

**WESTERN STATES SEISMIC POLICY COUNCIL
POLICY RECOMMENDATION 10-7**

Seismic Design of New Schools

Policy Recommendation 10-7

WSSPC recommends that each member state, province, and territory establish and fund an active program to improve the seismic safety of new schools and ensure that seismic building code provisions for new schools are followed. WSSPC also recommends that FEMA provide dedicated financial support for the establishment of a program that improves the seismic safety of new schools.

Background

School facilities are used by communities for meeting places and are frequently utilized as areas of refuge or impromptu command centers during natural disasters and other emergencies. The use of schools in this fashion is commonplace throughout most of America, particularly so in rural areas. Current building codes and design standards typically identify schools as an intermediate priority occupancy classification (Occupancy Category III). School facilities that are designed and built under this set of assumptions essentially end up being constructed to ensure that the structure has earthquake survivability and is not specifically designed to remain functional (i.e. safe and habitable) after a design level seismic event. Additionally, in most instances there are no special seismic performance requirements for utilities such as water, electrical, sewer, Heating Ventilation and Air Conditioning. This presents an obvious problem where school facilities are used as emergency shelters or impromptu command centers.

If the Occupancy Category were increased to level IV and a minimum of Seismic Design Category C is required, then school facilities with an occupant load greater than 250 persons would be designed and constructed as essential facilities or in conformance with the community's actual use. The structures themselves would have greater seismic resistance and be able to remain functional after a design level seismic event. The increase in design level will also facilitate greater community and economic resilience after an earthquake by allowing parents of school-aged children to return to work more rapidly.

Individual School Districts and private operators should also be made aware of FEMA 241 which addresses mitigating non-structural hazards from building contents and occupancy habits. Post disaster assessments have identified that many common injuries and some types of damage can be prevented by properly mitigating non-structural hazards. There is also the additional benefit that school children would be better protected while attending classes.

Facilitation and Communication

This policy recommendation will be sent to all identified policy and decision makers (elected officials, heads of key departments such as emergency managers, building officials and planners and chairs of State Seismic Safety Commissions and Boards) as well as to WSSPC representatives in the member states.

Assessment

A measure of the acceptance of this policy recommendation is the number of states, provinces, and territories that adopt these or similar elevated seismic design standards for school facilities.

History

Policy Recommendation 10-7 was adopted by majority voice vote of WSSPC members July 9, 2010 at the Annual Business Meeting in Broomfield, Colorado. Hawaii was opposed.