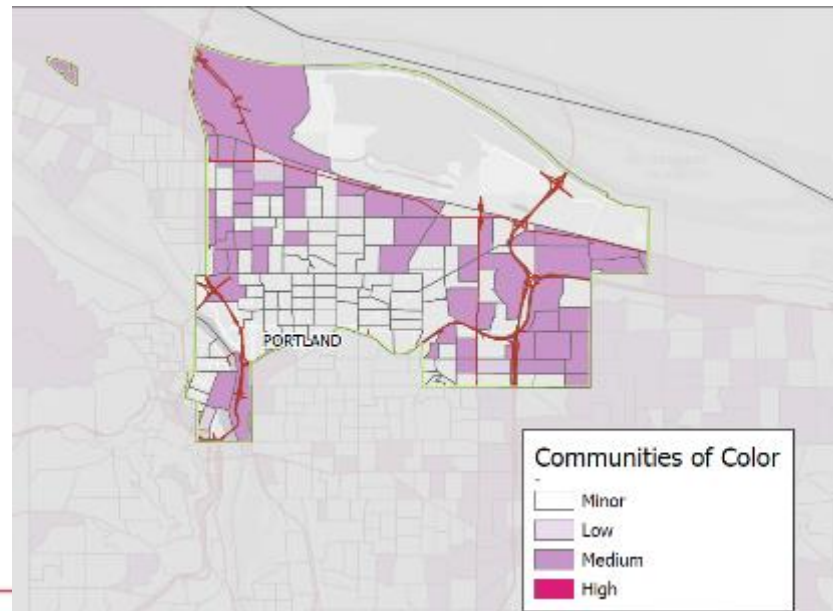
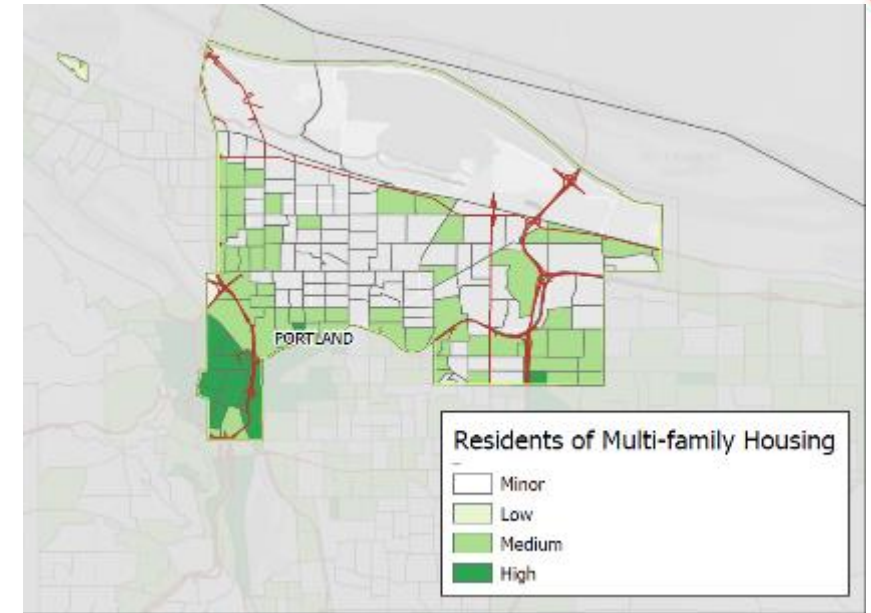
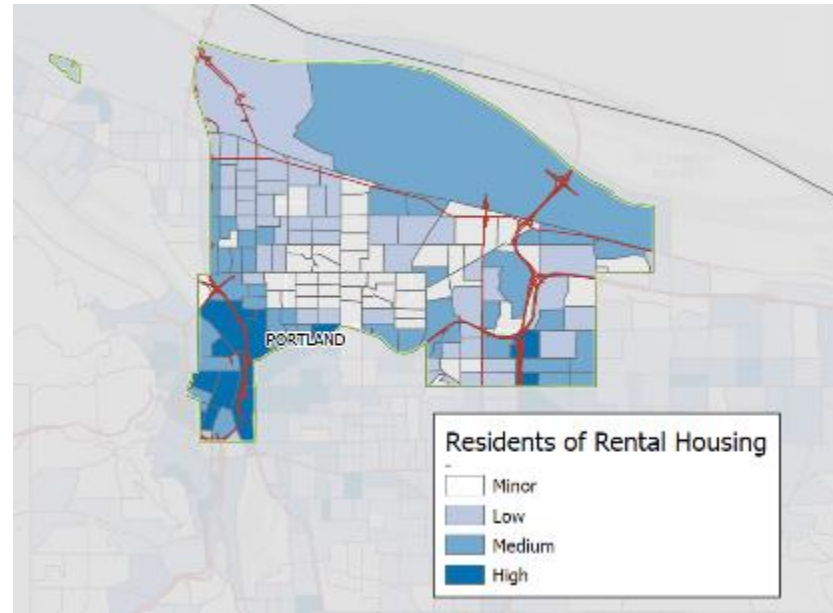
Underserved Communities: Geographic Layers



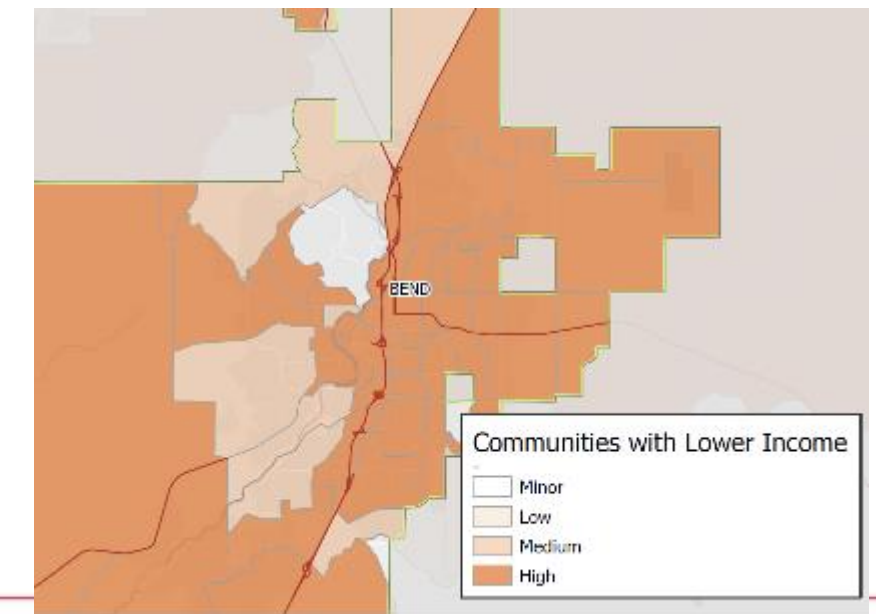
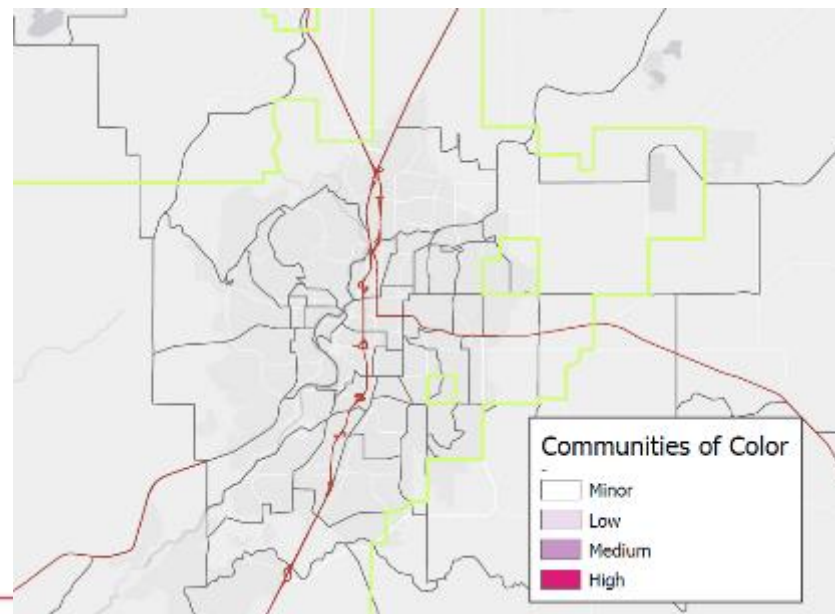
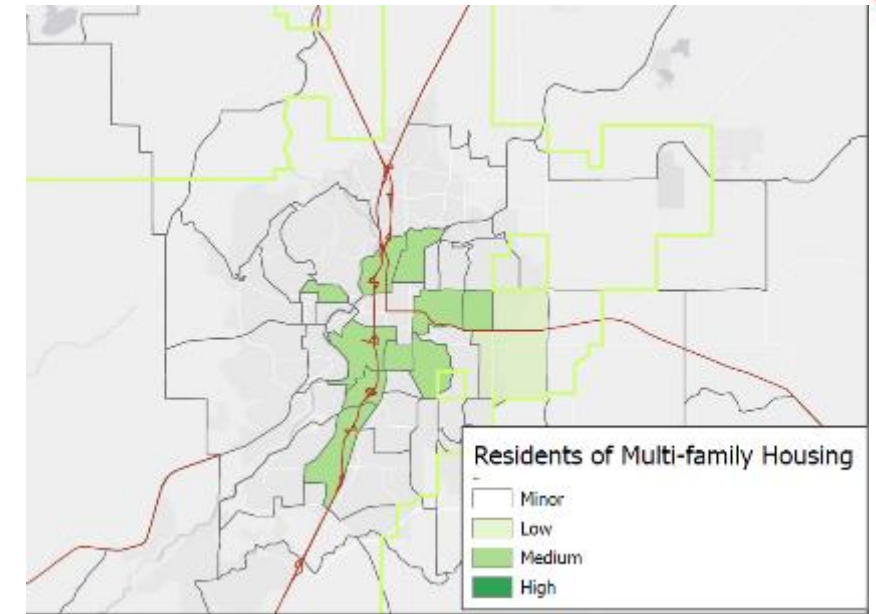
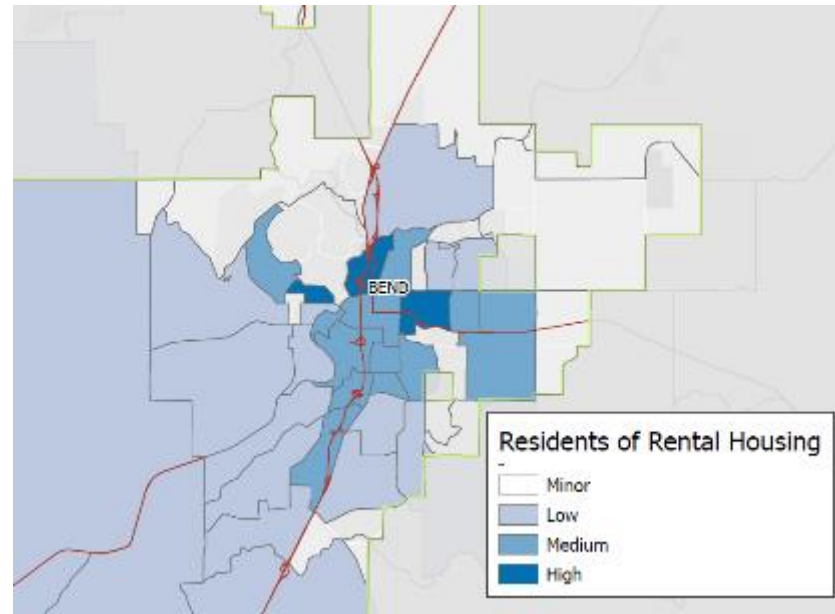
Demographic Layers: PacifiCorp Service Area



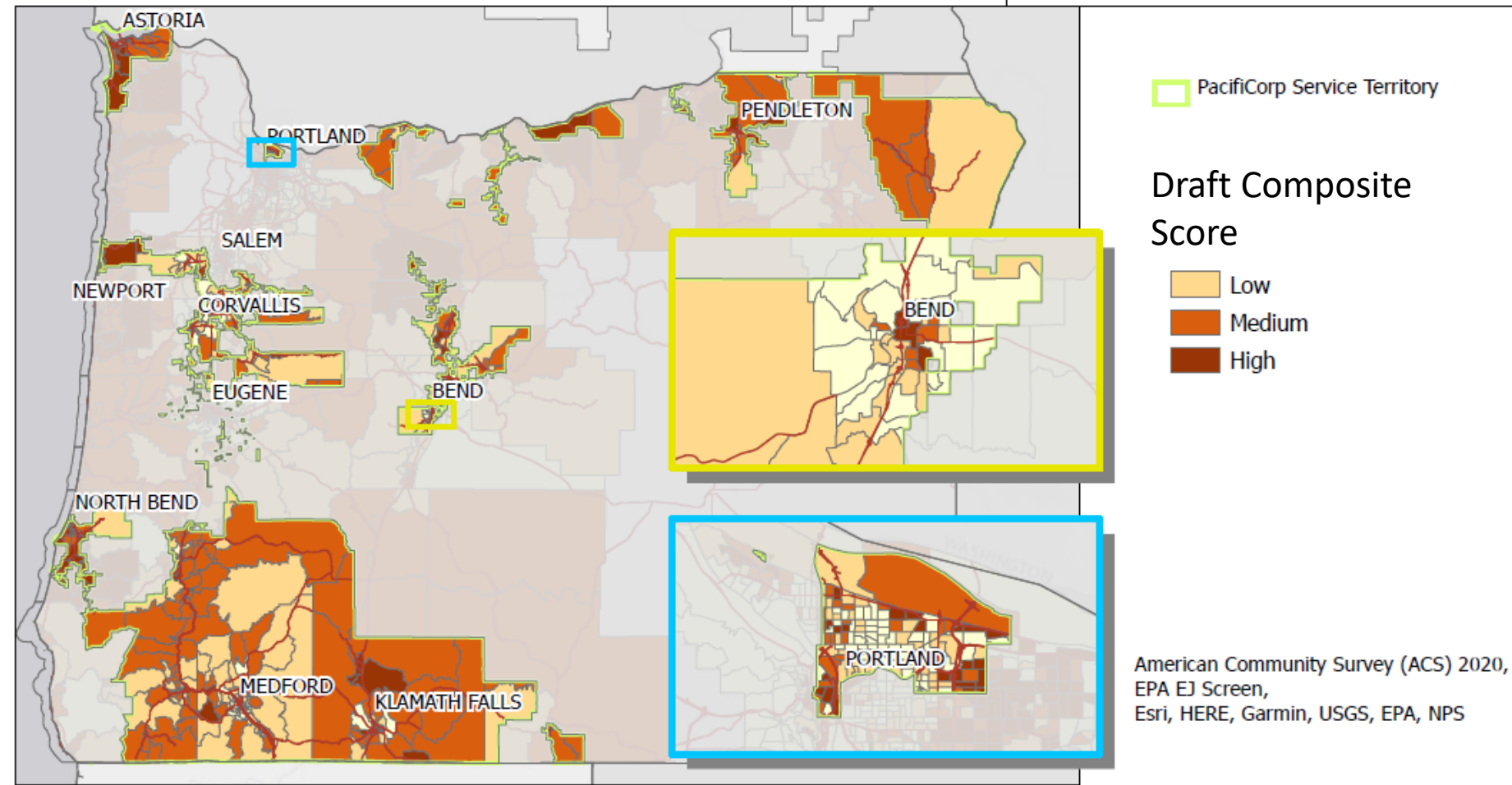
Demographic Layers: Portland Area



Demographic Layers: Bend Area



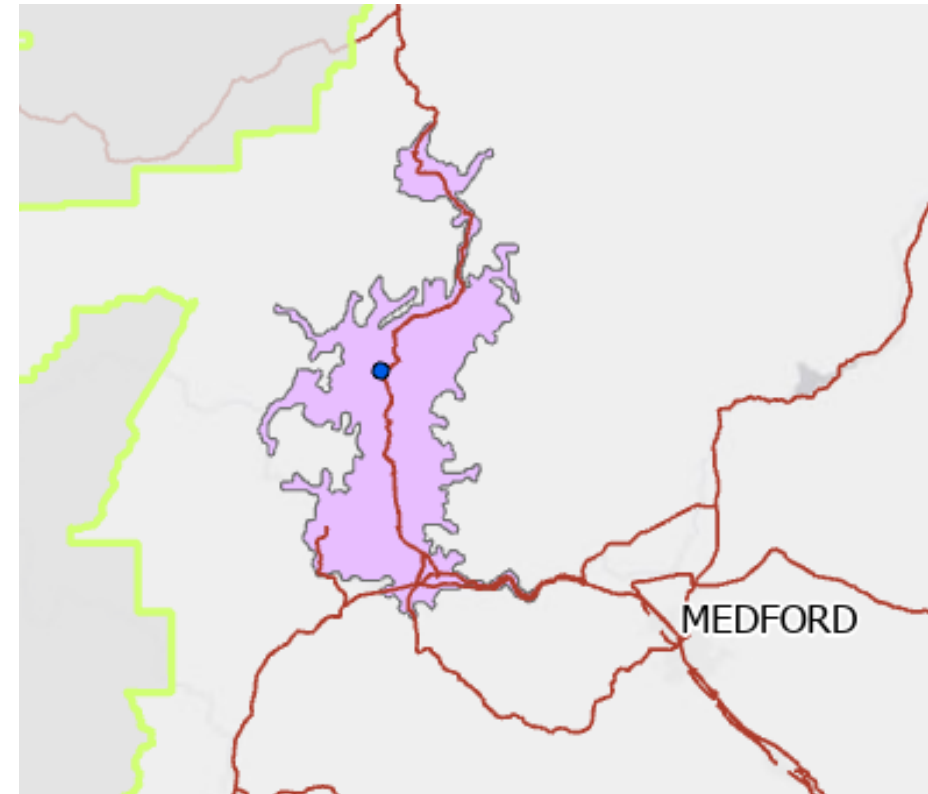
Underserved Communities: High-Level Initial Composite Index *For Discussion*



Next Steps

- Continue to refine composite underserved community index incorporating parts a, b, and c from HB 2165 Section 2(c)
 - Use pollution and population factors presented above
 - Incorporate access to public charging stations
- How to define areas with a low density of public charging stations?
 - Access to Level 2, DC fast chargers, or both?
 - Drive time to charging stations
 - What is a reasonable radius?
 - Is having access to a single charging station sufficient?

Example isochrone map – 45-minute drive time from DC fast charger



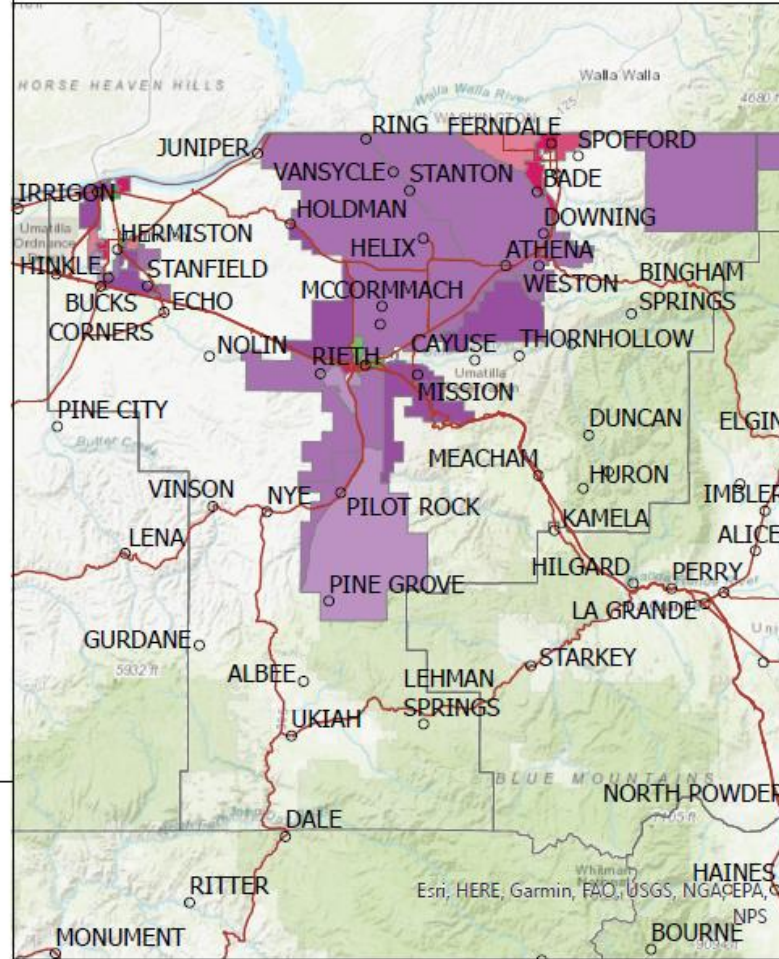
Draft Relationship Map: Umatilla County

Umatilla County

June 2022

DC Fast Charging Ports: 5

Level 2 Ports: 6



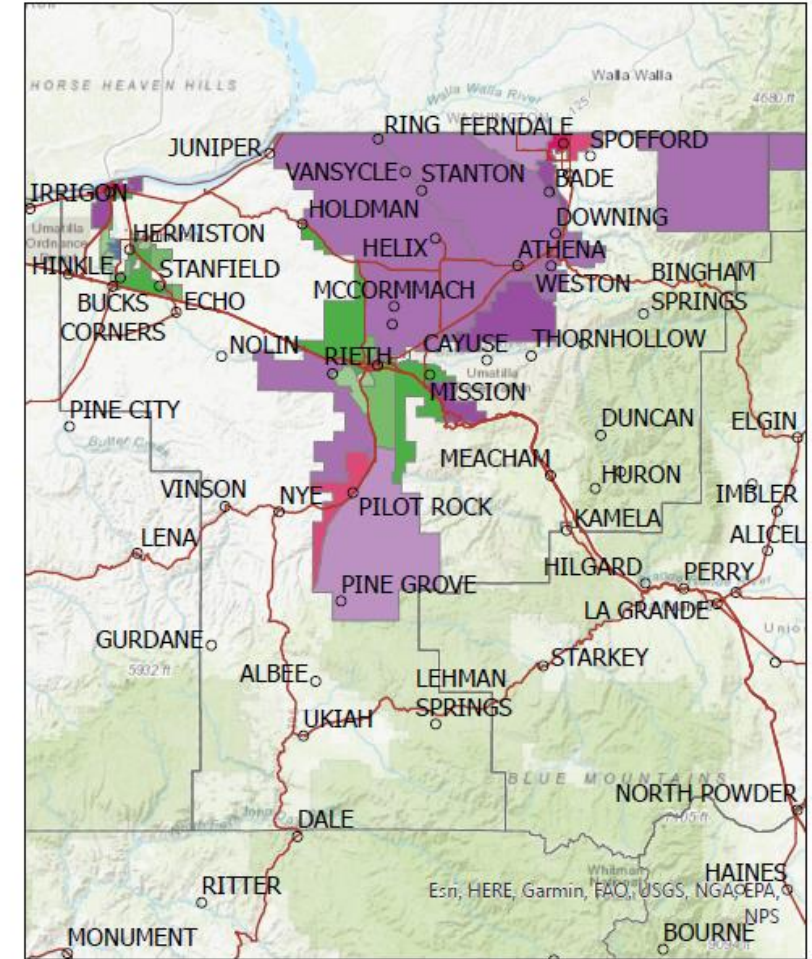
Non-Tesla Index

Underserved Communities by EVSE



DC Fast Charging Ports: 8

Level 2 Ports: 0



Tesla-compatible Index

Underserved Communities w/ Low EVSE Coverage

Underserved Communities w/ High EVSE



Not Underserved Communities w/ Low EVSE Coverage

Not Underserved Communities w/ High EVSE Coverage

A man and a woman are in a workshop, looking at a tablet together. The man is wearing a blue t-shirt and the woman is wearing a red plaid shirt and overalls. They are both smiling. In the background, there are shelves with tools and a large window. The text "Stakeholder Engagement & Next Steps" is overlaid on the right side of the image.

Stakeholder Engagement & Next Steps

Stakeholder Engagement Overview

- Series of virtual workshops
- National audience
- Led by PacifiCorp

Large Forums



- In-person workshops in PacifiCorp service area
- Led by Forth

Localized Engagement

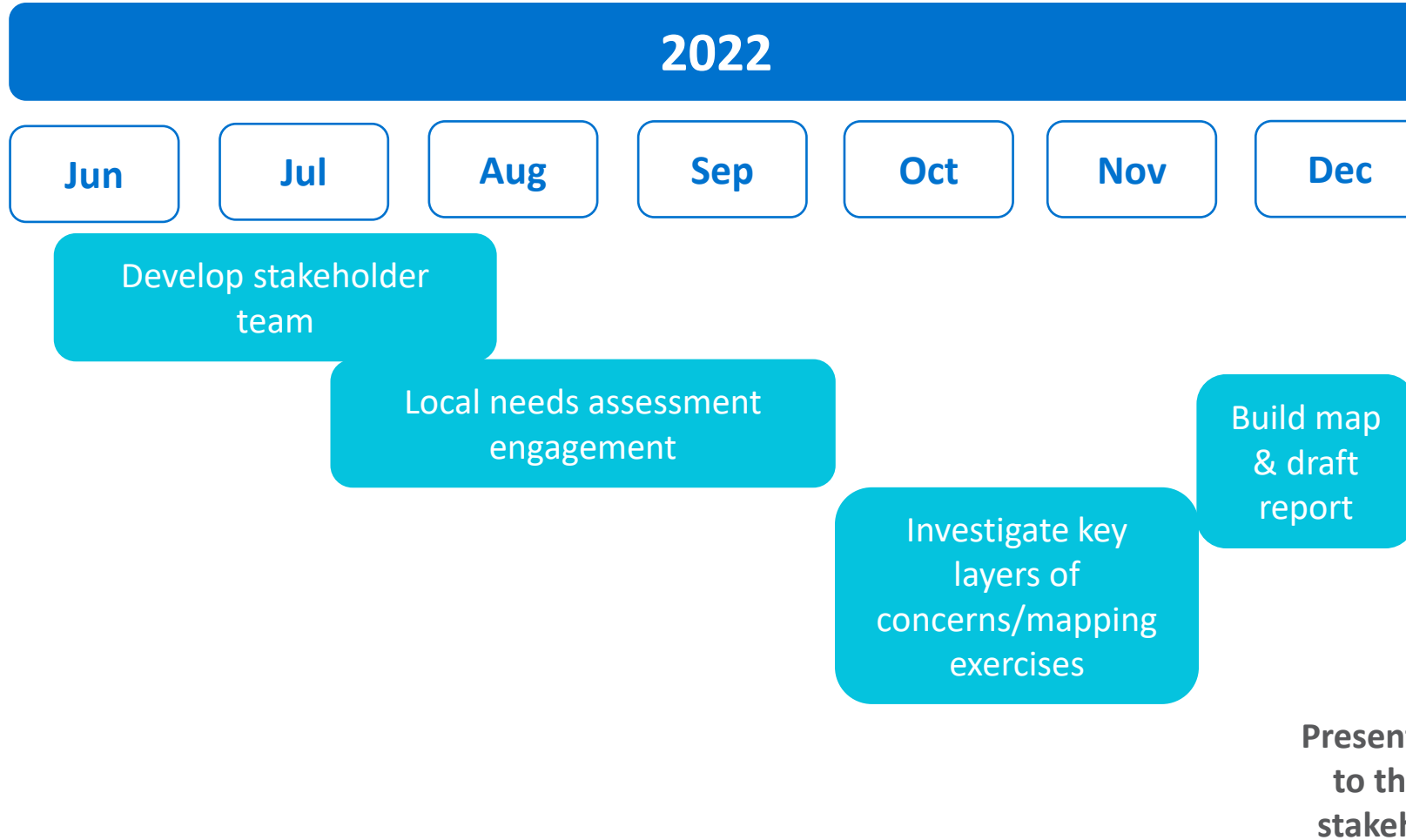


Localized Engagement

- PacifiCorp has hired the nonprofit Forth to facilitate six in-person local engagement sessions
- Engagement sessions will take place in rural or underserved communities throughout PacifiCorp's service area
- The goal of these in-person sessions will be to take a deeper dive to identify any TE barriers facing rural and underserved communities that may not be as easily identified in the larger stakeholder sessions



Draft Engagement Calendar



PacifiCorp Requests Your Feedback

- PacifiCorp is actively soliciting your feedback on what has been presented and discussed today
- PacifiCorp is particularly interested in feedback on the mapping exercise to identify underserved communities
 - Does equal weighting of factors make sense?
 - If not, how should weighting of factors be done?
 - More broadly, how can we improve our layered map to better identify and understand areas that are lacking infrastructure coverage?



**If you have feedback, recommendations for who we should reach out to, or additional resources,
email us at kate.hawley@pacificorp.com**

Next Forum Discussions

August 11

9:30–11:30 a.m. PDT

- Roadmap Discussion
- Goals & Objectives
- Portfolio Guardrails
- Future Revenue Projections

September 23

10:30 a.m.–12:30 p.m. PDT

- Program Portfolio
- Budget Forecasts
- Timelines

QUESTIONS?



Contact Information:
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