

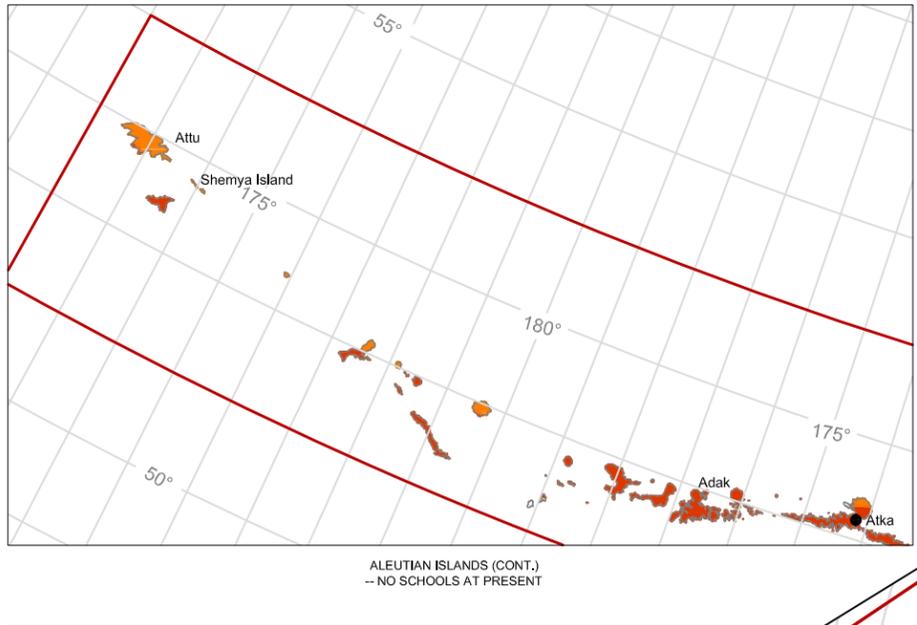
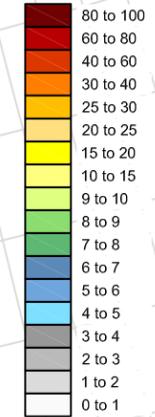
# PUBLIC SCHOOLS AND EARTHQUAKE HAZARDS IN ALASKA

This map shows locations of communities with public school facilities in relation to potential ground-shaking as a percent of gravity, taking into account known earthquake sources. The colors represent peak bedrock ground acceleration (PGA) that has a 10-percent probability of being equalled or exceeded in a 50-year period, or an average of once every 475 years. PGA is useful for identifying general areas of low and high earthquake hazard. The PGA value of 10% g is considered the approximate threshold at which damage occurs to buildings not constructed to resist earthquakes. These values are represented on the map by the areas of yellow, orange, red, and brown. However, PGA cannot be used to directly predict the damage potential of an earthquake for specific structures without considering the duration and frequency of the ground motion, the proximity to the epicenter, and various site and building characteristics. Geologists also believe that unidentified active faults exist in many areas of Alaska. The scale of this map is not adequate for determining bedrock PGA at any given site. It should not be used in place of site-specific assessment of earthquake hazards by appropriately qualified professionals.

## LEGEND

- ◆ City School District Location
- Borough School District Location
- ▲ Regional Educational Attendance Area (REAA) District Headquarters
- REAA or Borough School Location
- ▼ Closed School Location
- SCHOOL DISTRICT BOUNDARY
- MAIN ROADS

Peak Ground Acceleration (% g)  
475-YEAR AVERAGE RETURN PERIOD



## DATA SOURCES:

INFORMATION COMPILED FROM THE "SEISMIC-HAZARD MAPS FOR ALASKA AND THE ALEUTIAN ISLANDS," US GEOLOGICAL SURVEY, 1999, THE "PROBABILISTIC SEISMIC HAZARD MAP OF ALASKA," US GEOLOGICAL SURVEY (OPEN FILE REPORT 99-36), THE ALASKA DEPARTMENT OF EDUCATION & EARLY DEVELOPMENT DIVISION OF SCHOOL FINANCE AND FACILITIES SCHOOL DATABASE, 2007, AND THE "ALASKA SCHOOL MAP," ALASKA DEPARTMENT OF EDUCATION AND EARLY DEVELOPMENT, REVISED 2003.

THE ACCELERATION VALUES CONTOURED ARE THE RANDOM HORIZONTAL COMPONENT. REFERENCE SITE CONDITION IS FIRM ROCK, DEFINED AS HAVING AN AVERAGE SHEAR-WAVE VELOCITY OF 760 M/SEC IN THE TOP 30 METERS, CORRESPONDING TO THE BOUNDARY BETWEEN NEHRP SITE CLASSES B AND C. IN SOME SITUATIONS, PARTICULARLY IN AREAS OF HIGH GROUND-MOTIONS (E.G. ALONG THE COAST OF SOUTHEAST ALASKA) THERE ARE DISCONTINUOUS CHAINS, OR ISLANDS, OF HIGH GROUND MOTION VALUES. THIS IS AN ARTIFACT OF THE GRID SPACING USED IN THE CALCULATIONS. IN MOST CASES THESE CHAINS SHOULD BE REPLACED WITH CONTINUOUS BANDS OF HIGH GROUND-MOTION VALUES ENCLOSING THE CHAINS.

ADDITIONAL INFORMATION, INCLUDING GRIDDED VALUES AND ARC/INFO COVERAGES USED TO MAKE THE MAPS IS AVAILABLE AT: [HTTP://EARTHQUAKE.USGS.GOV/RESEARCH/HAZMAPS/](http://earthquake.usgs.gov/research/hazmaps/). ALASKA STATE BOUNDARY, MAIN ROADS AND SCHOOL ARC/INFO COVERAGES WERE OBTAINED FROM THE ALASKA STATE GEOSPATIAL CLEARINGHOUSE AT [HTTP://WWW.ASGDC.STATE.AK.US/](http://www.asgdc.state.ak.us/) ON APRIL, 2007.

MAP PROJECTION: ALBERS EQUAL AREA CONIC, STANDARD PARALLELS 55° N AND 65° N, CENTRAL MERIDIAN 160° W.

ADEED\_SCH\_PGA.dwg

11/15/2007 (REV. 11/24/2009)

SEE ABOVE INSET FOR CONTINUED COVERAGE OF THE ALEUTIAN ISLANDS