

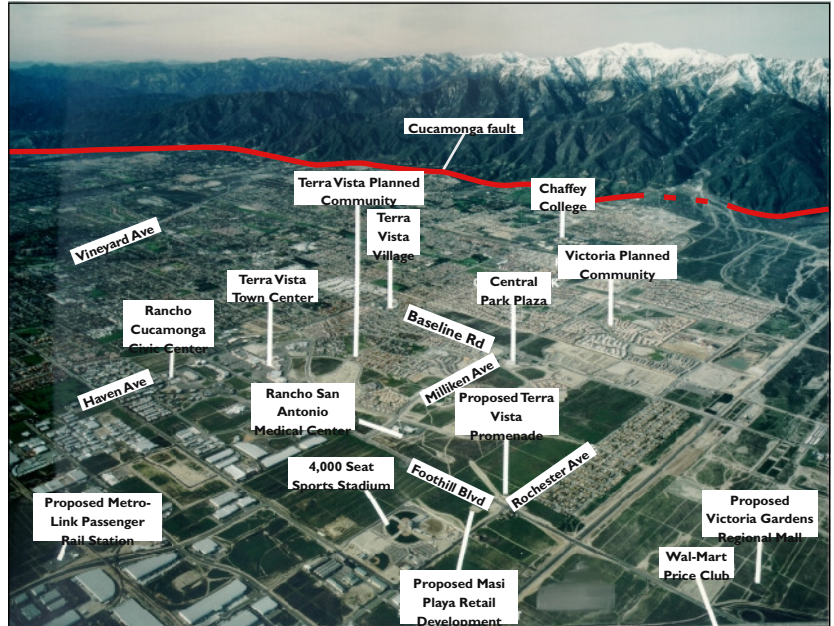


HAZARD ASSESSMENT STUDY FOR THE SAFETY ELEMENT OF THE GENERAL PLAN for the City of Rancho Cucamonga, California

PROJECT DESCRIPTION

Rancho Cucamonga sits at the base of the San Gabriel Mountains in San Bernardino County. While the City is susceptible to a variety of natural and man-made hazards, the event with the greatest potential for loss of life, property damage and economic destruction is an earthquake. In addition to ground shaking and surface rupture caused by earthquakes, Rancho Cucamonga is also susceptible to various other hazards such as: landslides, wildfires, dam failures, toxic chemical releases, and foundation failures caused by liquefaction and subsidence.

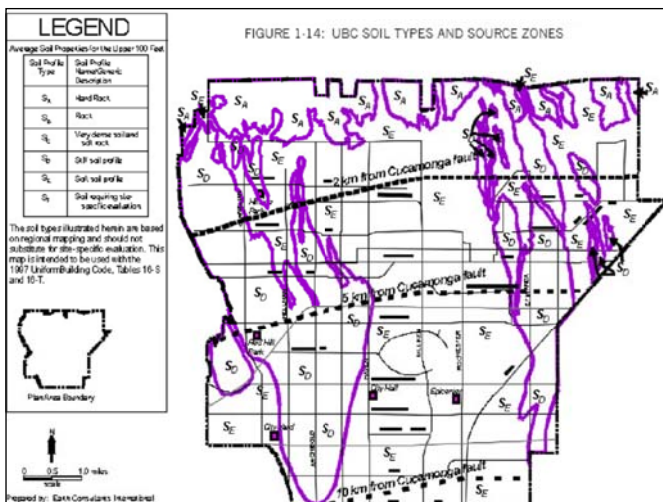
In accordance with state law, the City prepared a new Safety Element of their General Plan that addresses these hazards, and that contains goals and policies aimed at reducing the risk associated with them. *Earth Consultants International* was retained by the City of Rancho Cucamonga to conduct a Hazards Assessment Study for the City's new Safety Element.



Aerial Photo of Rancho Cucamonga showing various landmarks, including the Cucamonga fault in red

SOLUTION

Our report primarily addressed seismic and geologic hazards, and hazardous materials issues. Using HazUS™, we performed loss estimations for earthquake scenarios on the Cucamonga, San Jacinto, and San Andreas faults. We created GIS-based maps that include: known and inferred fault locations, fault hazard management zones, potential liquefaction zones, potential dam and water tank failure-inundation areas, Uniform Building Code (UBC) soil types and near-source seismic zones, regions of slope and soil instability, and significant hazardous materials sites.



Uniform Building Code Soil Types and Seismic Source Zones in the City of Rancho Cucamonga are used to regulate structural design for new buildings. Internal review of development plans insures that the plans are compliant with the City's goals, policies, and standards.

