



Rapid Visual Screening for all of Utah's School Buildings – HB 0162

QUICK TAKE

- ❑ A preliminary study indicates about 58% of Utah school buildings were constructed before 1975 when modern seismic regulations were first introduced into building codes.
- ❑ There is a need to understand the vulnerability of older school buildings to help protect occupants and communities.
- ❑ School facilities can be a community resource in a post-earthquake scenario and should be seismically safe.
- ❑ Cost: \$500,000 one-time

School Building Vulnerability

Schools should be one of the safest places for students, educators and the community. What are some facts and why should we be concerned?

- There are about 23 school districts (750 schools) plus 51 charter schools housing 84% of all Utah students (430,000) daily along a corridor of high potential seismic activity.
- Many of these public school structures were built before modern seismic design requirements were introduced into the building codes.
- The school building construction program has tried to address the problem of updating older structures but no uniform system of evaluation and prioritization has been applied to all schools.

It is important to make progress toward mitigation of this risk since there is little doubt that buildings constructed prior to

seismic regulations will most probably experience significant damage during an earthquake.

What is RVS and How Can It Help?

RVS or “Rapid Visual Screening” was developed by the Federal Emergency Management Agency (**FEMA**) and would provide a standardized means to identify the most vulnerable buildings and get them on the radar screen for seismic retrofit.

RVS will:

- Quickly categorize buildings based on construction type and year built.
- Estimate relative seismic vulnerability based on the past performance of similar buildings.
- Aid in determining the proper importance to be placed on the most needful buildings.

Provide Information and Tools so Communities Can Prepare

Once the survey has been completed, a community can evaluate the most critical needs and prepare appropriate mitigation strategies.

This important step will assure that the schools most at risk can be identified and steps can be taken to lessen the danger.

A plan for mitigating the seismic vulnerability of Utah's schools can be integrated into the facilities maintenance operations through incremental seismic rehabilitation methods. This process interjects seismic rehabilitation components into the regular maintenance and improvement plans for

structures and is a proven cost-effective means of mitigating seismic risks.

School districts and charter school boards could create seismic safety committees to look at the results of RVS and develop district/charter policy statements and criteria for prioritizing each building into an overall plan and time-line.

Estimated Cost

The cost to provide RVS is anticipated to be between \$300 and \$600 per building plus travel. There will be some cost savings due to economies of scale in larger school districts and where school designs are duplicated.

The expected state-wide cost is approximately \$300,000 to \$500,000 (including some travel costs)

It is recommended that state funds be made available to school districts and charters for these costs since schools are part of the infrastructure of Utah and can be valuable post earthquake recovery centers.

SEISMIC MITIGATION OF UTAH'S SCHOOLS IS A STATE NEED.

In addition to housing students and educators during school hours, these buildings are uniquely positioned and expected to be valuable community resources immediately following an earthquake.

- Temporary community shelters
- Aid distribution centers