ABSTRACT
The Washington Geological Survey produced a lidar-based landslide inventory for the Washington side of the Columbia River Gorge, using a newly developed landslide inventory protocol. The inventory was based on 1-meter high-resolution lidar and contains detailed landslide mapping in portions of three counties: Clark, Skamania, and Klickitat. The landslides were given 17 attributes, including a movement azimuth, estimated failure depth, and movement type, as well as a unique ID number. The landslide inventory for the gorge includes over 2100 landslide polygons, expanding upon previous mapping in the area.

The landslide inventory, when digitized and analyzed, can be used by municipalities to make more informed planning decisions. With the largest landslide totaling nearly nine square miles. Over half of the mapped landslides are of a complex movement type. A major state highway, six cities, and many popular recreation sites including a national scenic area lie within the study area boundary.

Landslide Movement Types
The Washington Geological Survey divides landslide movement types into four major categories: rotational slide, translational slide, earthflow, and complex landslide. The mapper digitizes the polygon and uses a combination of the slope shade as well as a surface profile drawn with the 3D analyst tool in order to determine the movement type. Shown below are profiles of the four major movement types and the geomorphic signatures associated with them.