



LINK
OREGON

NERO Integration

Webcast – August 13, 2019

Today's Participants

- Link Oregon
 - Steve Corbato, Executive Director
 - Stephen Fromm, Network Engineer
 - Rick Hicks, Network Engineer
 - Ann Marcus, Communications Consultant
 - Molly Thurston, Executive Specialist
- University of Oregon Information Services
 - Cindy Hetrick, Business Manager
 - Matt Riley, Chief Technology Officer



REGIONAL RESEARCH AND EDUCATION NETWORKS IN THE UNITED STATES

Legend:

- Inter-Network Topology (Thick lines)
- Intra-Network Topology (Thin lines)

Networks shown on the map:

- PNWGP
- MUREN
- WRN
- SD-REED
- NORTHERN TIER - ND
- NORTHERN LIGHTS
- WISCNET
- MERIT
- NETWORK NEBRASKA
- BOREAS
- ICN
- I-LIGHT
- COARNET
- INDIANA GIGAPOP
- KYRON
- ONENET
- ARE-ON
- LONI
- MISSION
- LEARN
- CENIC
- SUN CORRIDOR
- UNM|ABQ
- FRGP
- UETN
- DETN
- IRON
- NEREN
- NYSENET
- KINBER
- 3ROX
- MAX
- NJEDGE
- MDREN
- CAAREN
- WUNET
- MARIA
- NCREN
- C-LIGHT
- FLR
- NETWORK MAINE

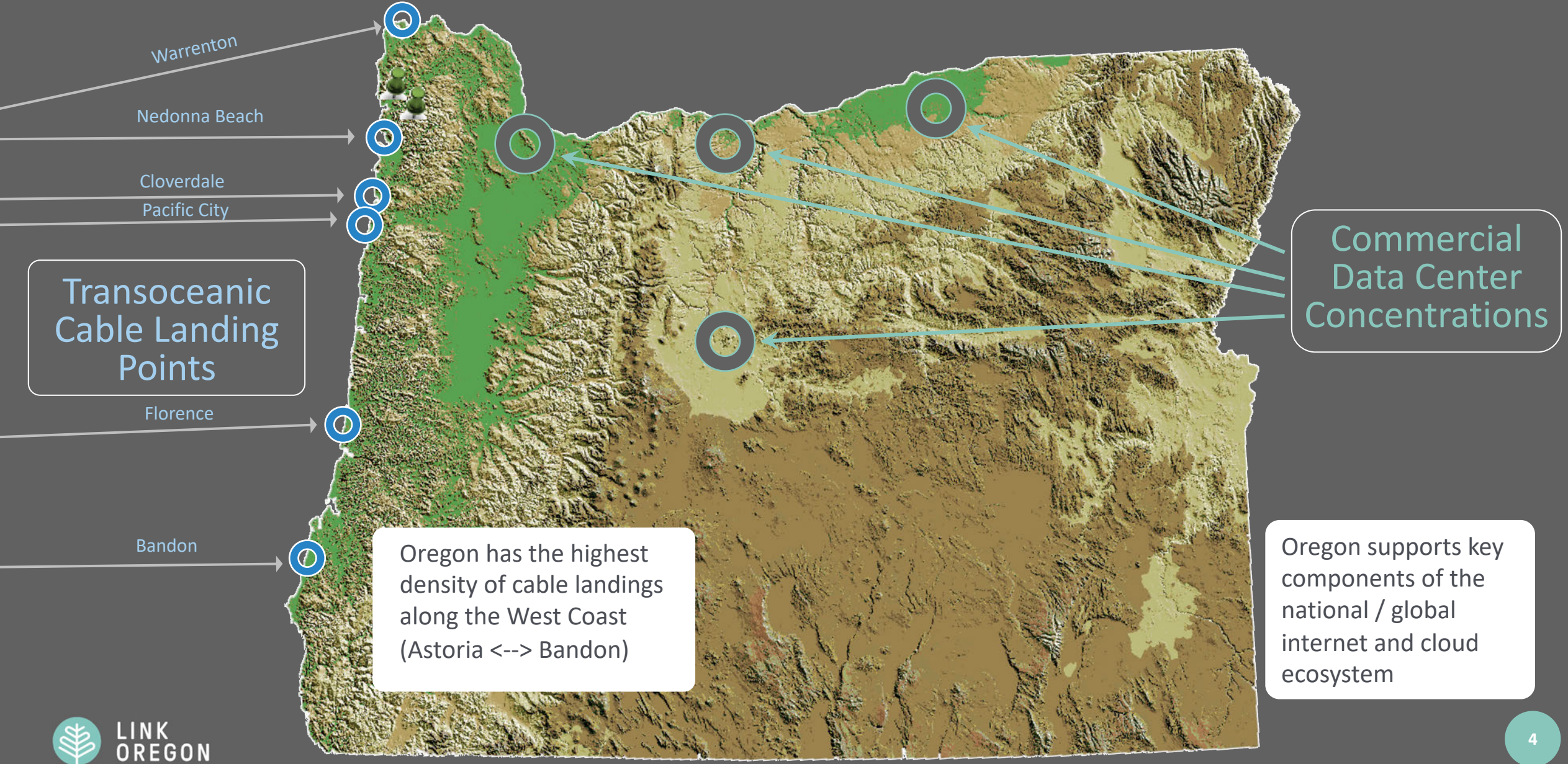
THE QUILT



QUILT MEMBERS AND AFFILIATES



Oregon Internet Geography (2019)



Link Oregon: Governance

- Board
 - State government
 - Terrence Woods, OSCIO/State CIO (Vice Chair)
 - Brendan Finn, Governor's Office
 - Peter Tamayo, ODOE
 - Kurtis Danka, State CTO
 - Research universities
 - Kirk Kelly, PSU (Chair)
 - Bridget Barnes, OHSU
 - Jon Dolan, OSU
 - Jessie Minton, UO
 - Ninth board member (expandable to 11)
 - Steve Corbato (**temporary**)



Link Oregon: Building the Organization

- Non-profit organization formed
 - 501(c)(3) application
 - Naming
 - Oregon Fiber Partnership (corporate)
 - Link Oregon (service name/dba)
 - Web presence
 - www.linkoregon.org
- Staffing
 - Currently 5 (4 employees, 1 consultant)
 - Hiring
 - Business Manager
 - Senior Network Engineer/Architect
 - Project Manager



Link Oregon: Network Development

- Optronics/Ethernet transport RFP (OSU)
 - Interesting time (tariffs, export/import)
 - Executive Order 19873
- Procuring additional fiber segments
 - OSU ITN (SW Oregon)
 - Public partnerships
 - City of Portland
 - Clackamas County
 - City of John Day
- NERO integration
 - Technical staff joins Link Oregon
 - Communication
- New CENIC connection (100 Gbps - Eugene)
 - Internet2 (100 Gbps – Portland)





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PLANNED NETWORK CONNECTION SITES

- Newport
- Portland/Hillsboro
- Salem
- Corvallis
- Eugene
- Roseburg
- Grants Pass
- Medford/Central Point
- Ashland
- The Dalles
- Bend
- Klamath Falls
- Pendleton
- La Grande
- Ontario
- Burns
- Boise, Idaho
- Florence - possible
- Coos Bay - possible

IMPLEMENTATION

- Over 3-5 years
- State of Oregon and University funding
- Partnerships with private and public telecommunications companies





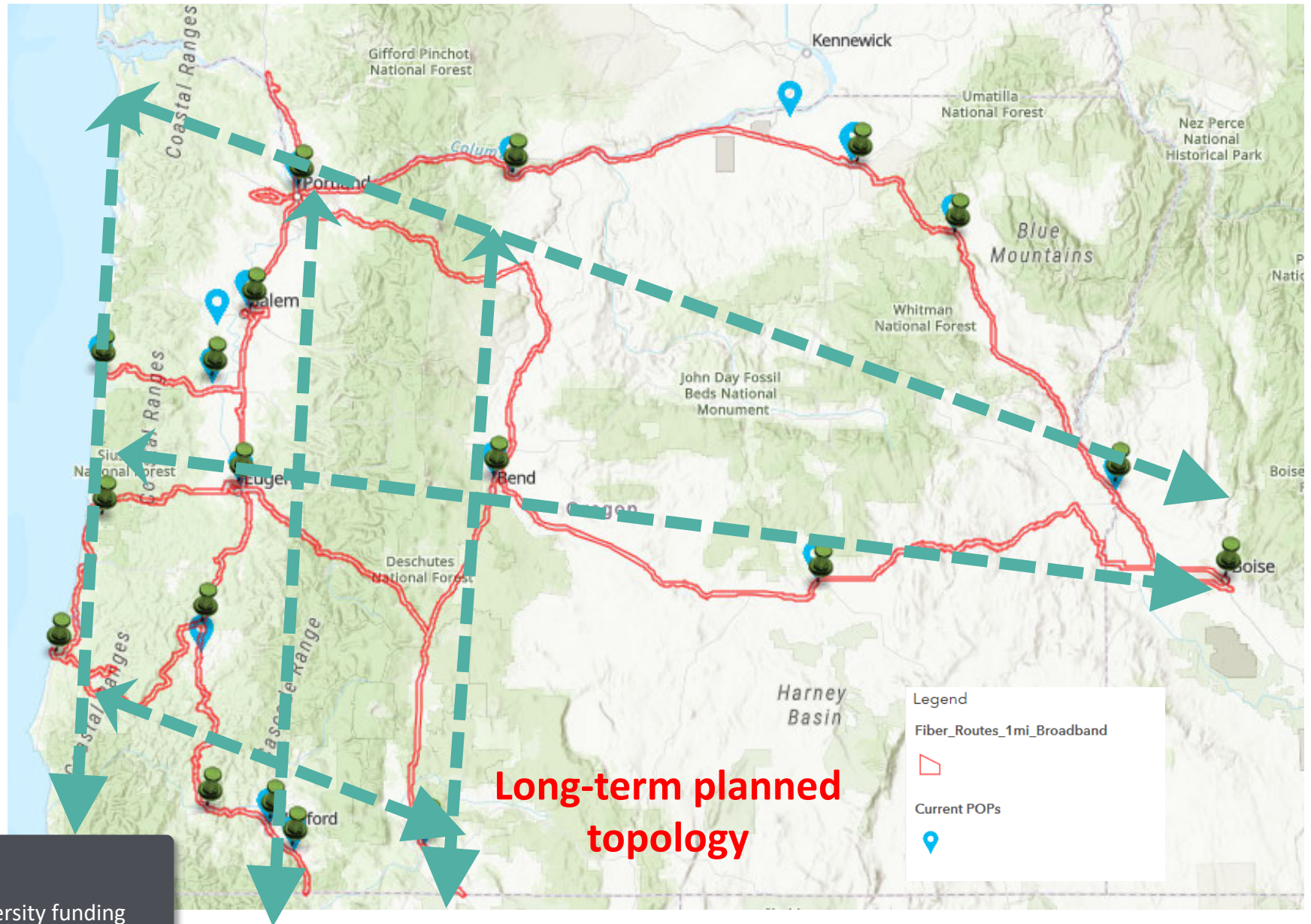
LINK OREGON

PLANNED NETWORK CONECTION SITES

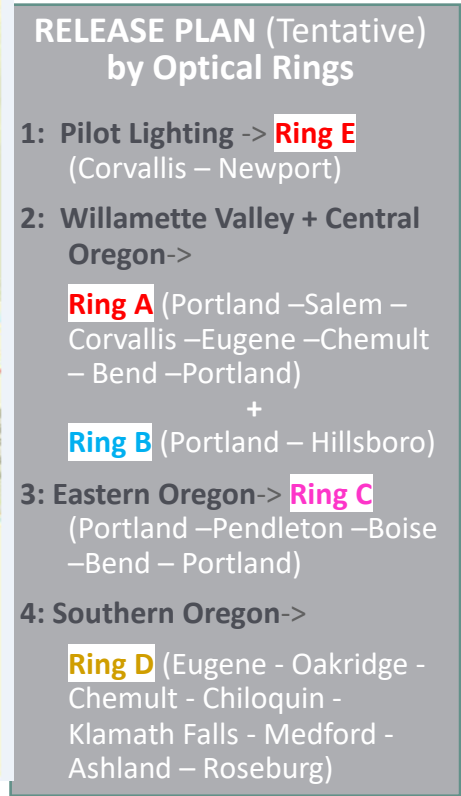
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The map illustrates four optical rings in Oregon, each represented by a different color and connecting specific cities. Ring A (red) connects Eugene, Corvallis, Salem, Hillsboro, and Portland. Ring B (blue) connects Hillsboro, Portland, and Bend. Ring C (magenta) connects Bend, Burns, Boise, and La Grande. Ring D (orange) connects Eugene, Medford, Ashland, Klamath Falls, and Altamont. The map also shows major highways, national forests, and neighboring states like Idaho and California.



Link Oregon: Outreach

- Significant discussions
 - NTIA Broadband USA (DOC/D.C.)
 - Klamath Tribes
 - State Broadband Office
 - USDA Rural Development
 - John Day
 - Oregon Tech, EOU, SOU, and WOU
 - Lakeview
 - Harney, Intermountain and Lane ESDs
- Upcoming USDA ReConnect/NTIA Rural Broadband workshops – Aug 28 and 29
 - Independence and Madras
 - Link Oregon is a co-sponsor
 - Highlighting applications role



Link Oregon: Target Sectors for Expansion

- Higher education
 - Private baccalaureate institutions
 - Community colleges
- K-12 education
 - NERO already supports ~30% of school districts - mostly through the ESDs
- Public libraries
- Healthcare
- Local governments
- Federally recognized Tribes (nine in Oregon)
- Other community anchor institutions



Link Oregon: NERO Transition

- Collaborative effort of UO and Link Oregon
- Link Oregon is absorbing both:
 - NERO network
 - Oregon Gigapop (Internet2 connectivity)
- Engineering staff continuity
- Business relationship
 - Business Manager search
 - Agreements will be assigned from UO to Link Oregon
 - For time being, we will continue to use the NERO SPIN held by UO
 - No fee changes during FY20
- E-rate and service continuity are high priorities for this transition
- Best way for continuing input?





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