4. EARTHQUAKE EFFECTS ON HOSPITALS, SCHOOLS, FIRE AND POLICE STATIONS

4.1 Effects on Hospitals

Of the several large hospitals serving the greater Santa Barbara area, one, namely Goleta Valley Community Hospital, is located in Goleta, the area that was hardest hit by the earthquake. More than fifty persons injured in the earthquake sought emergency treatment at the Goleta hospital. The most serious injuries consisted of a broken back, second and third degree burns from scalding water, and numerous cases of lacerations from shattering glass. Cottage Hospital in downtown Santa Barbara reported more than ten cases of earthquake related injuries.

None of the hospitals in the quake area suffered any serious damages to buildings or equipment. As a precaution against potential injuries from aftershocks, and also to aid quake victims, Goleta Valley Community Hospital instituted an emergency plan following the earthquake. According to this plan resident nonambulatory patients were wheeled to safety outdoors, and an emergency treatment center was set up temporarily outdoors with signs directing the injured to specific types of treatment. The single story Goleta Hospital building sustained some light plaster cracking. In addition, a 10,000 lb chiller in the hospital basement was thrown off its vibration isolation supports, and some pipes were broken. The earthquake activated the emergency power supply system of the hospital even though a power outage had not occurred.

4.2 Effects on Public Schools

The public elementary and high schools in the Goleta area generally performed very well, and only minor damages occurred. The damages were exclusively architectural in nature, and not structural. As observed in previous earthquakes, the seismic resistance of public school structures demanded by the Field Act was sufficient to prevent structural damages. No injuries resulted from the architectural damage because schools were not in session. Some window panes were broken and shattered, plaster walls were cracked, and acoustical ceilings were dislodged. Damages to the acoustical ceilings occurred typically at the periphery of the T-bar networks supporting the acoustical tiles, where the T-bars abut against the side walls. In those cases where the T-bars were anchored to the walls, only the tiles were shaken loose. However, in those cases where the T-bars were not anchored, both T-bars and tiles fell to the floor. Some acoustical tiles glued to ceilings and side walls were also dislodged by the earthquake.

4.3 Effects on Private Schools

St. Vincent's School for Disabled Children, a private school, suffered extensive architectural damage to its residential building constructed in 1924. This school building varies between two and three stories in height and is of concrete construction, with a concrete frame and concrete floors. As a result of the earthquake, the building's unreinforced tile filler panel walls cracked through the mortar. Damages were estimated to be over $200,000. Private schools in California do not have to meet the earthquake resitance criteria of the Field Act.

An old two story adobe school house also received significant damage. This private school house, located in Goleta on the west campus of UCSB is currently used as a student residence hall. The interior and exterior adobe walls suffered cracks in localized areas on the second floor which potentially weakened the bearing capacity of the walls.

4.4 Effects on Fire and Police Stations

No significant damages were reported by city and county police and fire stations. Firefighters were able to respond to calls for assistance following the quake in a routine manner. Under a mutual aid agreement, fire engines were brought in from neighboring Ventura County, but they were not used. Most calls for assistance were from homeowners requiring help with gas and water leaks.

4.5 Acknowledgments

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