

Closing the Broadband Gap for the Public and Non-Profit Sectors in Oregon

About Link Oregon

- A consortium of Oregon's four largest research universities & the State of Oregon Enterprise Information Services.
- A non-profit, member-based, middle-mile provider serving Oregon's public & non-profit sectors established in 2019.
- Link Oregon's mission is to build and maintain a robust, well-governed, statewide network to serve the needs of the state executive branch agencies, higher-education, healthcare, libraries, Tribes, & other public sector & nonprofit needs.
- Link Oregon harnesses dark fiber & other network assets from which it develops a resilient, statewide backbone to support last-mile solutions.
- Link Oregon provides Ethernet transport & Internet transit as primary services.
- Link Oregon currently supports its five founding organizations & ~30% of Oregon K-12 school districts.

Background

- In 2016, the State of Oregon sought ways to reduce network costs & increase bandwidth statewide using existing public facilities.
- This approach aligned with the University of Oregon's existing Network for Education & Research in Oregon (NERO) network approach.
- Pooling the State & university resources, the Oregon
 Fiber Partnership was born, later taking "Link Oregon" as
 its operating name.
- In 2020, CARES Act funding (\$8.4M) enabled expedited network expansion into southern & eastern Oregon & the completion of 50 access locations statewide.

Goals

- Develop and maintain a middle-mile network to enable the delivery of robust, affordable, resilient broadband services to all Oregonians through public & non-profit community-based anchor institutions statewide.
- Ensure continued network resilience, reliability, accessibility, and affordability for improved remote learning, telehealth, Tribal engagement, enhanced hazards monitoring and response, and economic development.

Link Oregon Founding Members

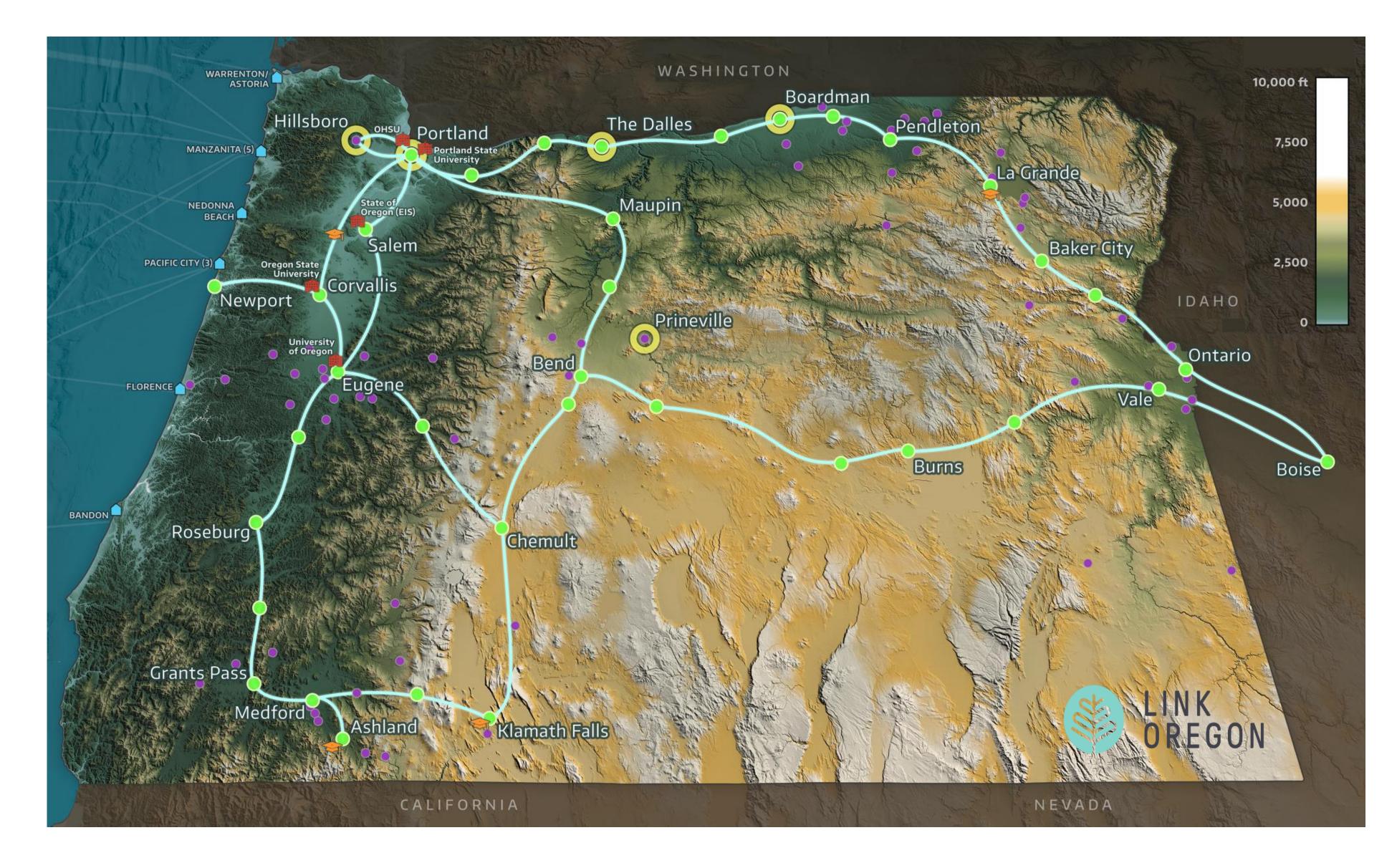












Challenges We Address

- Lessons learned from the evolving COVID pandemic compels decisive action to mitigate **Oregon's long-standing digital divide** with more equitable, resilient, cost-effective connectivity solutions statewide.
- Attaining digital equity for all Oregonians has been hobbled by **cost differentials** based on population densities, geographies, & policies (as evidenced by digital deserts, construction challenges, & right-of-way and ROI issues).
- Need for better coordination of hazards monitoring and response networks to ensure greater resilience against natural & manmade threats.
- Addressing data transport costs from remote communities across the State to the nearest Internet Exchange (IX), which can vary by as much as a factor of 20 based on distance & transport provider rates.
- The lack of equitable, resilient, cost-effective connectivity keeps Oregon and its residents from realizing their full potential.

Leveraging this Pivotal Point in US Broadband Development

- Federal & state funding earmarked to address infrastructure gaps, magnified by the pandemic, are at levels unprecedented since rural electrification in the 1930s & development of the Interstate Highway System in the 1950s.
- New technologies are being developed for use together to address urban & rural connectivity challenges & are being tailored to the needs of different communities.
- Equity, diversity, and inclusion have finally become top of mind in social, economic, public safety, & digital realms.
- Oregon's broadband ecosystem must work collaboratively and quickly to secure funding for infrastructure upgrades and future-proofing solutions.

Thanks to our Ecosystem for the Support & Collaboration

- Founding / Regular Members
- State Organizations: Business Oregon, Oregon Broadband Office, Oregon Department of Education (ODE), Higher Education Coordinating Commission (HECC), Oregon Department of Transportation, Oregon State Library
- Municipal & Community Leadership
- Oregon Federally Recognized Tribes & Tribal Liaisons
- Federal Agencies: FCC, NOAA (N-Wave), NSF, NTIA, USDA Rural Development
- Collaborating Regional Networks: CENIC, IRON, Merit, NevadaNet, OSHEAN, PNWGP, Sun Corridor Network, UETN, WiscNet
- Affiliated Organizations & Associations: Internet2/eduroam, NWAX, The Quilt, SHLB, Technology Association of Oregon (TAO), Western States Pact Broadband Alliance, WIX/Lane Council of Governments
- Technology & Service Providers: Arista, Blue Mountain Networks, Douglas FastNet, Fatbeam, Flexential, Fujitsu, Hunter Communications, Lumen, PEAK / Pioneer, Pittock Block, TDS BendBroadband, TDS OneNeck, Wave Broadband, Windwave, Zayo, Ziply Fiber



