Link Oregon - Update
High-speed Fiber Broadband for Oregon’s Public & Non-profit Sectors

Steve Corbató – Executive Director, Link Oregon
NITRD Joint Engineering Team
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Cutting-Edge Technology and Access

- We are building an advanced ‘fourth-wave’ middle-mile network for Oregon.
- We have acquired 2,700 route-miles of dark fiber statewide and into adjacent states, which allows us to add capacity and offer new services more flexibly and cost-effectively.

Broad Partnership Strategy

- We know that broad partnerships are critical to success:
  - Core: State of Oregon EIS and the four public research universities
  - (Pre)K-12 Education (P/K-12)
  - Higher Education
  - State Agencies: Oregon Broadband Office, State Library, ODOT
- We seek to partner with telecommunications providers that are investing in their communities’ connectivity
- We are partnering with campus researchers to support field science, including wildfire and seismic detection (UO: AlertWildfire and ShakeAlert)

Visionary Approach and Support

- We are working with partners to envision and develop a roadmap for an Oregon Learning and Telehealth Network (OLTN).
- We endeavor to stimulate broadband deployment statewide
- We received State Federal CARES Act funding for network expansion to expedite deployment of network to underserved areas across the state
What is Link Oregon?

• Link Oregon is a non-profit consortium of Oregon’s four state research universities and the state government (EIS)

• Link Oregon is an R&E network developing a facilities-based optical network
  - Statewide fiber footprint: 2,700+ route miles, 6 providers
  - Individual statewide WANs will converge onto this platform

• Link Oregon serves public and non-profit sectors – not a common carrier

• Link Oregon assumed responsibility for the previous R&E Network

• Link Oregon offers two core services:
  - Statewide, Ethernet-based transport
  - Enhanced Internet transit (250 Gbps) (Internet2, CENIC, commercial Internet)

• Link Oregon engages in local peering
  - NWAX (metro Portland), WIX (Eugene), SIX (Seattle)

• Link Oregon is engaged in last-mile partnerships with commercial and municipal providers
Strategic Governance

Non-profit organization with strategic & sustainable governance

- Oregon non-profit with **federal 501(c)(3) tax-exempt status**
- Asset vessel and operational entity
- Vehicle for collaborative IT projects

Board of Directors

- State government
  - Terrence Woods, State CIO (Chair – FY21)
  - Kurtis Danka, State CTO
  - **Kristen Sheeran, Governor’s Office**
  - Peter Tamayo, Department of Education CIO
- Research universities
  - Andrea Ballinger, OSU (Vice Chair – FY21)
  - Bridget Barnes, OHSU
  - Kirk Kelly, PSU
  - Jessie Minton, UO (Treasurer)
- Additional board members
  - Steve Corbató (Link Oregon)
  - Bylaws provide for up to two more board seats
Topology and Implementation
Network Status

Phase 1
- Network implementation early fall
- Includes Rings A, B, and E in Willamette Valley, Newport and central Oregon
- Equipment partners: Fujitsu (optronics) and Arista (routers)

Phase 2
- Network project underway concurrently
- Includes Rings C and D in southern and eastern Oregon
- Legislative Emergency Board approved $8.39M in funding of Phase 2 capital expenses from federal CARES Act Coronavirus Relief Fund
- Strong bipartisan, urban/rural support
- Partnership with State Broadband Office, Department of Education, and Enterprise Information Services
- Extensive optical add/drop capability in eastern Oregon

Phase 3
- Planning for fiber network extensions on Coast and to remote locations in eastern Oregon – John Day and Lakeview
State Government
• **EIS:** Terrence Woods (CIO), Jennifer Bjerke (Deputy CIO), Kurtis Danka (CTO), Ann Andrews, Paul Deike, Mike Gromek, Jeremy Lyon, Kris Walker, Sandy Wheeler
• **ODE:** Peter Tamayo (CIO), Rick Crager, Carla Wade
• **HECC:** Robel Tadesse
• **Business Oregon / State Broadband Office:** Chris Tamarin

Research Universities
• **OHSU:** Bridget Barnes (CIO), Abhijit Pandit (CTO), Don Westlight, Andy Payne, Joe Voje, Danna Blattman, Harvey Clawson, Bob Cesaro
• **OSU:** Andrea Ballinger (CIO), Jon Dolan, David Barber, Suzanne Lucke, Johan Reinalda, Terry Meehan, Ben Baggett
• **PSU:** Kirk Kelly (CIO), Ryan Bass, Tamarack Birch-Wheeler
• **UO:** Jessie Minton (CIO), Matt Riley (CTO), Steve Huter (NSRC), Cindy Hetrick, Andy Vaughn

Link Oregon
• Kevin Bohan, Steve Corbató, Stephen Fromm, Rick Hicks, Tina Kirk, Ann Marcus, Katy Molloy-Brady, Molly Thurston

*Italics denotes Members of the Board of Directors*
THANK YOU

Steve Corbató
Executive Director
corbato@linkoregon.org
503-998-3957
"Any opinions, findings, conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Networking and Information Technology Research and Development Program."

The Networking and Information Technology Research and Development (NITRD) Program

Mailing Address: NCO/NITRD, 2415 Eisenhower Avenue, Alexandria, VA 22314

Physical Address: 490 L'Enfant Plaza SW, Suite 8001, Washington, DC 20024, USA Tel: 202-459-9674, Fax: 202-459-9673, Email: nco@nitrd.gov, Website: https://www.nitrd.gov