



MEASURING THE  
**EARTH**  
THE SCIENCE OF  
**GEODESY**

**EARTHQUAKE EARLY WARNING** Real-time GPS data, in combination with seismic instrumentation, allows scientists to detect earthquakes quickly and warn people of impending shaking. Earthquake early warning systems are currently being developed for the western United States and could give enough warning to safely shut down public transportation, land planes, stop surgeries, and mobilize emergency services to prevent significant damage and loss of life.

*Photo: Earthquake damage near Mexicali, Mexico by Ken Hudnut, USGS*



a monthly series on the how and why of geodesy