



EERI Policy Statement

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Improve Reliability of Lifeline Infrastructure Systems

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Programs to improve the reliability and resilience of lifeline infrastructure systems in earthquakes should identify the systems' vulnerabilities and interdependencies in earthquakes, prioritize mitigation actions, implement system improvements over time, and communicate system vulnerabilities to lifeline customers, other lifeline operators, and affected local, state, and federal governments.

Background

Lifeline infrastructure systems include interdependent and often co-located utilities (electric power, natural gas, telephone and other communication systems, water and wastewater) and transportation systems (roads and highways, rail systems, ports, and airports). Earthquakes can damage lifeline infrastructure systems, causing disruption that threatens lives and impedes community recovery, even well beyond those areas directly shaken by an earthquake. Lifelines are highly interdependent systems, so damage to one system will affect other systems. These disruptions can disproportionately harm the young, the elderly, and those with special needs.

Some lifelines utility services providers have in-depth experience in identifying and mitigating earthquake risks that can serve as valuable guidance for others.

Needed Action

Public and private utility and transportation system operators and owners should:

1. Assess the likely performance of their systems in potential significant earthquakes,
2. Develop a prioritized work plan to reduce earthquake damage and loss of service, and
3. Implement system improvements to minimize the loss of lifeline services in earthquakes.

The National Institute of Standards and Technology (NIST), the American Society of Civil Engineers (ASCE), federal and state Departments of Transportation, and other agencies should develop and implement guidance for achieving acceptable utility and transportation performance in earthquakes that are consistent and appropriate for all lifeline infrastructure systems.

Local and state governments in seismically hazardous areas should establish Lifeline Infrastructure Councils to improve communication of expected lifeline infrastructure system performance among providers and governments in their area.

More information on this policy statement can be found on the full policy white paper:
<https://www.eeri.org/wp-content/uploads/eeri-policy-lifelines.pdf>

Information on EERI's Public Policy and Advocacy efforts, including other policy statements at:
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