

November 2022

STANDING AT THE CORNER

THE INTERSECTION OF EQUITY AND RESOURCE
PLANNING

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We're at the intersection of resource planning and increased DEI focus



Recent trends:

Clean energy policies with **embedded equity guidelines**

Shift from income-based to **broader DEI focus**

Prioritize non-energy impacts of EE, DR, and DER investments



Utilities can use better tools to navigate this intersection



Better tools to:

Assess gaps in historic delivery

Identify customer segments for outreach and delivery

Optimize distribution resource planning and equity objectives together



In this session...

I'll discuss a couple of tools that we've implemented for our local utility that address both resource planning and increased DEI focus.

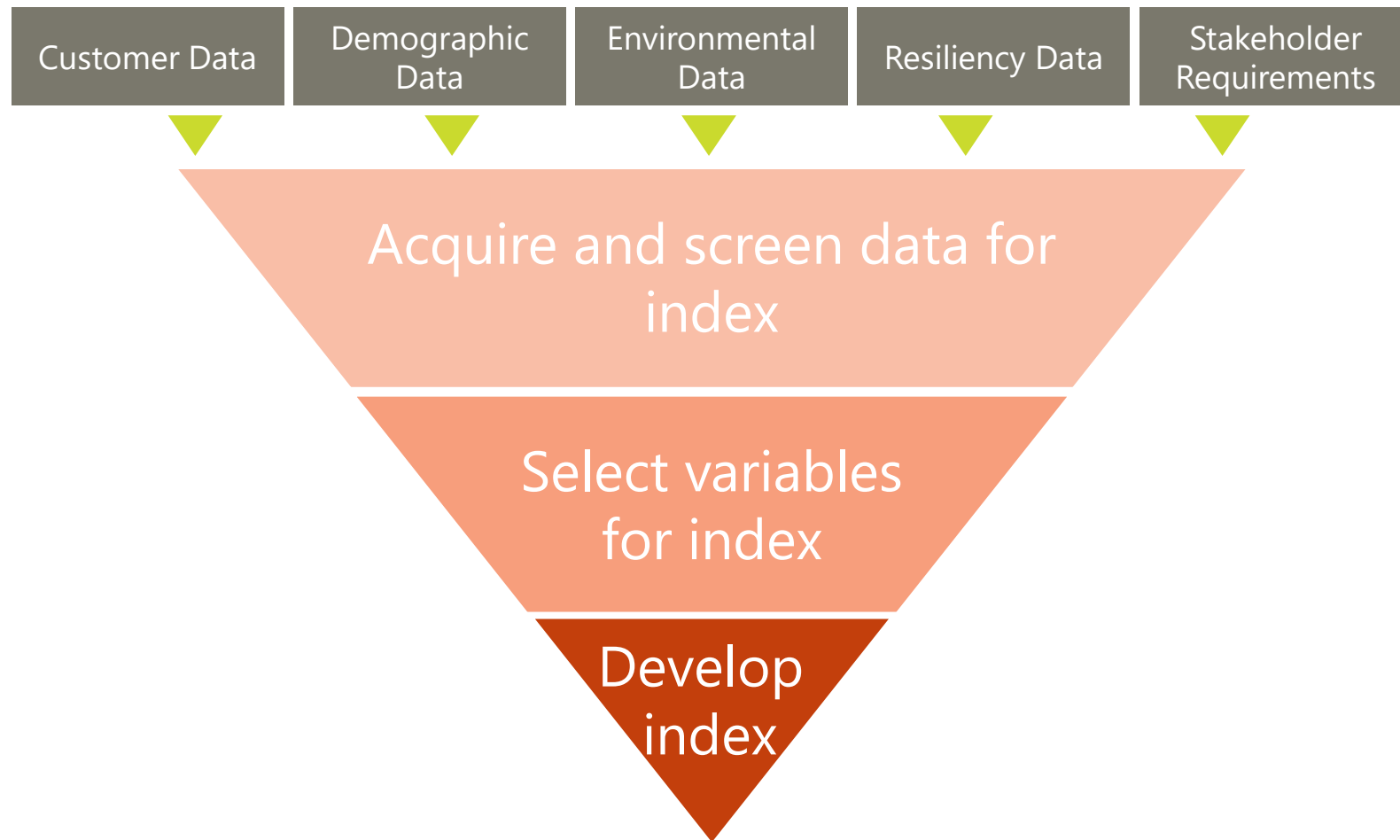
1. Locational Targeting Indices
2. Locational DER and Electrification Forecasting



Tool #1: Locational Targeting Indices



Locational Targeting Indices allow us to identify key communities



We've developed locational targeting three indices

Portland General Electric has used these indices in DSP activities and NWS siting.

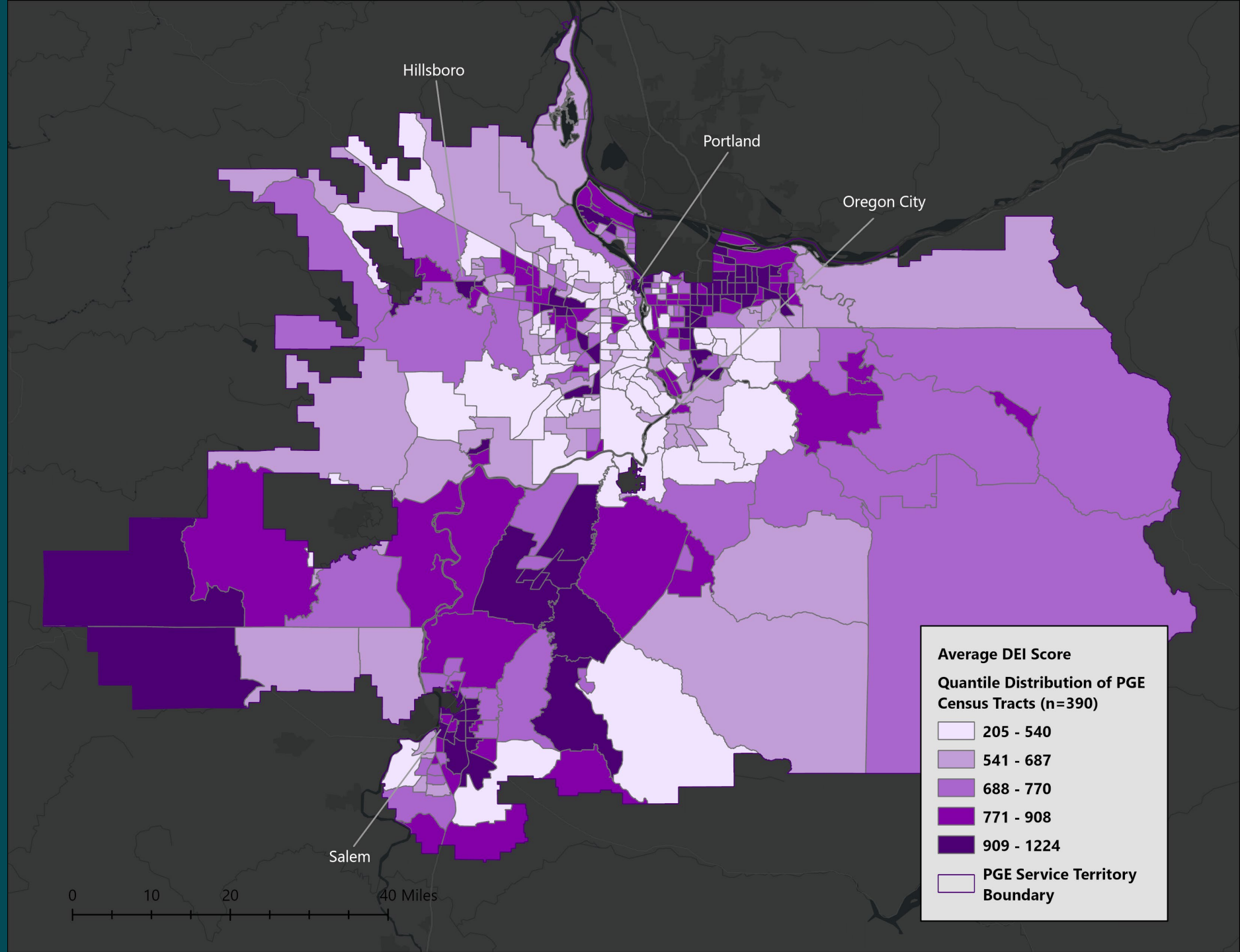
1. Diversity, Equity, and Inclusion (DEI)
2. Resilience
3. Environmental



DEI Index

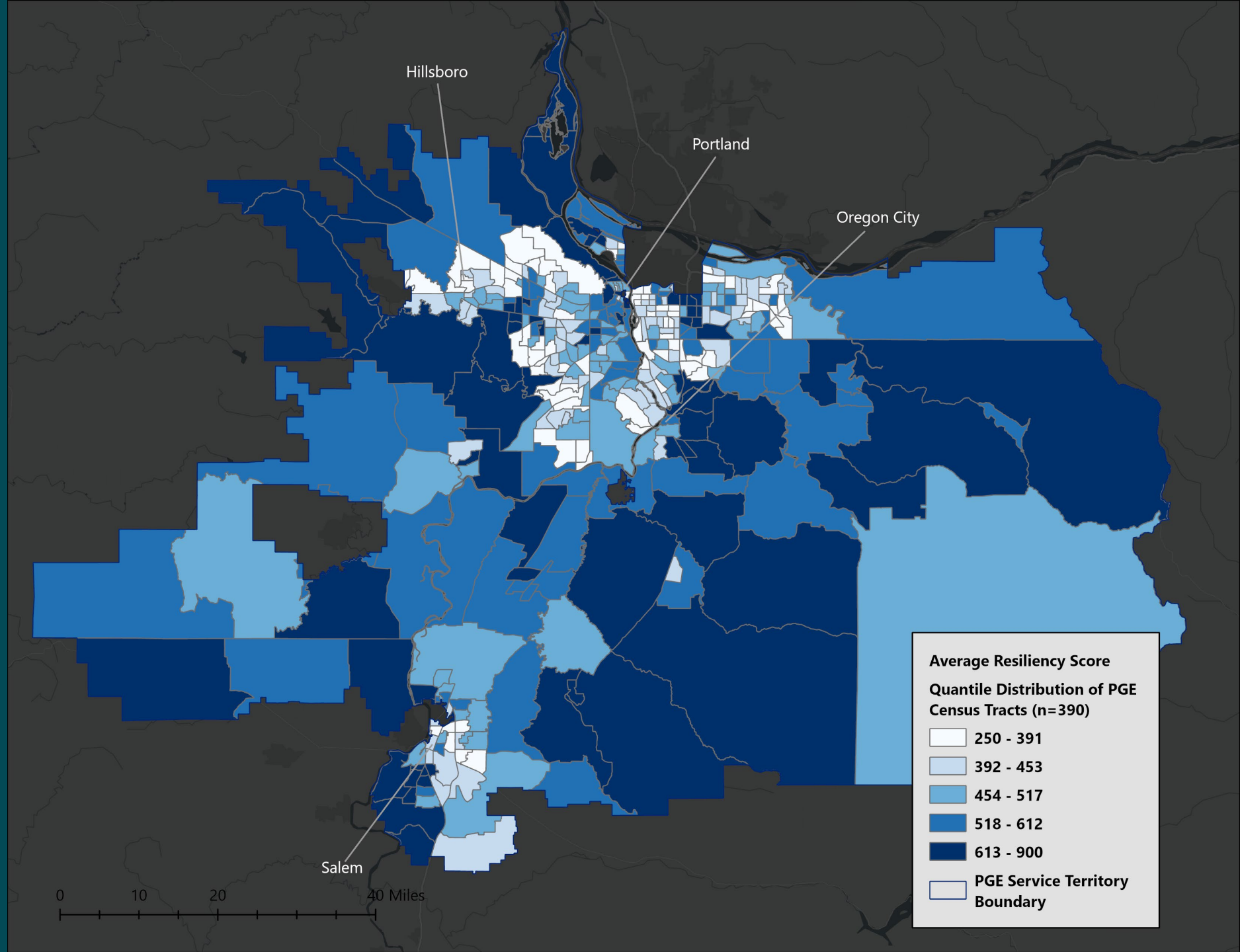
Composite of:

- Energy Burden
- Housing Type
- Owner/Renter
- Race
- Households with Internet
- Households with Disabilities



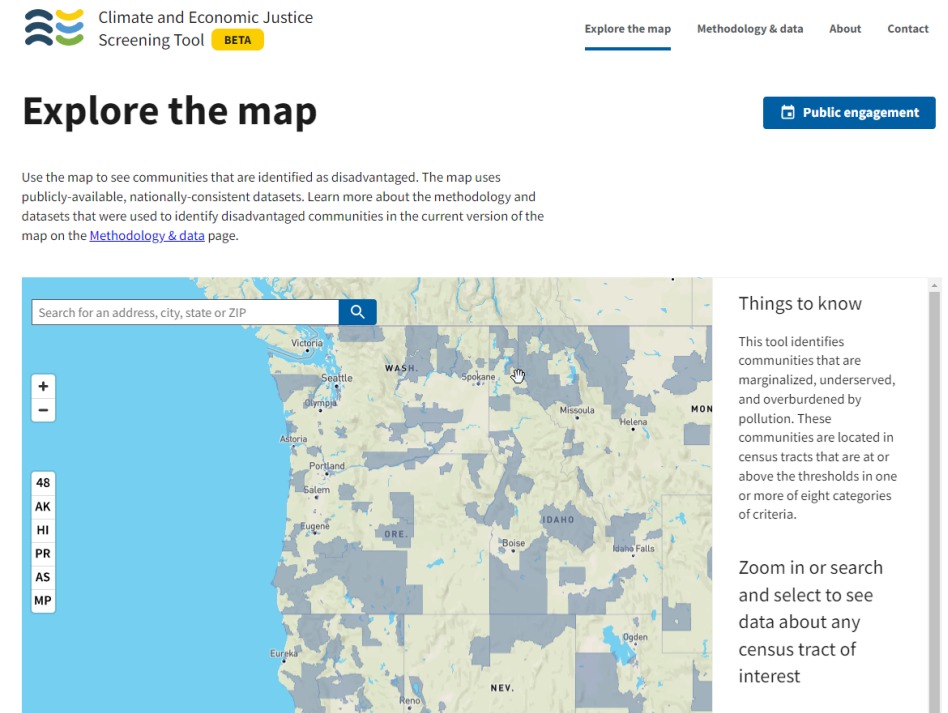
Resilience Index

- Composite of:
- Hour Loss Power Substation
- Hour Loss Power Transmission
- SAIDI (outage duration)
- Seismic Risk



There are a variety of other locational targeting tools

- Climate and Economic Justice Screening Tool (White House)
- Washington Environmental Health Disparities Map (WA DOH)
- PBOT Equity Matrix (City of Portland)
- Social Equity Analysis (ESRI)
- LI/DEI Geographic Targeting Initiative (DTE)
- Sustainable Communities – Sensitivity Analysis (SMUD)
- LI Needs Assessment (PSE)

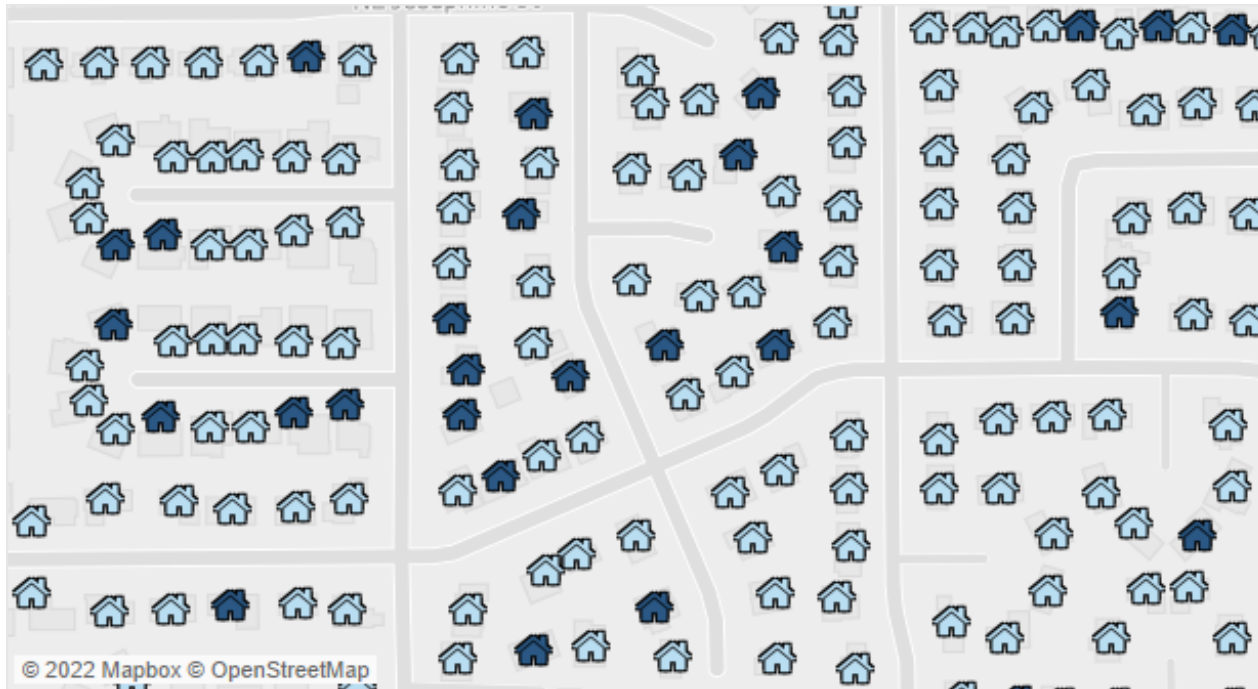


Tool #2: Locational DER and Electrification Forecasting



We developed a model to simulate site-level DER adoption

Site-Level Solar PV Adoption Forecast (Year 2030)



We've developed a **locational DER adoption and load impacts** model: AdoptDER.

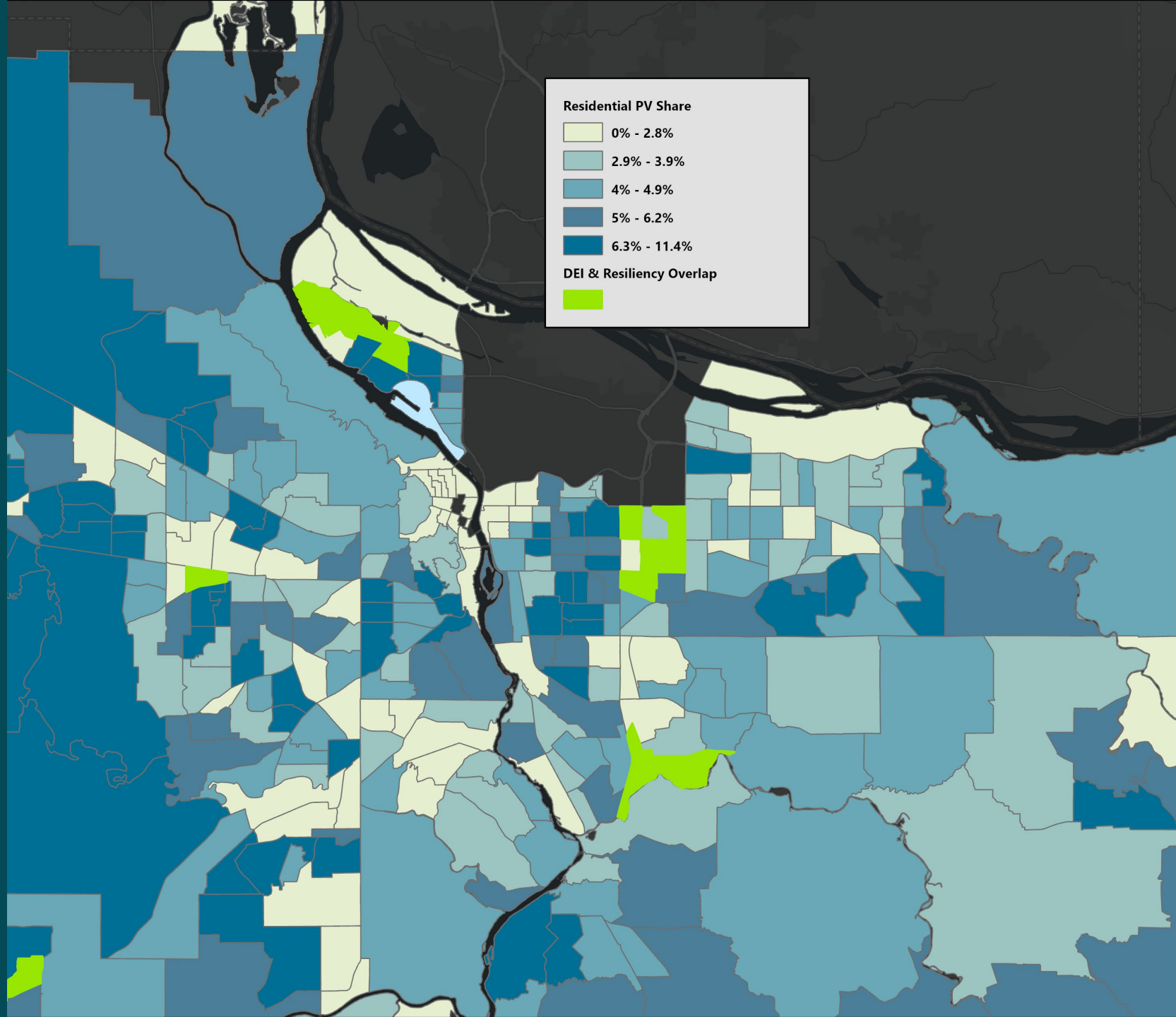
- 40+ DERs and their interactions
- Site-level adoption forecast
- Hourly, feeder-level load forecasting

Like the locational indices, AdoptDER used in DSP proceeding.



Back to the intersection...

Use the intersection of high potential, high DEI, and high resiliency scores to **optimize distribution planning and DEI objectives**



Closing Thoughts



Recent trends necessitate better tools



Recent policies have brought resource planning and equity together

Use tools to better navigate this intersection

- Locational targeting indices
- Locational DER and electrification forecasting



Thanks!

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