

## SEISMIC HAZARDS SAFETY COMMISSION

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4 February 2015

Sent via email

Representative Millett State Capitol, Room 204 Juneau, Alaska 99801

RE: House Bill No. 35

## Dear Representative Millett:

The Alaska Seismic Hazards Safety Commission (ASHSC) believes continued awareness is a very cost effective and practical means to help mitigate the risk to public safety from a future earthquake. Therefore, the ASHSC strongly supports House Bill 35, establishing March 27 as "Great Alaska Earthquake Remembrance Day", in perpetuity.

The significance of the March 27, 1964 Great Alaska Earthquake, and the associated tsunamis, spans not only the entire state, but also continues today to effect the fields of geology and engineering, as well as efforts to mitigate the risks from future earthquakes.

- The 1964 Great Alaska Earthquake, felt across the entire state from Barrow to Ketchikan, was, and remains the second largest earthquake ever recorded in North America (Magnitude 9.2). The earthquake caused massive destruction and casualties in the coastal communities throughout south-central Alaska, as well as in British Columbia, California, Oregon and Washington (approximately \$2.3 billion dollars of damage in 2013 dollars; and 131 deaths, 115 in Alaska). Without question, this earthquake and the subsequent recovery effort represents one of the major hallmarks and defining moments in Alaska's statehood.
- The earthquake was pivotal in the worldwide awareness of the devastating effects of great subduction zone earthquakes; provided positive evidence to support the then theory of global plate tectonics; and helped lead to the establishment of many current Federal programs specifically intended to mitigate earthquake hazards (e.g. the National Earthquake Reduction Program, and the Federal Emergency Management Agency). And,
- The devastating consequences and efforts of recovery after the 1964 earthquake provided many lessons which should not be forgotten and are still relevant today to develop a safer human environment in the state.

Alaska has more earthquakes than any other region of the United States and is, in fact, one of the most seismically active areas of the world. During 2014 the Alaska Earthquake Center<sup>1</sup> located

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<sup>&</sup>lt;sup>1</sup> www.aeic.alaska.edu

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roughly 30,000 earthquakes in the state, with notable events experienced in all regions including a vigorous and unusual local earthquake swarm in the spring which damaged foundations and alarmed residents in Noatak, in northwest Alaska; a magnitude 7.9 earthquake in the far Aleutians, the strongest in the United States since 2002; a moderate earthquake in southeast Alaska which triggered a submarine landslide that severed a fiber-optic line, disrupting communications in Juneau and throughout the region; and several earthquakes that produced the strongest shaking experienced at Anchorage and Fairbanks in more than a decade. Evidence from recent earthquakes in New Zealand, Italy, China as well as other countries illustrate that earthquakes of even moderate size, which happen annually in Alaska, can cause significant damage and loss of life when they occur close to population centers.

While it is not possible to predict the time and location of the next big earthquake, the active geology of Alaska guarantees that major, potentially damaging earthquakes will continue to occur. Further, despite advancements in seismic hazards analysis and engineering, the age and structural resilience of buildings and infrastructure vary across Alaska, especially in areas of higher seismicity, so damage and casualties should be expected. However, a very cost effective and practical method to reduce the risks to public safety from a future earthquake is through education, outreach, and especially continued awareness. The ASHSC believes that HB 35, in addition to honoring and remembering those Alaskans who lost their lives in the 1964 earthquake, will go a long way to keeping the hazards from earthquakes in the minds of the populace for many years to come.

Respectively yours,

Robert L. Scher, P.E.

Chair, Alaska Seismic Hazards Safety Commission

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Cc: April Woolery, DNR-DGGS