

THE SCHOOL SEISMIC SAFETY PROJECT

PHASE 2 (2019–2021)

PROJECT OVERVIEW

Many of Washington's K–12 students attend schools that may not withstand earthquake shaking.

More than 70 percent of schools studied in Phase 1 of the project are located within a high to very high seismic hazard zone.

The Washington Geological Survey (WGS) recently received continuing Capital Budget funding to work with the Office of Superintendent of Public Instruction (OSPI) and a team of structural engineers to assess the seismic safety of K–12 schools.

We plan to do engineering inspections of approximately 350 K–12 school buildings and five fire stations. We will also perform geophysical surveys to better understand the geology at each campus.

Conceptual retrofit plans and costs to upgrade will be produced for 10 of the selected schools.

HOW SCHOOLS BENEFIT

This project will:

- Help inventory schools needing seismic retrofits.
- Help to prioritize retrofitting of seismically deficient schools statewide.
- Provide schools with the information needed to apply for funding to retrofit buildings.



WASHINGTON STATE DEPT OF

**NATURAL
RESOURCES**

WASHINGTON
GEOLOGICAL SURVEY

WHAT WE'VE LEARNED SO FAR

- Washington State has many older school buildings that are vulnerable to earthquakes.
- Half of the buildings studied during Phase 1 are expected to be at least 43 percent damaged following an earthquake.
- The majority of buildings studied in Phase 1 will be unsafe to use following an earthquake.
- The cost to seismically upgrade a structure is less or much less than the damage costs the building would incur in an earthquake.

PROJECT TIMELINE

September
2019

September
2020

December
2020

June
2021

building inspections

geophysical surveys

concept-level designs

analysis

FINAL
REPORT



COMPLETE

WHAT TO EXPECT

- WGS will contact school districts to determine interest and feasibility.
- WGS or structural engineers will request copies of building plans, if available and information on any major renovations.
- Structural engineers will contact schools to schedule visual inspections.
- WGS will contact schools to schedule seismic surveys on the school grounds.

Our school visits are a great teaching opportunity for students to learn about seismic safety and earth science!



Visit our website for more information:

<https://www.dnr.wa.gov/school-seismic-safety>

CONTACT



WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**
WASHINGTON
GEOLOGICAL SURVEY

Corina Forson

Chief Hazards Geologist
Washington Geological Survey
(360) 902-1455
Corina.forson@dnr.wa.gov



OFFICE OF
SUPERINTENDENT
OF PUBLIC
INSTRUCTION

Scott Black

Program Development Manager
Office of the Superintendent of Public
Instruction
(360) 725-6268
Scott.black@k12.wa.us