

Washington Schools Earthquake Performance Assessment Tool (EPAT)

Quick Start Checklist for Data Entry

August 10, 2017

Things you will need to get started:

- General building information (school district, building name, total building area in square feet)
- Primary structural building type (see step 2.c.i for suggestions on where to find this information)
- Year building was built (see step 2.c.iii for suggestions on where to find this information)

Instructions for using tool (note that the cell shading indicates which cells require user input):

1. “Main” Page

- a) Input “Entity” (school district and building name), Contact Information, “File Name”, and “Date”
- b) Use the dropdown menu next to “District” to choose the school district name
- c) Use the dropdown menu next to “Facility Name” to choose the school facility name
- d) Input the building part name (i.e. gymnasium, classroom wing, etc.). Many schools have multiple building parts that need to be evaluated separately (parts may have been built at different times or built using different structural systems).
- e) Input the “Total Building Part Area”. This is for the whole building part being evaluated and the area should include all floor levels.
- f) Input the name of the person who evaluated the building and their affiliation in “Building Evaluated By”.
- g) Input the name of the person who is entering the data into EPAT and their affiliation in “Input Data by Person(s)”

2. “Building Data” Page

- a) Input “Building Use” however use is defined by the District (i.e. “Classroom building”, “Gym”, etc.).
- b) Use the “User Entered Values” to override any of the “Default Values” in the “Seismic Data” section. The default values are automatically preloaded based upon the Office of Superintendent of Public Instruction (OSPI) Information of Condition of Schools (ICOS) database. Entering “User Entered Values” here is necessary if and only if the automatically loaded OSPI data are incorrect.

The following items do not have to be changed if the information in the “Default Values” column is correct:

- i. Longitude and latitude
- ii. Site Class. If a site-specific determination of Site Class by a geotechnical engineer is available and differs from the default values that are estimates by the Washington Department of Natural Resources (DNR), enter the site-specific value using the drop-down menu.
- iii. Liquefaction Potential. If a site-specific determination of Liquefaction Potential by a geotechnical engineer is available and differs from the default values that are estimates by the Washington Department of Natural Resources (DNR), enter the site-specific value using the drop-down menu.
- iv. Geographic Region for Seismic Zones. If a site-specific determination is different from the auto-loaded values enter the Geographic Region using the drop-down menu. The auto-loaded values are based on digitized Uniform Building Code (UBC) zone maps (based on Figure 1). A difference between the site-specific determination and the default values is rare, but might be necessary for campuses that are very close the UBC zone boundaries.

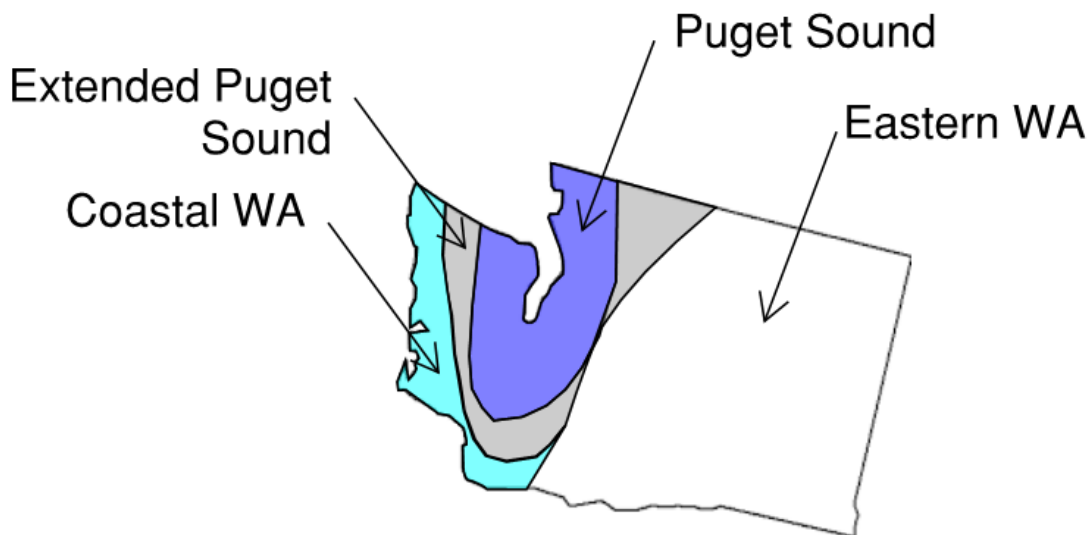


Figure 1 – Geographic regions for seismic zones

c) Use the User-Entered data column to enter the following data that are not preloaded from the ICOS Database.

- i. Input “HAZUS Building Type” using the drop-down menu. Refer to Appendix 1 of the supporting documentation for descriptions on each of these building types. If the building type is unknown, possible options include:
 - Consult with a facilities manager
 - Look at the existing structural drawings
 - Contact the local building department
 - Consult an architect or structural engineer
- ii. Input “Number of Stories”
- iii. Input “Year Built”, which the year in which the construction was completed. If the year built is unknown some useful resources may be:
 - Consult with a facilities manager
 - Look at the existing structural drawings
 - Contact the local building department
 - Consult an architect or structural engineer
- iv. Chose “Code for Building Design” from drop down menu if this is known. If this is unknown this cell can be left blank and a default assumption will be made from the value in “Year Built”. This information may be on the existing structural or architectural drawings.
- v. Chose “Design Code Year” from drop down menu if this is known. This cell can be left blank if this is unknown, and a default assumption will be made from the value in “Year Built”. *This information may be on the existing structural or architectural drawings.*
- vi. Indicate if there is a “Severe Vertical Irregularity” using the drop down menu (either “Yes” or “No”). See Figure 2 on page 9 of the supporting documentation for the description of a severe vertical irregularity. If this is unknown chose “No” as an assumption.
- vii. Indicate if there is a “Moderate Vertical Irregularity” using the drop down menu (either “Yes” or “No”). See Figure 2 on page 9 of the supporting documentation for the description of a moderate vertical irregularity. If this is unknown chose “No” as an assumption.
- viii. Indicate if there is a “Plan (Horizontal) Vertical Irregularity” using the drop down menu (either “Yes” or “No”). See Figure 3 on page 9 of the supporting documentation for the description of a plan (horizontal) irregularity. If this is unknown chose “No” as an assumption.