



UNIVERSITY OF
OREGON

School of Planning, Public
Policy and Management

Institute for Policy
Research and Engagement

Community Vitality and Natural Hazards Workshop

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2014 Eugene Springfield Vulnerability Assessment

- Integrate Climate and Energy Action Plan with Natural Hazard Mitigation Plan
- Develop a sector level vulnerability assessment tool
- Inform better mitigation actions
- Move from planning to action



Multi-hazard Vulnerability & Risk Assessment

- Embed climate and energy in *existing, ongoing, funded, and federally required* planning process
- Understand system vulnerabilities more holistically – several related risks
- Inform planning and future system investments
- Be more inclusive, capture synergies

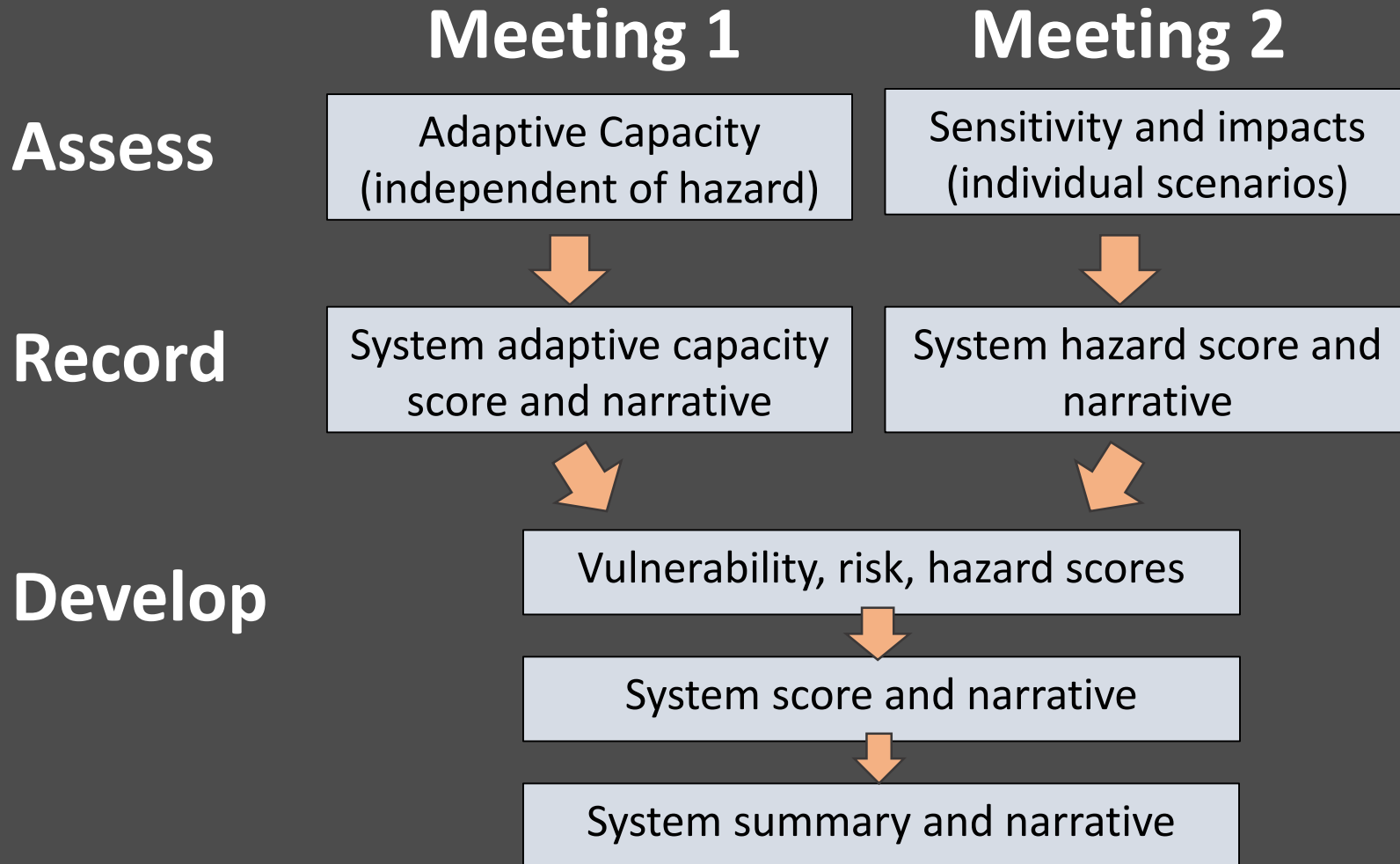


Systems and Services

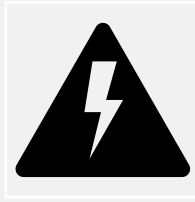
- Transportation
- Housing
- Fossil fuels
- Electricity
- Food
- Drinking water
- Stormwater
- Health
- Sanitary sewer
- Natural systems
- Public safety
- Communication



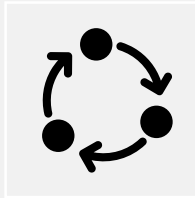
Assessment Process



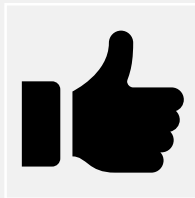
Key Observations



The region **will struggle to recover quickly from a large-scale event.**



Nearly every sector **relies other sectors to function.**



Strong support for **multi-sector risk-reduction actions.**



Project Findings

- Earthquake and Winter Storm
 - Community- AND region-wide impacts
 - Impacts to Transportation, Energy and Fossil Fuels
- System interdependencies compound impacts
 - Food, water, wastewater, economy, social services
- Lane County and ES Metro will become a hub
- Multiple local projects – similar conclusions



The Problem

- Lots of plans (too many?)
- Multiple critical interdependencies
- Risks and vulnerabilities cross jurisdictional boundaries
- Limited capacity
- Three critical sectors



Indicators of Resilience



Strong leadership

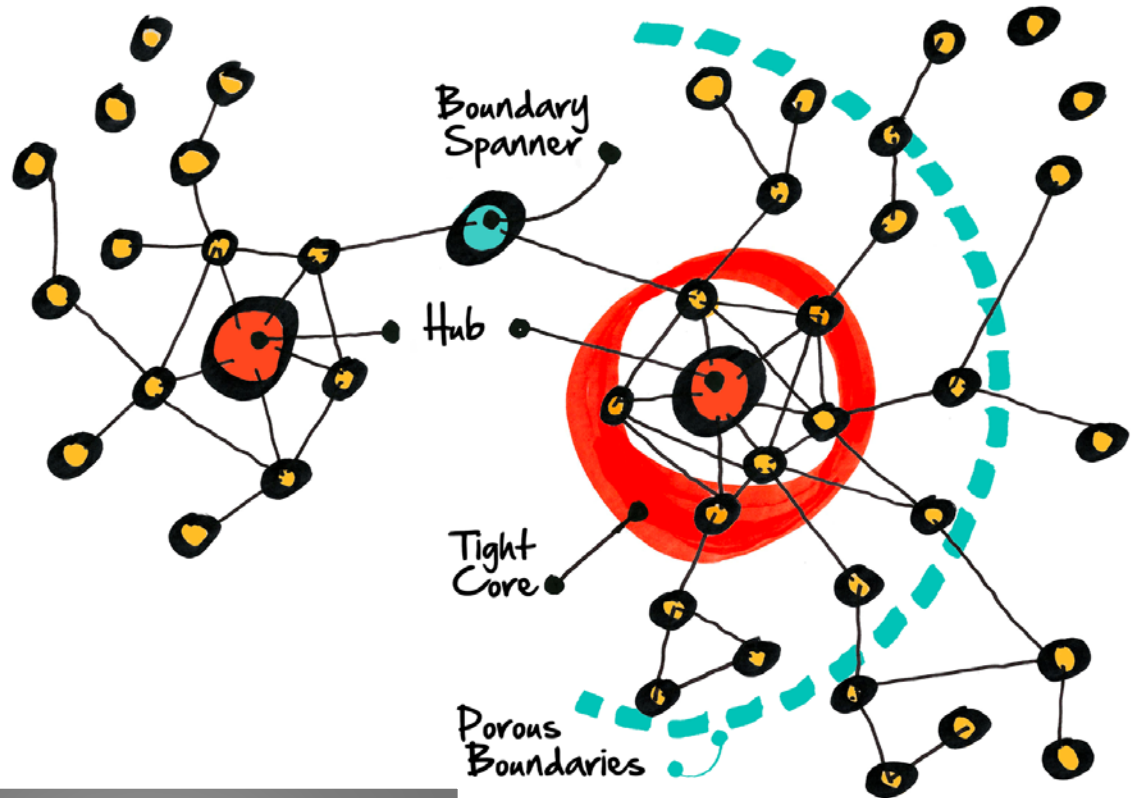


**Well-developed
networks**



Change readiness

Networks Can Be Complex



No clear “command & control” structure, but more flexible & nimble

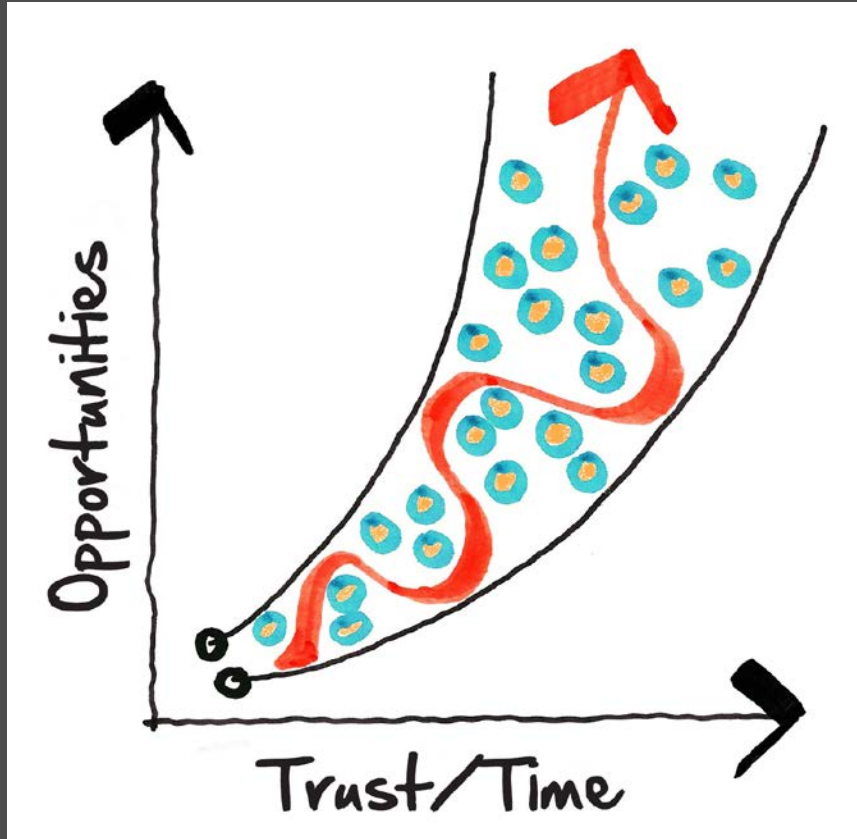


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Networks Yield Results!



- As the number of nodes in a network increases, the value of the network & its outcomes increases exponentially
- Adding a few more members = value^2