

# HB 3486

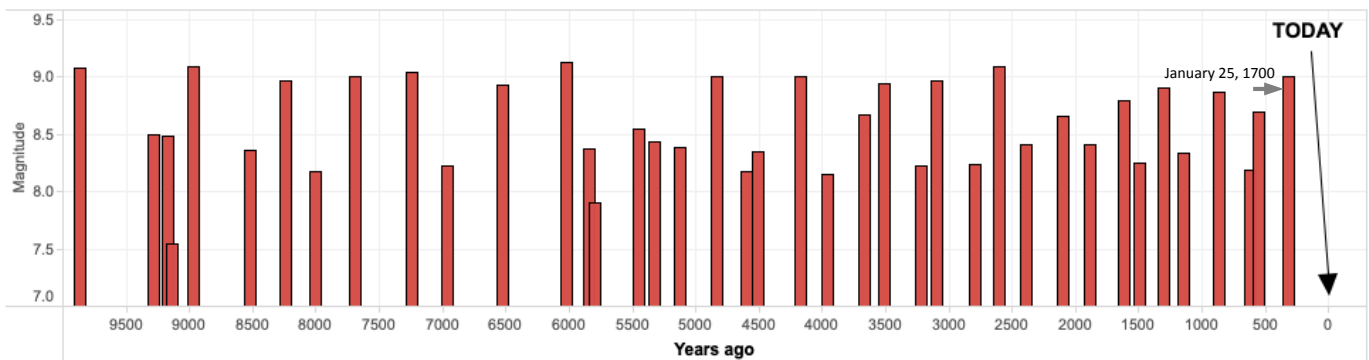
## Resilient Spaces in New School Buildings

### 10,000 years of Cascadia earthquakes

The chart shows all 40 major earthquakes in the Cascadia Subduction Zone that geologists estimate have occurred since 9845 B.C. Scientists estimated the magnitude and timing of each quake by examining soil samples at more than 50 undersea sites between Washington, Oregon and California.

Average quake is every 246 years

1700 + 246 = 1946... We are overdue!



(Source: Oregon Department of Geology and Mineral Industries - earthquake data from Chris Goldfinger, Oregon State University)

Communities are responsible for providing relief shelters following disasters. Schools are a natural choice to meet this need. But building to current code standards for schools will limit their use as community shelters after severe earthquakes. With a Cascadia earthquake inevitable, we must plan ahead and take the simple steps that allow us to protect Oregonians.

The proposed legislation would require new school buildings to have gathering spaces with higher structural standards for essential facilities. Higher structural designs would also be required throughout the new buildings to ensure they are repairable after the earthquake.

In code terms, this means moving from Risk Category III to Risk Category IV. It would not mandate that they meet all the non-structural requirements for essential facilities but would require they implement a number or resilience measures that allow gymnasiums, cafeterias and multipurpose rooms over 2,500 square feet be used as shelters. These would include:

- Providing for emergency power
- Provide for emergency water supply
- Providing an earthquake activated automatic natural gas shutoff devices

The experience of the Beaverton and Seaside School Districts show that added cost for these measures is minimal. They amounted to 1% to 1.5% of construction costs for the new high school and middle schools. The interest from invested funds from bond sales can easily fund these improvements.

This cost is minimal for buildings that serve the public for 50+ years. Seismologists predict a 30% chance of a 9.0 cascade earthquake with 50 years.

The bill also proposes that the State Resilience Officer and ODEM convene stakeholders that included school districts, community colleges, local and state emergency management, the Department of Education work out policies and procedures that ensure the smooth transition from school to shelter and back to school.

Passage of this bill will enact recommendations made in both in the Oregon Resilience Plan and in the more recent OSSPAC Mass Care report.

HB 3486 helps communities after disaster and will also result in schools reopening in a timely manner to educate students, an essential requirement for recovery.