M7.2 Baja, Mexico, Earthquake of 4 April 2010

**Tectonic Setting**
- The magnitude 7.2 Baja California earthquake of 4 April 2010, occurred approximately 40 km south of the Mexico-U.S. border at depths along the principal boundary zone. This is an area with a high level of historical seismicity, and also the area where the Pacific plate subducts beneath the North American plate. 
- The April 4 event is the largest earthquake to strike this region since 1954. 
- The epicenter of the 4 April 2010 earthquake was located about 20 km offshore in the Salton Trough, faulting occurred along a strike-slip fault system. The April 4 main shock occurred along a right slip segment of the plate boundary, but correlates with the southwestern part of the Trans-Pecos fault. Although the exact slip vector of the earthquake are constrained, the April 4 earthquake may have associated with extensive surface faulting. 

**Seismic Hazard**
- Seismic hazard is expressed in peak ground acceleration (PGA) and spectral acceleration (SA). PGA is the peak acceleration of ground motion that is experienced during an earthquake, and SA is a measure of the effect of seismic waves on a structure. 

**Epicentral Region**
- The epicentral region includes the major cities of Baja California and the neighboring states of California and Arizona. 

**Earthquake Summary Map**
- This map is a summary of the earthquake event, including details such as the epicenter, magnitude, depth, and estimated surface rupture. 

**Estimated Population Exposed to Earthquake Shaking**
- This map shows the estimated population in the affected region based on the magnitude of the earthquake. 

**Table: Earthquake Data**
- The table provides details on past earthquakes in the region, including the date, location, magnitude, and depth. 

**Explanations**
- The explanations provide additional context and information about the earthquake and its impact.