LRRC Projects

Project Tracker

Project Title	Community Lifeline	Short Project Description
Interagency resilient communications technology strategy	Communications	This project aims to increase emergency communications interoperability and resiliency across Lane County, from HAMM radios to fiber/microwave systems.
Emergency Supplies Staging	Food, Water, Shelter	Pre-staging emergency response supplies at locations around the county, emphasizing areas that may be islanded after an event.
Countywide fuel reduction project mapping	Developing a single sou	Developing a single source of data to create a common operating picture and assess where risk is being reduced in comparison with wildfire risk maps.
Resiliency master planning		This project will aim to identify "islands" and areas that are lacking assets to focus efforts on in order to reduce overall risk.
Resilient Communications Building	Communications	This project involves building a structure with the ability to withstand Cascadia that would house critical communication systems for the region. The project would also have the potential to house a regional EOC on additional floors.
Develop Type III Interagency IMT's for Multi-Agency Response	Other	Identify staff, train, and create interagency staff.
Monthly ESF Coordination Meetings		Convene ESF's to collect data on vulnerabilities/capabilities to further identify collective projects of focus for resilience efforts across Lane County or regional
Resource Centers for vulnerable populations during events	Food, Water, Shelter, O	Can we identify community based resource centers to stage resources and provide care during emer
K12/Higher Education Reunification Planning	Safety & Security	Develop a shared plan among Metro K12 and higher education entities on how to run reunification centers.

Submitting Projects

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Resilient Communications Building

Upper McKenzie Community Center

Islanding Project

Regional Resiliency Building Concept

October 12, 2023

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Why do we need a resiliency building?

The Oregon Resilience Plan

Reducing Risk and Improving Recovery
for the Next Cascadia Earthquake and Tsunami

Report to the
77th Legislative Assembly

from
Oregon Seismic Safety Policy
Advisory Commission (OSSPAC)

Salem, Oregon
February 2013

" If it were to occur today, a Cascadia subduction zone earthquake would result in catastrophic impacts to information and communication systems throughout western Oregon"

- The Oregon Resilience Plan
Oregon Seismic Safety Advisory Commission February 2013

Source: Resilience Triangle by Wang, Bartlett, and Miles (2012)

Estimated Time to Restore Service after a great Cascadia earthquake and tsunami

Critical Service	Zone	Estimated Time to Restore Service
Electricity	Valley	1 to 3 months
Electricity	Coast	3 to 6 months
Police and fire stations	Valley	2 to 4 months
Drinking water and sewer	Valley	1 month to 1 year
Drinking water and sewer	Coast	1 to 3 years
Top-priority highways (partial restoration)	Valley	6 to 12 months
Healthcare facilities	Valley	18 months
Healthcare facilities	Coast	3 years

*"Resilience gaps of this magnitude reveal a harsh truth: a policy of business as usual implies a post earthquake future that could consist of decades of economic and population decline – **in effect, a "lost generation" that will devastate our state and ripple beyond Oregon to affect the regional and national economy."***

Source: The Oregon Resilience Plan (2013)

Tuesday, Aug 8, 2023

People watch as smoke and flames fill the air on Front Street in downtown Lahaina, Maui, on Tuesday. *Alan Dickar via AP*

MAUI WILDFIRE DISASTER
UPDATE: 8.22.23

POWER RESTORATION
More than 1,800 Lahaina customers and nearly 50 Kula customers are without power. In coordination with State and County response efforts on Maui, Hawaiian Electric crews are working to restore critical circuits in West Maui that serve essential services. These include grocery stores and pharmacies, along with a County wastewater pumping facility in the Lahaina area. Once that circuit is restored, coordination between County response teams, individual businesses, and private properties will determine next steps toward respective reopening at these commercial facilities. Installation of a second mobile substation, … continues.

COMMUNICATION
When attempting to connect with loved ones in areas of low cell phone or internet connectivity, it is best to text not call. Though there is coverage in these areas the capacity is still building, which can result in dropped calls. Maui County updates will now be aired daily at noon on local radio stations, including KPOA FM 93.5

SCHOOLS
King Kekaulike High School reopened for staff on Monday, Aug. 21. Freshman students will be returning to school Wednesday, Aug. 23, with Sophomores, Juniors, and Seniors returning Thursday, Aug. 24.

How might we reimagine infrastructure for a 21st Century disaster?

Hazard Assessment

- Earthquake
- Flooding
- Dam Inundation
- Wildfire
- Landslide
- Severe Weather
- Power outages

Regional Network Resiliency is Critical for...
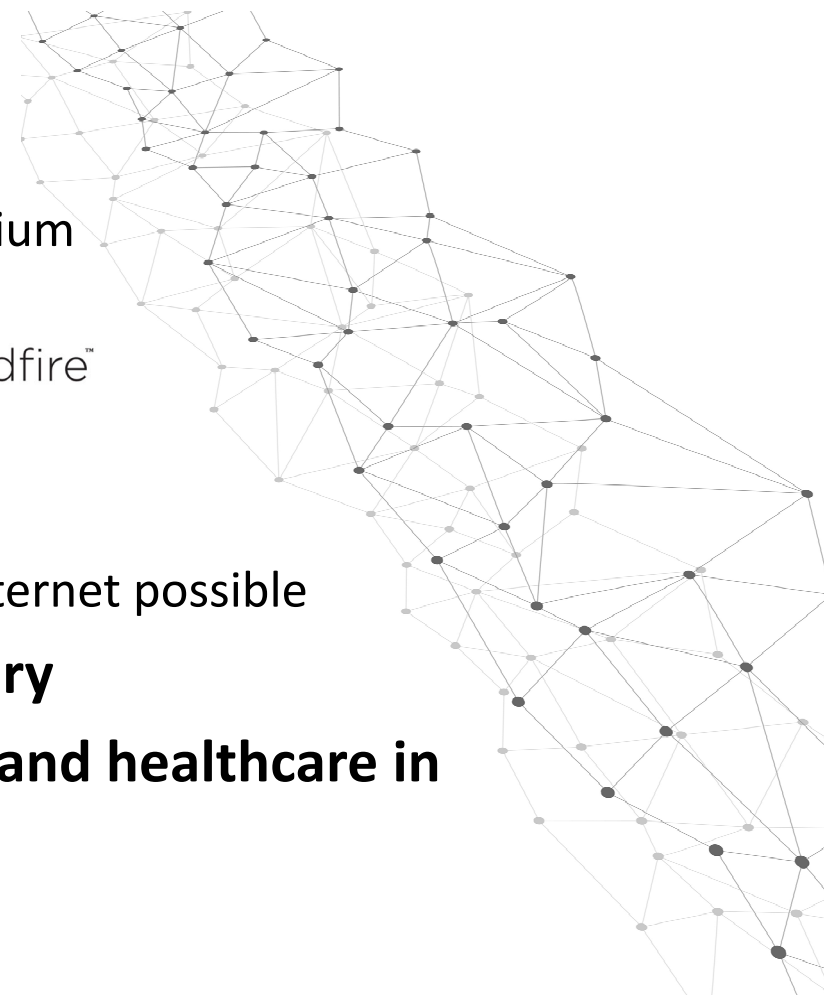
- **Emergency Communications**
  - Central Lane 911 network connections
  - Cellular connectivity for campus & Autzen Stadium
  - Secondary PSAP connectivity
  - Oregon Hazards Lab – Shake⚠Alert™ ALERT🔥ildfire™
  - Text alert connectivity – Lane Alerts, UO Alerts

- **Regional Internet Services**
  - Exchanging traffic between ISPs to make the Internet possible
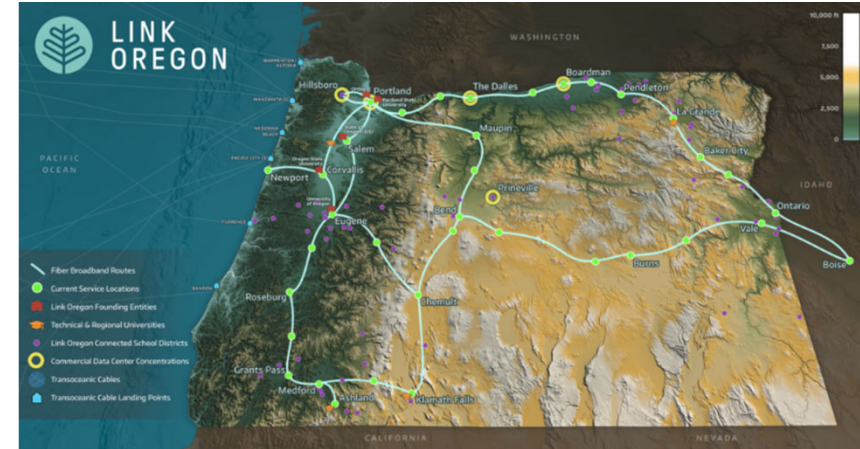
- **Disaster Response / Coordination / Recovery**

- **Maintaining economic activity, education, and healthcare in the aftermath of a natural disaster.**
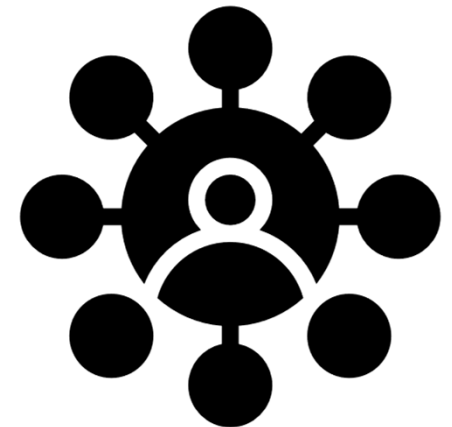
Sustaining Regional Connectivity

- **Oregon Hall**
  - UO Connectivity
  - Statewide Connectivity via Link Oregon
  - Public Agency Connectivity including State of Oregon facilities

- **859 Willamette Street**
  - UO Connectivity
  - ISP Connectivity
  - Statewide Connectivity via Link Oregon
  - Public Agency Connectivity

- **RIS Data Center**
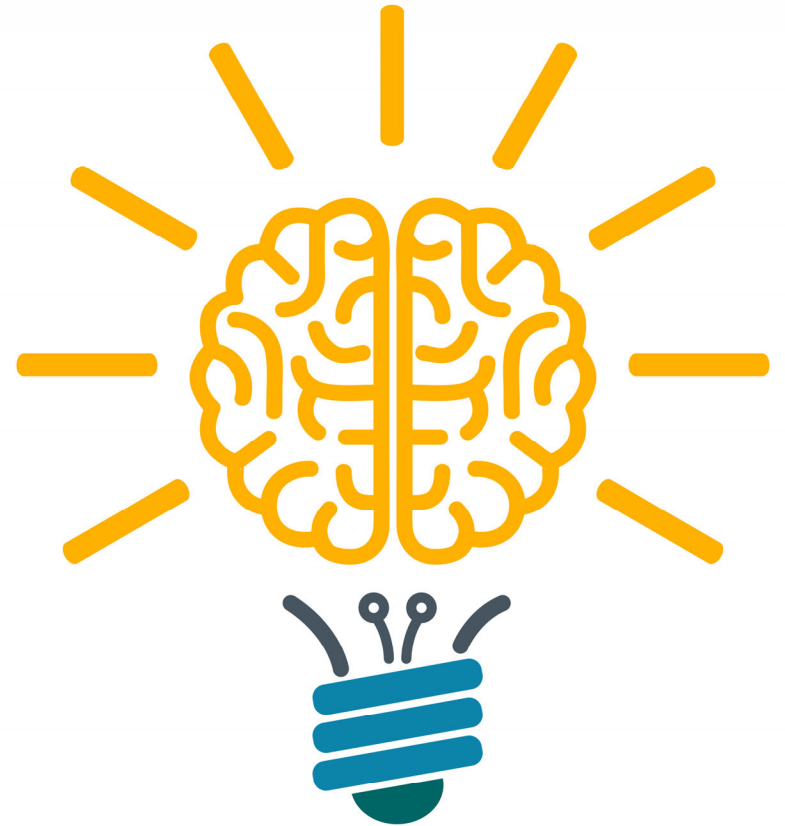 - Public Agency Connectivity

UO Information Technology Assets & Capabilities

- **Campus Fiber Outside Plant**

- **Major local network connectivity customer**
  - Lumen, Zayo, Hunter, LS Networks, Comcast, Link Oregon
  - Verizon, ATT Cellular DAS installations on campus

- **Existing metro fiber asset location**
  - Autzen, Spencer View, Downtown Eugene, Gang of 6, EWEB
  - Link Oregon access to Downtown Springfield

- **Oregon Hall within proximity of potential new site**

- **TV Broadcasting**
  - Level3 Vyvx

- **IT Staff**
  - Physical Infrastructure Specialists
  - Network Engineers

What else should we be considering for the RRB?

Example

Treasury Resiliency Building – Salem Oregon

Credit: Mason Trinca for The New York Times

"The Treasury Resiliency Building is the first USRC Platinum-rated building in Oregon and the first USRC-rated seismically isolated building in the United States. It not only achieves a USRC Platinum rating at the design-basis earthquake (as required by the USRC methodology) but also at the Risk-Targeted Maximum Considered Earthquake (MCER) as a result of the seismic isolation system."

\- U.S. Resiliency Council – 2022

Questions & Next Steps