ASHSC Alaska Seismic Hazards Safety Commission

POLICY RECOMMENDATION 2026-3
SEISMIC DATA, INSTRUMENTATION, AND INFRASTRUCTURE RESILIENCE FOR CRITICAL FACILITIES

The Alaska Seismic Hazards Safety Commission recommends that the State strengthen the resilience of critical infrastructure by expanding access to seismic site data, promoting seismic instrumentation, and improving post-earthquake decision-making for essential facilities.

DISCUSSION

The performance of critical infrastructure during earthquakes is strongly influenced by local site conditions and actual ground motions. The federal government and the State of Alaska have made significant investments in seismic monitoring and research, yet this information is fragmented and not systematically leveraged to reduce risk, guide retrofit decisions, or support rapid post-earthquake assessments.

Critical facilities—including transportation corridors, ports, utilities, hospitals, schools, and emergency response facilities—must not only survive earthquakes but remain functional to support response and recovery. Improving access to seismic data and expanding the use of instrumentation are low-cost, high-value strategies to improve resilience.

RECOMMENDED ACTIONS

The Commission recommends that the Legislature support initiatives that:

1. **Establish and maintain an Alaska Seismic Site Response and Data Clearinghouse** to consolidate geotechnical, geological, and seismic information for use in planning, screening, design, and emergency response.
2. **Encourage the installation and maintenance of seismic instrumentation** in critical public facilities and infrastructure to support rapid post-earthquake safety evaluations and operational decisions.
3. **Leverage recorded ground motion and site response data** to improve seismic design practices, reduce uncertainty in retrofit planning, and enhance statewide hazard assessments.
4. **Promote awareness and coordination** among state agencies, utilities, municipalities, and facility owners regarding available seismic data, monitoring resources, and best practices for resilient infrastructure.

These actions would improve life safety, reduce downtime after earthquakes, and maximize the value of existing state and federal investments in seismic monitoring and research.

HISTORY

PR 2026-03 was approved unanimously on October 15, 2026 and supersedes PRs 2013-1, 2015-3, and 2021-1.