

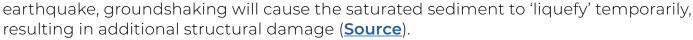
EARTHQUAKE FACTS

QUICK FACTS

- Over the next 50 years, the Wasatch Front region has a 57% chance of a 6.0 magnitude or greater earthquake, or a 43% chance of a 6.75 magnitude or greater earthquake
- In the event of a 7.0 magnitude earthquake, the Wasatch Front expects
 - 3,000+ deaths, nearly 10,000 injuries, and nearly 85,000 displaced households, putting the earthquake among the deadliest natural disasters in U.S. history
 - Critical utilities (power, natural gas, water, sewer, telecommunications) and transportation to be down for weeks to months
 - \$33.2 billion in economic losses
 - Lasting damage to our economy and way of life

IMPORTANT DEFINITIONS

- **URM:** Unreinforced Masonry Building, a building constructed of brick or block without reinforcing steel (**Source**). URMS are one of the primary sources of deaths and injuries in an earthquake.
- Retrofitting: Adding structural reinforcement and other seismic upgrades to existing buildings that are vulnerable to collapse (i.e. URMs) during an earthquake (Source). Some retrofits are designed to re uce the risk of death or injury, while others will also increase the likelihood of functional recovery of the building.
- Liquefaction: As a result of Lake Bonneville, much of the Wasatch Front is located on saturated sediment. During a major
 earthquake groundshaking will cause the search of t





RELEVANT REPORTS

- A Strategic Plan for Earthquake Safety in Utah by Utah Seismic Safety Commission;
 link
- Scenario for a Magnitude 7.0 Earthquake on the Wasatch Fault—Salt Lake City Segment by Earthquake Engineering Research Institute, Utah Chapter; <u>link</u>
- Earthquake Preparedness & Resilience by BYU & Envision Utah; link
- Planning for Infrastructure Resilience by Joseph DeAngelis, AICP, Haley Briel, Michael Lauer, AICP; link
- 2018 Annual Report by Western States Seismic Policy Council; link