

ECONOMIC BENEFITS OF EARTHQUAKE-RESISTANT BUILDINGS



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WHY BUSINESS AND GOVERNMENT SHOULD
INVEST NOW TO PROTECT CALIFORNIA
FROM DEVASTATING EARTHQUAKES



EXECUTIVE SUMMARY

As this paper was being finalized, California received what Governor Gavin Newsom termed “a wake-up call” in the form of two major earthquakes in the Ridgecrest area. The double blow of a 6.4 quake followed by a 7.1 temblor, plus thousands of smaller quakes, the likes of which had not been felt by Californians in decades.

This timely paper presents important information from many sources to demonstrate that earthquake resistant buildings are a sound economic investment for business and government entities, particularly those that serve or employ large numbers of people or house vulnerable populations.

Building damage is the primary cause of death, injury and property loss suffered from earthquakes. Many building codes considered safe 25 years ago have now been proven to be ineffective in guarding against the violent ground movement experienced in a major quake. Scientists and engineers have pinpointed five main building types that present particular risk to building owners, tenants and the communities served by those structures.

The identification of these vulnerable building types has sparked considerable debate for property owners, businesses and governments. Some building owners and cities have chosen to pursue seismic retrofits to save lives, protect existing assets and ensure the economic and social well-being of the community-at-large. Others have opted to do nothing, taking a gamble that their buildings will stay standing without a retrofit after a major earthquake. Many others remain undecided: uncertain about the right path to follow.

Several independent studies show the money spent to retrofit existing building stock has significant benefits. These include: lower building repair and replacement costs, continuation of building function that reduces business interruption, preservation of revenue streams and, most importantly, improved life safety.

Other major economic risks to property owners and businesses when retrofit work is not done include owner's liability for negligence due to death and injuries caused by failure of buildings, business relocation costs, destruction of equipment and inventory, displacement of key employees, loss of goodwill, and loss of business opportunities.

Governments across California also face serious economic and social risks from major earthquakes. The entire social and economic fabric of communities can be extensively impacted as businesses close, workers lose their employment, infrastructure networks and systems such as water, electricity and gas are compromised, housing becomes uninhabitable, public facilities are rendered inoperable, and public services are disrupted.

Unfortunately, there is a myth that the economics of retrofitting are not practical. In fact, retrofitting is a good business investment that protects businesses, property owners, residents, communities and government agencies in the event of earthquakes.

The reality is that Californians cannot hide from the type of major earthquakes projected by seismic experts. But we can and should take steps now in order to be as prepared as possible to survive the next major quake and preserve our quality of life in the Golden State.