

## Metadata explanation of the BakerColoradoWUI file geodatabase – June 5, 2022

The dataset is a geodatabase that is usually used in the GIS program, ArcGIS, but can be opened in other GIS programs. The ColoradoWUIBuildingRisk Feature is the only feature (dataset) in this geodatabase. It includes individual records for each of the 2,185,953 building centroids in Colorado, including the fields that are used to classify each building into relative risk categories in Table 1 in the text.

In ArcGIS, to see the data, in a blank or new project, first click the “add data” icon. Then click on the geodatabase name, and you will see the ColoradoWUIBuildingRisk feature in the geodatabase. Click on it to add it to the blank project. Then click on Open Attribute Table to see the full dataset, which contains 11 fields and 2,185,953 records. This dataset can be exported into Excel or another program for further analysis.

Field	Explanation
OBJECTID_1*	Internal ArcGIS sequential number for each record
Shape	Internal ArcGIS name for the centroids
Shape_Leng	Internal ArcGIS measure of the length of the centroid in meters
NoKm2	Density of buildings within a 1000-m circular buffer centered on this building centroid (No./km <sup>2</sup> )
PercentCover	Percent cover of wildland vegetation within a 1000-m circular buffer centered on this building centroid
XCoord	NAD83 UTM Zone 13 Easting geographic coordinate of the nearest point to this building centroid, up to 2400 m, in a large (5 km <sup>2</sup> ) wildland vegetation patch. -1 = no nearest large patch of wildland vegetation within 2400 m.
YCoord	NAD83 UTM Zone 13 Northing geographic coordinate of the nearest point to this building centroid, up to 2400 m, in a large (5 km <sup>2</sup> ) wildland vegetation patch. -1 = no nearest large patch of wildland vegetation within 2400 m.
NEARDIST2	Distance (m), up to 2400 m, from this building centroid to the nearest large patch of wildland vegetation. 9999 = no nearest large patch of wildland vegetation within 2400 m.
RiskText	This is the classification into eight categories, using the WUI components (e.g., Interface, Intermix, Non-WUI) and distance from the building centroid to wildland vegetation, given in the second column of Table 1 in the text.
RelativeRisk	This is the digital version of the Relative Risk in Column 1 of Table 1 in the text, which sets the highest risk to 10, then scales the other seven categories by their estimate % home loss. See note a at the bottom of Table 1 for a worked example of how the other relative risks are calculated.
Relative Risk	This is simply the text version of RelativeRisk above

To work with data for particular parts of Colorado, add this ColoradoWUIBuildingRisk Layer to ArcGIS, zoom into the area of interest, and use clip or another selection method to select the records within a particular area of interest. Then export the records to a new Layer. The map in Figure 1 can be created for this new area of interest by assigning similar colors to the digital RelativeRisk field. If you have questions, you can email Dr. William L. Baker at [bakerwl@uwyo.edu](mailto:bakerwl@uwyo.edu). Metadata created on June 6, 2022