

**Nevada Earthquake Safety Council
Recommendation to DEM for a Policy Statement on
Earthquake Monitoring Networks
Policy Number 2009-01**

Purpose:

An effective earthquake monitoring network accomplishes several goals:

- 1) Enhances scientific understanding of the earthquake hazard in various geographic areas
- 2) Enables better real-time response during an earthquake
- 3) Creates opportunities for focused risk mitigation planning.

This policy recommends that a comprehensive statewide earthquake monitoring network become a priority for deployment in Nevada utilizing USGS ANSS monitoring systems, the Nevada Educational Seismic Network (NESN) and a citizen volunteers' network of monitoring devices.

Policy Statement:

It is the policy of the State of Nevada, through its Division of Emergency Management (DEM) and the Nevada Earthquake Safety Council (NESC) that the expansion of implementation of the Advanced National Seismic System (ANSS) in Nevada should be endorsed and promoted by the State of Nevada as important to the safety and security of its citizens.

NESC supports development of supplemental seismic and geodetic monitoring systems in addition to ANSS including continued deployment and expansion of the Nevada Educational Seismic Network and development of a citizen volunteers' network of dense, low cost real-time strong motion accelerometers.

Legislative Interest:

To the extent DEM can implement this policy within its current framework and budget, no legislative action will be required.

Fiscal Impact:

Since ANSS is a federal budget item, there is no direct impact to the State of Nevada unless it chooses to fund some of the instrument costs. The NESN already is funded. The citizen network could be funded as a pilot project (the NESC recommended this project for grant funding of about \$26,310 with a non-federal salary match of \$27,705) and accelerometers could be offered for purchase by volunteers.

Benefits and Detriments of Implementation:

BENEFITS: This policy will help with scientific understanding and measurement of strong motions during earthquakes and engage the public in learning about earthquake risks.

DETRIMENTS: Funding sources may not readily be available. The effort and costs to recruit citizen volunteers, then to set up their systems and monitor them may be difficult to measure.

Communications:

NESC will need to contact stakeholders to elicit their support and cooperation in this effort. Use of public media to solicit citizen participation will be important to the project. Strong letters of support should be submitted from stakeholders to the USGS for further deployment of ANSS.

Assessment of Effectiveness:

Measures to assess the effectiveness of an expanded monitoring network ultimately will be the additional inputs into scientific research data and furthering of understanding of the earthquake hazards in more areas of Nevada. To the extent the network enables real-time monitoring, the Nevada Seismological Laboratory's ability to provide accurate and timely data to DEM, public officials, media and citizens will be greatly enhanced.