## Electric: Vehicle charging an issue in rural areas

#### Continued from Page B2

indication of the scale and cost the effort entails to meet the Zero Emission Vehicle policy goals for state fleets."

#### Charging

Even if more Oregonians buy electric vehicles, the state is not on pace to have the necessary and convenient public charging infrastructure to support them.

Consumers and businesses are still concerned about the range of their electric vehicles, and residents of many rural areas, low-income neighborhoods, condominiums and apartments have little access to public charging. The Department of Transportation is supposed to lead the charge, increasing capacity and addressing those inequities.

In 2021, the transportation department issued a needs analysis to support the number of electric vehicles that were in the Legislature's goals. The results were eye-popping.

It determined the state would need 3,525 public chargers to support the 50,000-vehicle goal in 2020. Today the state is 40% short of that number, according to the state Energy Department.

The needs analysis determined the number of chargers necessary to support 250,000 electric vehicles in 2025 — the Legislature's goal would be nearly 17,000, including 4,411 public fast chargers. That's 10 times the number of fast chargers in Oregon today.

Again, the state is not on track, and ODOT's Climate Action Plan is considerably less ambitious. It aims to expand statewide electric vehicle charging infrastructure by 10% by the end of 2025. That would still leave the state well short of the charging network its own analysis determined the state would need to support 50,000 electric vehicles, much less the 120,000 vehicles it is targeting by the end of 2023.

Pietz, ODOT's data and analysis manager, said the agency is not in the business of installing charging stations. Rather, it's role is as a facilitator, she said, working with utilities and the private sector to develop a deployment strategy, providing some incentives, and in particular, to make sure there is equitable access in disadvantaged communities, in rural areas and in apartments and condos that don't have access to home charging.

The state has a grant program for community charging. It is seeking a \$21 million federal grant to support charging. The federal infrastructure bill provided \$52 million for charging infrastructure in Oregon. And the Legislature passed a law earlier this year allowing utilities to invest ratepayer money in charging.

"There's going to be a fairly significant uptick in investment in electrification within the next two to five years," Pietz said.

ODOT has not analyzed how much it would cost to hit any of these goals. But Atlas Public Policy, a Washington, D.C., based group

'THERE'S GOING TO BE A FAIRLY SIGNIFICANT UPTICK IN INVESTMENT IN ELECTRIFICATION WITHIN THE NEXT TWO TO FIVE YEARS.'

Amanda Pietz | administrator of Oregon Department of Transportation's policy, data and analysis division and former director of its Climate Office

that tracks the EV market, did run the numbers for public fast chargers needed in every state.

It used different assumptions than ODOT, and concluded the state would require fewer, but much higher voltage ports that could charge cars faster. It's still a big number: 1,624 public fast charging ports by 2025, a fourfold increase from the 432 lower voltage ports in operation here today. The firm estimated that would require an investment of \$264 million by 2025, and the need would grow from there. That's for fast chargers alone.

Chargers can be expensive to install and maintain. On top of the chargers come conduiting costs and electrical upgrades to buildings, parking lots and even the local electrical distribution system. In August, for example, the agency awarded a \$4.1 million contract to upgrade and maintain Oregon's section of the West Coast Electric Highway, a charging network along I-5 from Canada to Mexico. That expenditure will update and maintain 44 existing charging stations and add three more.

Reichers, at the Department of Energy, said the state will need to be flexible about how it establishes its charger network as the technology changes rapidly and it doesn't want to install a lot of expensive equipment that quickly becomes obsolete.

"At the same time we don't want to overbuild infrastructure in an attempt to future-proof it only to find we spent more money than necessary," she said. "It's a delicate balance."

#### **E-bikes**

Steve Cheseborogh, a 65-yearold blues musician from northeast Portland, bought an electric cargo bike last December for about \$4,000. About a month later, he sold his car, and started using the bike for everything: shopping, transporting two guitars and an amplifier to and from gigs, going to a friend's house, whatever the need.

"It just works," he said. "People think an e-bike is a replacement for a bicycle. They don't realize that it really replaces your car, or most of your car use."

E-bikes are mounted with a rechargeable battery, allowing cyclists to go faster and farther with less physical effort. Compared to a car, (even an electric car) buyers save on the purchase price, fuel, parking, maintenance, insurance, registration and taxes. Moreover, they are responsible for less carbon dioxide and other forms of air pollution. They decrease congestion.

Yet cycling advocates say the state isn't taking them seriously as an alternative form of transit, an assertion ODOT disputes.

Spokesperson Matt Noble said in an email the agency "sees bikes, electric and otherwise, are an economical, environmentally friendly and healthy way to travel. We believe giving Oregonians several options to get where they're going is essential to a modern, multimodal transportation system, and a key strategy to lower GHG emissions from transportation."

### **RELIGION BRIEFS**

#### **Anchor Baptist Church**

The congregation meets at the Astoria Christian Church, 1151 Harrison Ave. On Sundays, the service starts at 1 p.m.; Bible study is at 7 p.m. Thursdays. For information, email anchorbaptistastoria@gmail.com

#### Astoria Christian Church

For service information and updates, go to astoriachristian. org or bit.ly/AstoriaChristian, call 503-325-2591 or email Astoria-Christian@gmail.com

#### **Astoria First Baptist Church**

First Baptist Church, 349 Seventh St., holds a worship service at 10:45 a.m. Sunday. The service is also broadcast at fb.me/ astoriafirstbaptist

Sunday school starts at 9:30 a.m. There is no child care, but children are encouraged to join the service. For information, call the church office at 503-325-1761.

#### Astoria First United Methodist Church

Open for worship on Sundays at 11:30 a.m., 1076 Franklin Ave. Masks are required. For livestream service information, email the church office at office@unitedmethodistastoria.org or call 503-325-5454.

#### **Common Ground Interspiritual Fellowship**

Common Ground Interspiritual Fellowship holds a service from 9:30 to 10:30 a.m. Sunday, via Zoom, which is open to all belief systems, including the spiritual but not religious. For information, go to cgifellowship.org. For the Zoom link, email info@cgifellowship.org

#### First Church of Christ, Scientist

Sunday morning services and Sunday school at the Christian Science Church, 632 11th St., are held at 10 a.m.; enter on 11th Street.

Wednesday evening testimony meetings are at 7 p.m. Those wishing to attend by phone can get details by calling 971-320-0294.

The Reading Room hours are 11:30 a.m. to 1:30 p.m. Tuesday through Thursday, except holidays; enter on Franklin Avenue.

#### Grace Episcopal Church

For updates, food pantry hours and in-person and livestream service information, call the church at 503-325-4691, email graceastoria4691@gmail.com or go to graceastoria.org or fb.me/Grace Astoria

#### **Olney Community Church**

The non-denominational Olney Community Church, 89351 Oregon Highway 202, meets at 9:30 a.m. Sunday for breakfast. Sunday school is at 10 a.m., and the worship service is at 11 a.m. All are welcome. A Wednesday prayer meeting is at 3 p.m. For information, call the church at 503-325-3394, or Ed Hortsch, pastor, at 503-791-4475.

#### **Pacific Unitarian Universalist**

The Pacific Unitarian Universalist Fellowship now meets in person at noon Sunday at the First Presbyterian Church, 1103 Grand Ave. The sanctuary entrance is on 11th Street between Grand and Harrison avenues. The service is also held via Zoom; for information, go to pacuuf.org

#### **Peace First Lutheran**

Peace First Lutheran Church holds Sunday services at 8:30 and 11 a.m. at 725 33rd St. The 8:30 a.m. service is also streamed live at bit.ly/3rckrMd

Wednesday Bible Study is at 10:30 a.m., followed by midweek Advent prayer, at 565 12th St.

Soup suppers are at 6 p.m. Wednesday, followed by Advent services at 7 p.m., at 725 33rd St.

Church office hours are Monday through Friday 8:30 a.m. to 5 p.m. For information, call 503-325-6252, email office@peacefirstlutheran. com or go to peacefirstlutheran.com

#### **Pioneer Presbyterian Church**

WARRENTON — For service information, call the church at 503-861-2421 or go to pioneerchurchpcusa.org

#### St. Mary, Star of the Sea Parish

For information about the St. Vincent de Paul Food Pantry hours, and service and livestreaming information at both the Astoria church and Hammond mission, call 503-325-3671, email office@stmaryastoria.com or go to stmaryastoria.com or bit.ly/ stmaryastoria



# FOR A NEW KUBOTA!



## MX5400HST

- 55.5 Gross HP,<sup>†</sup> 4-Cylinder Kubota Diesel Engine
- 4WD Hydrostatic Transmission
- Factory-Installed Cab or ROPS Model
- Performance-Matched Implements Available



## L2501HST

- 24.8 Gross HP,<sup>†</sup> 3-Cylinder Kubota Diesel Engine
- 4WD 🦳
- Hydrostatic Transmission (HST)
- Performance-Matched Implements Available

## *\*O DOWN O\* A.P.R. FINANCING FOR UP TO 84 MONTHS\* ON SELECT NEW KUBOTAS*







watkinstractor.com

501 S. PACIFIC AVE • KELSO, WA • (360) 423-7220 • 800-858-7220

100 PORT AVE • SAINT HELENS, OR • (503) 397-1012 • 800-606-1012



\*© Kubota Tractor Corporation, 2021. Offer valid for residents within states of CA, AZ, NV, UT, WY, ID, OR, MT and WA only. \$0 Down, 0% A.P.R. financing for up to 84 months on purchases of select new Kubota L, L60 and LX Series equipment from participating dealers' in-stock inventory is available to qualified purchasers through Kubota Credit Corporation, U.S.A.; subject to credit approval. Some exceptions apply. Example: 84 monthly payments of \$11.90 per \$1,000 financed. Offer expires 12/31/21. Terms subject to change. This material is for descriptive purposes only. Kubota disclaims all representations and warranties, express or implied, or any liability from the use of this material. For complete warranty, disclaimer, safety, incentive offer and product information, consult your local Dealer or go to KubotaUSA.com/offers. † For complete warranty, safety and product information, consult your local Kubota dealer and the product operator's manual. Power (HP/KW) and other specifications are based on various standards or recommended practices. K1383-24-145714-5