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RECOMMENDATIONS TO REDUCE EARTHQUAKE HAZARDS

to the

UTAH ADVISORY COUNCIL ON INTERGOVERNMENTAL RELATIONS

by

Genevieve Atwood, Utah Geological and Mineral Survey
James Tingey, Utah Division of Comprehensive Emergency Management
Walter Arabasz, University of Utah Seismograph Stations

Two lists of actions that can be taken by government to reduce earthquake hazards are given below. The first list includes our top priorities for action, and the second list includes less critical but still very important actions that are needed. At the end of each item on both lists, the type(s), branch(es), and agency(ies) of government that could contribute to the action are listed by the following symbols:

L Legislation (State)
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EO Executive Order (State)
BDP Governing board or department (division) policy
 (State)-Board or Department/Division identified
SB School boards, State Office of Education
LG Local government (cities, towns, counties)
OG Organizations of local governments (League of Cities
 and Towns, Associations of Governments)

LIST 1. TOP PRIORITIES

1. Require all new school construction to conform to modern seismic building codes and require inspection during construction by local government building inspectors (L, SB).
2. Mandate seismic safety evaluations of existing government buildings, including schools and health-care facilities, and develop a plan to retrofit or retire unsafe buildings (EO; BDP-Facilities Construction Management, Building Board; SB; LG).
3. Provide for geologic hazards evaluations of proposed sites for new government buildings or government-funded construction prior to site selection and design; Master planning of university campuses (LIL, EO, BDP-Facilities Construction Management, Building Board; LG).
4. Include geologic hazards elements in local government master plans and/or land-use ordinances (L, BDP-Community Impact Board, LG, OG).

5. Adopt UBC annexes which include provisions for strong-motion instrumentation in new buildings (L, BDP-Department of Commerce, LG).
6. Require disclosure of geologic hazards information in real estate transactions (L; BDP-Department of Commerce, Real Estate; LG).
7. Modernize seismographic instrumentation operated by the University of Utah Seismograph Stations to meet State needs, and expand instrumentation to address needs of the engineering community for strong-motion information and public-safety officials for emergency response information (L).
8. Set increased individual, student, and teacher earthquake awareness and planning as a State goal (L, SB).
9. Consider geologic hazards and progress toward hazard reduction as an annual agenda item of the Utah Advisory Council on Intergovernmental Relations, with presentations by the Utah Geological and Mineral Survey, Division of Comprehensive Emergency Management, University of Utah Seismograph Stations, and any other groups making significant progress.
10. Encourage higher levels in governments to identify their top concerns regarding geologic hazards based on loss estimation studies and risk evaluation (Legislative fiscal analyst, Governor's Office of Planning and Budget, Office of Risk Management, LG).

LIST 2. SECOND PRIORITIES

1. Provide for earthquake resistance in regulated public utility, water supply and waste disposal, and transportation systems (BDP-Public Service Commission; LG; BDP-Utah Department of Transportation, Highway Commission).
2. Review seismic safety of existing dams; provide guidelines and review seismic considerations for new dams and diked water impoundments (BDP-Division of Water Rights).
3. Develop guidelines for engineering geologic reports for major government-funded construction projects (EO, DPM - Facilities Construction Management, Department of Transportation, Division of Water Rights, Utah Geological and Mineral Survey; LG - adoption of guidelines developed by the State).
4. Actively participate in the International Decade of Natural Disaster Reduction, including passage of a resolution and development of a plan of action (L, BDP - Utah Geological and Mineral Survey, Division of Comprehensive Emergency Management).

5. Acquire new and more detailed geologic hazards mapping for use by State and local governments (BDP - Utah Geological and Mineral Survey).
6. Promote involvement in earthquake hazard reduction by the banking and insurance communities by considering hazards in lending and insuring (BDP - Departments of Commerce, Insurance, and Financial Institutions; Professional organizations of bankers and insurers).
7. Define engineering geologists by statute, register or certify engineering geologists, or otherwise provide for assurances that geologic hazards work is done by qualified geologists; strengthen licensing requirements for architects, engineers, and building inspectors with regard to earthquake-resistant design and construction (L, BDP - Department of Commerce).

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