Potential Impact of Permanent Ground Deformation to Metro Emergency Transportation Routes
Cascadia Subduction Zone Magnitude 9.0 Earthquake Wet (Saturated) Soil Scenario

Closeup, Oregon Highway 8, showing potential permanent ground deformation (same color scale as main map)

Source Data:
Emergency Transportation Routes: Metro, 2006
Cities: Metro Regional Land Information System (RLIS), May 2017
Projection: Lambert Conformal Conic, EPSG 2913. Unit: International Feet.
Horizontal Datum: NAD 1983
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September 1, 2017

Potential Permanent Ground Deformation

- < 0.5 meters
- 0.5 – 1.0 meters
- 1.0 – 2.0 meters
- > 2.0 meters

Permanent ground deformation takes the maximum of earthquake-induced landslide and lateral spread from liquefaction (Plate 8).

Probability of occurrence for road areas with > 0.5 m permanent ground deformation is between 20% and 30% (Plate 9).

Emergency Transportation Routes in Columbia County (OR) and Clark County (WA) not analyzed nor fully represented in this map.

Highway labels are placed on areas with minimal to no ground deformation (< 0.5 m).

Not all cities are labeled.