Oregon Hazards Lab:
A Statewide Program for Societal Resilience

Mission Statement —

OHAZ uses science, technology, and community engagement to understand, detect, and mitigate multi-hazards within the Pacific Northwest.

ShakeAlert™ OHAZ University of Oregon ALERT West

UNIVERSITY OF OREGON

ohaz.uoregon.edu

Seismic Site TRIPT
Jordan, Oregon

ShakeAlert™

Earthquake Early Warning System

California – Oregon – Washington

A well-coordinated coalition of federal, state, and university partners in Oregon, Washington, and California

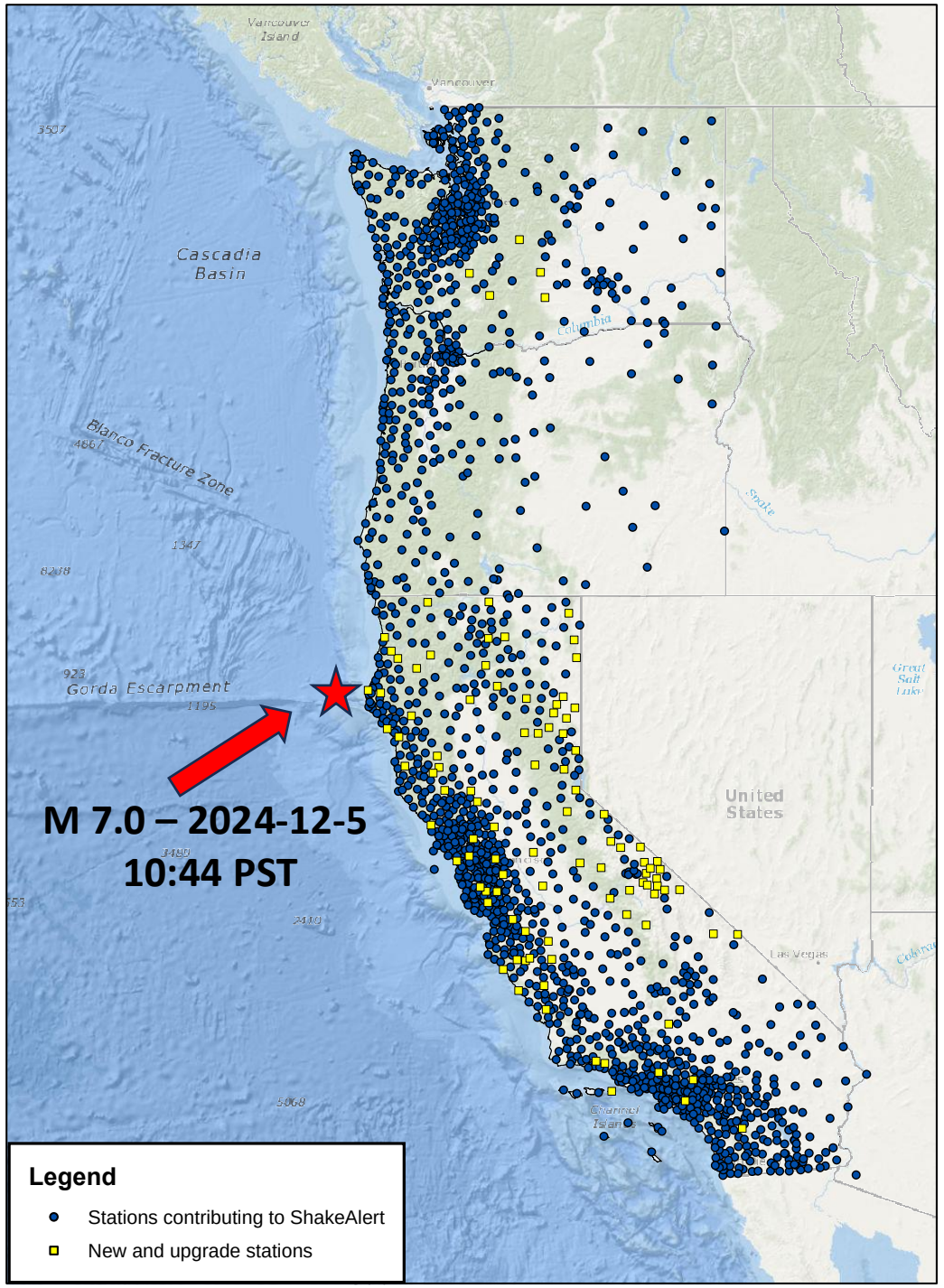
USGS science for a changing world

Berkeley UNIVERSITY OF CALIFORNIA

Caltech

OREGON

UNIVERSITY of WASHINGTON



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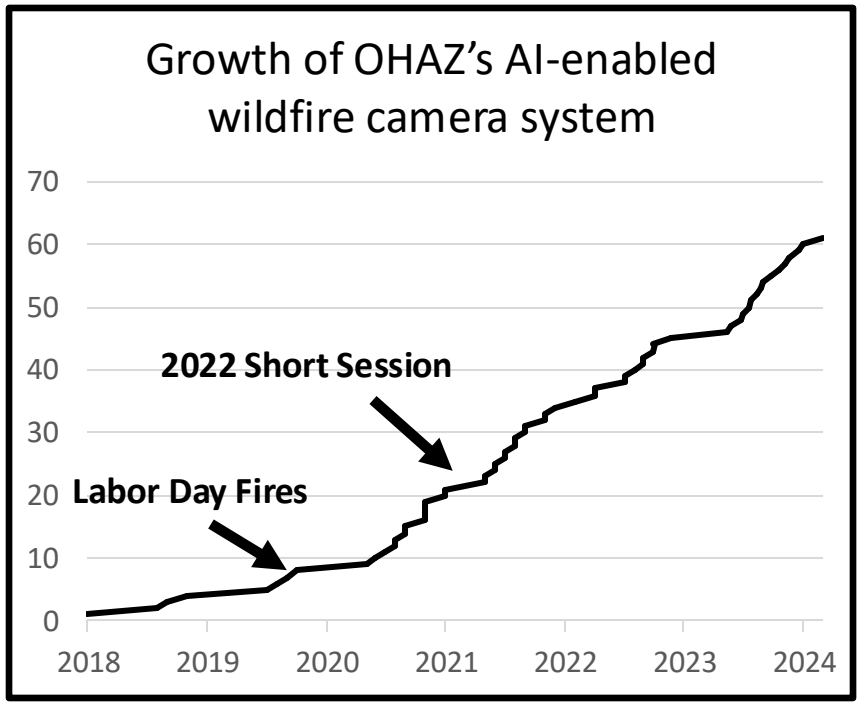
Medford 549c School District

First K-12 School in State to adopt ShakeAlert

Successful alerting (tens of seconds)

OHAZ Wildfire Cameras

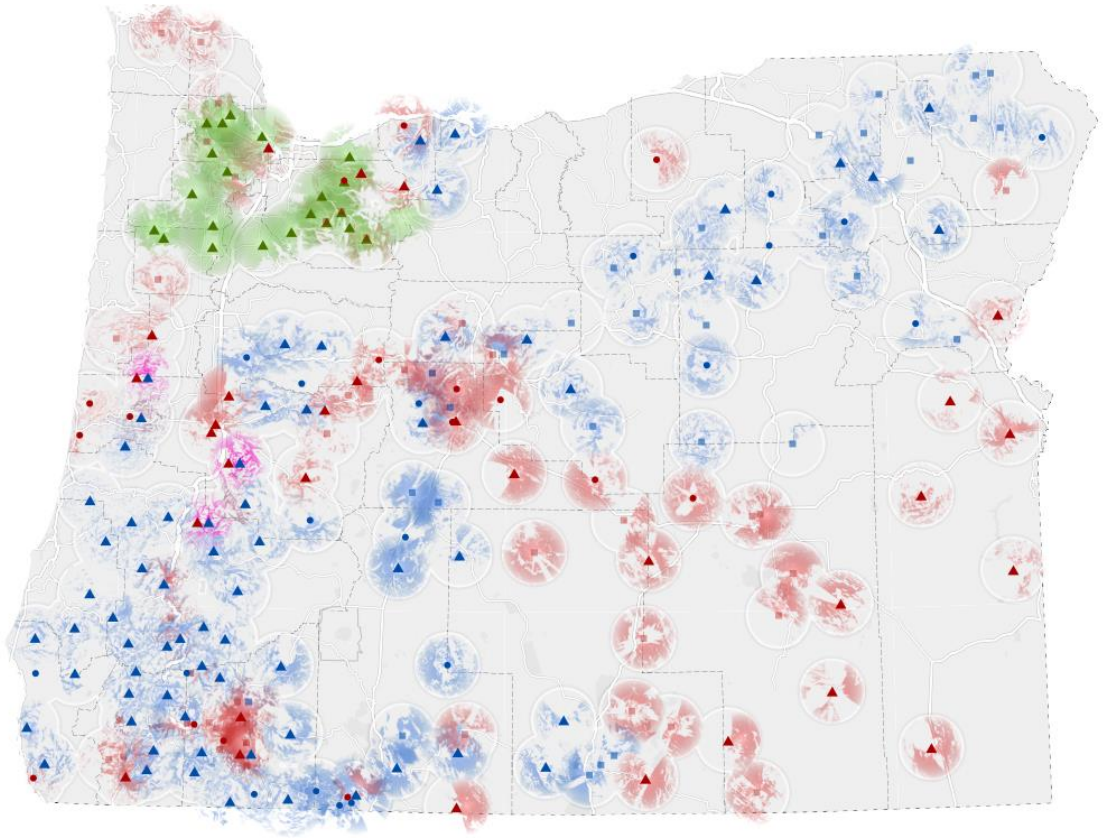
- Improving situational awareness with AI-enabled cameras
- Publicly viewable west coast wide system at alertwest.live
- Alert delivery & remote control for fire services and responders
- Integration with Watch Duty 🔥



Protecting critical infrastructure complex — Pine Mountain, Deschutes County, October 2024

Well Coordinated Effort

- OHAZ facilitates a multi-jurisdictional coordination of communities in Oregon
- Oregon is the only state in the nation with such a committee
- Influencing regional policy on one of the most vexing problems of our time
- Represented under the SIEC



Oregon Wildfire Detection Camera Interoperability Committee
Co-chaired by OHAZ and Oregon Department of Forestry

Committee composition: Governor's Office, Public Safety Agencies, ODF, Fire Agencies, Emergency Managers, United States Forest Service, Bureau of Land Management, Statewide Interoperability Coordinator, Oregon Hazards Lab @ University of Oregon, Tribal Representation

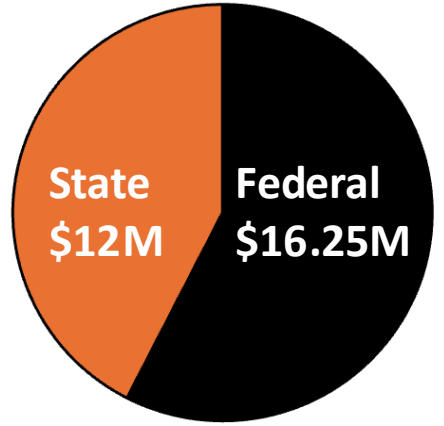
Benefits of Supporting HB3219

What stable funding achieves

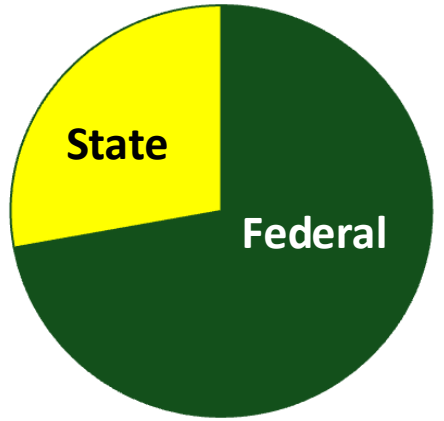
- **Protects the investment**, including infrastructure and expertise
- Leverages and **matches other funding** sources
  - BLM, USGS, FEMA, USFS, NSF, Utilities, Foundations, In-kind
- **Grows** statewide wildfire network (**2024 SCIP goal**)
- **Supports** existing **non-federal cameras and seismic stations**
- **Supports rural communities, small utilities, and fire districts**
- **Enhances** statewide **fire technology capabilities**
- Leverages statewide network, allowing:
  - Smoke monitoring and forecasting
  - Wind speed and moisture for fire spread prediction
  - Forest health
  - Multi-hazards — landslides, flooding, extreme weather
- Supports statewide collaboration, e.g., OSSPAC, OWDCIC, OEM, DOGAMI, other universities

Funding, FY20-FY25

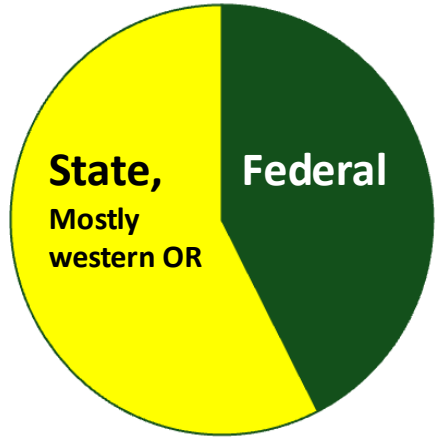
➢ State dollars matched by Federal dollars



➢ **Seismic network** primarily funded by Federal sources



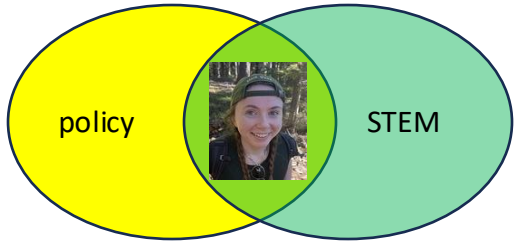
➢ **Wildfire network** primarily funded by State sources

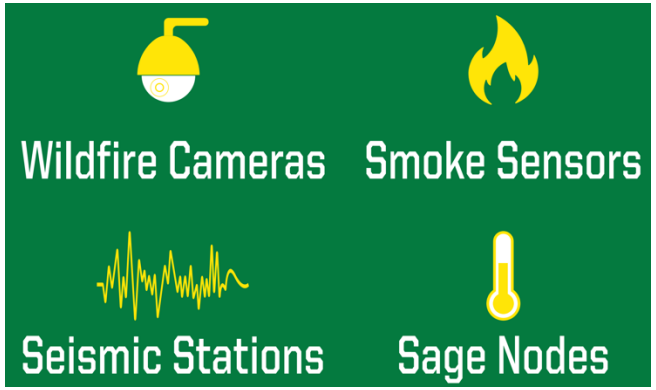


OHAZ undergraduate experiential learning

Autumn Oberhart

- UO Class of 2025, Environmental Studies and Political Science
- Current OHAZ Communications Assistant
- OHAZ provides valuable experiential learning opportunities
- Gaining skills and knowledge of the technical aspects of this program
- *Grateful to be a part of something larger than myself, and see the impacts of this work within my own lifetime*





18 OHAZ undergrads gained hands-on work experience

- Remote Sensing Field Operations
- Fabrication and Construction
- IT and Microwave Networking
- Solar Power Systems
- Data Science
- Software Development