

COU EV Mapping

Case Study:

Electric Vehicles Charging in Salem Electric Cooperative Territory



Partner Profile

Founded in 1938, Salem Electric is a not-for-profit electric cooperative. Unlike investor-owned utilities, electric cooperatives provide electricity to their consumer-members at cost. More than 96% renewable electricity is distributed to members throughout their 17.5 square mile service territory.

"The Pilot Program was a great experience. ODOE was easy to work with and after we provided a map, their final data was very easy to understand. This has helped as an additional planning tool for our EV Programs and we look forward to scheduling future updates so we can track adoption rate over time." - Salem Electric



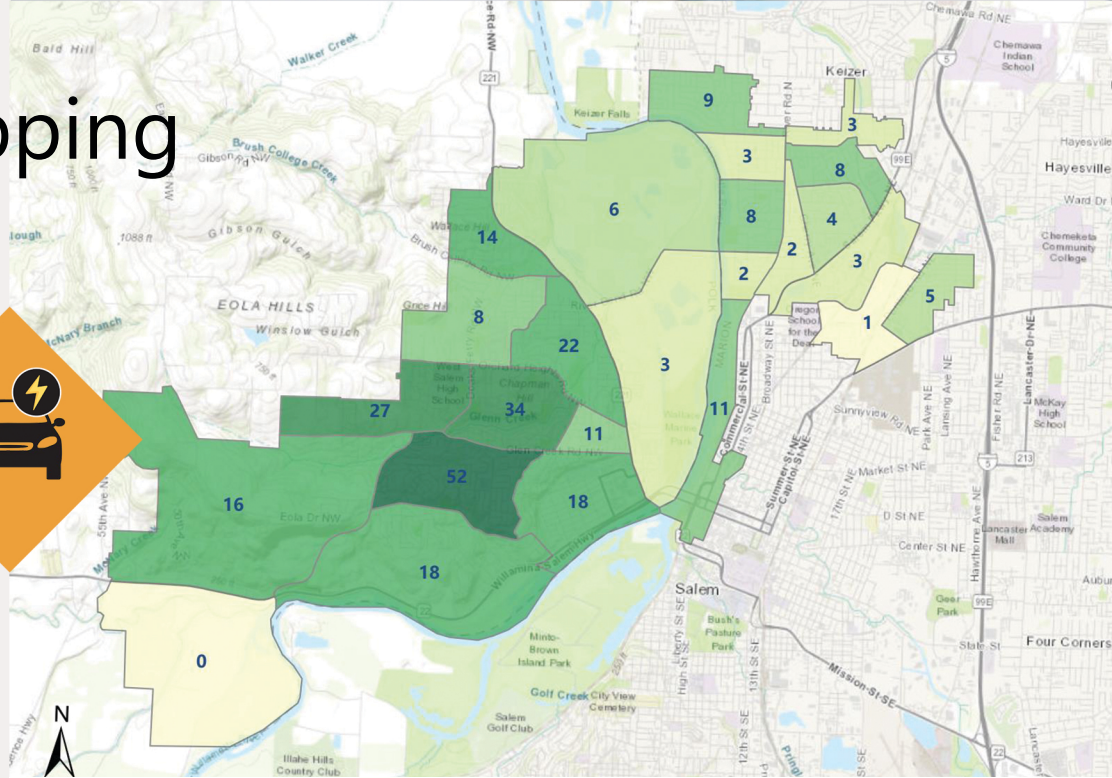
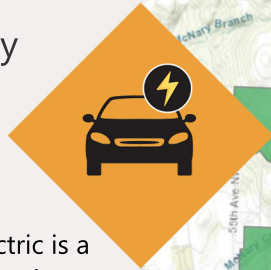
Approach

- Hold a kick-off meeting
- Complete a MOU
- Utility submits geospatial data
- ODOE will combine, analyze, and prepare data which will include EV locations map (as shown above)
- Hold a results meeting



How to get Involved

The project is available to any Oregon COU at no cost and will be supported through several means of communication, beginning with an on-line portal for the initial application. [Introduction and Initial Application link.](#)



Overview

The Consumer Owned Utilities Mapping project provides Oregon's COU and Public Owned utilities with geographical information about where electric vehicles are likely charging on their distribution system. The origin of this project can be traced back to Executive Order #17-21 where the Oregon Department of Energy is directed to engage with consumer and public owned utilities to "enable increased EV adoption in their service territories and provide technical assistance on strategies to accommodate increased loads on their electric systems in support of the states EV goals".

Opportunity

In 2019 and 2020, ODOE conducted pilot mapping projects with Salem Electric, Consumers Power Inc., and the Eugene Water & Electric Board. While working with Salem Electric, ODOE concluded that combining datasets of locations where electric vehicles are registered with data about Salem Electric's distribution system may enhance the utility's future distribution system planning, and in turn be helpful toward the integration and advancement of vehicle electrification. ODOE was also able to provide Salem Electric with a detailed map showing where and how many electric vehicles are registered in their territory. Map shown above.

Outcome

By combining utility distribution system data with anonymized EV registration data, Salem Electric will be more informed when it comes to their maintenance and upgrade planning for their system. This should help to avoid equipment overloads, power quality issues, or other potential consequences and will help to improve the adoption of increased transportation electrification for utilities, their customers, and ultimately support Oregon's goal of reduced greenhouse gas emissions.



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