

November 2018 Vol. 5 Issue 8

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HOW MEXICO CITY WILL BE REBUILT

THE MISSION IS TO RECONSTRUCT SAFER
BUILDINGS AND PROVIDE FINANCIALLY
FEASIBLE SOLUTIONS FOR PEOPLE WHO
LOST THEIR HOMES.

By H. Kit Miyamoto, Ph.D., S.E.

IT'S SUNDAY MORNING IN MEXICO CITY. I am in a small dark conference room packed with people from all walks of life. Their facial expressions are earnest and distressed. They are owners of apartments in a high-rise building that was really badly damaged and, in some cases, collapsed, in last year's earthquake. One by one, they start to ask me questions.

Last year on Sept. 19, a 7.1-M earthquake affected thousands of buildings in Mexico City, even though the epicenter was hundreds of miles away. After the Spanish conquest of the Aztec empire, the Spanish turned a large lake into one of the largest megacities in the Americas. The city is essentially sitting on deep soft soil. This soil resonates with long-distance earthquakes and creates dangerous motion for taller construction.

The earthquake collapsed 44 buildings and the city estimates that more than 800 buildings were severely damaged and need to be taken down. More than 400 people died, and thousands more lost homes and their investments. Most of these buildings are older nonductile concrete structures, which are well known for earthquake risk. Most of the damaged buildings are mid-rise apartment buildings that housed tens of thousands of people.

Our mission is to not only reconstruct safer buildings but provide financially feasible solutions for people who lost their homes. The city has a plan that allows home owners to reconstruct 35 percent taller than what zoning allows. This is a smart concept. Mexico City is developing fast and the value of housing is rising exponentially. It even sometimes matches property prices in U.S. cities.

This enables a developer to rebuild a whole building and sell the 35 percent additional condominiums. Existing owners can return to their newly constructed apartment with little or no cost, and they are safer and architecturally more suited for modern city life. Developers make a decent return on investment for their capital investment. I call this a private-sector driven approach to disaster reconstruction.

Strategy — a similar concept was applied in the aftermath of the 1995 Kobe Earthquake and the city was rebuilt bigger, better, and safer. Fast — I really feel this will be a successful program, judging by the entrepreneurial spirit of the Mexican people and robust engineering capacity.

The energy of this city is something else. Its vivid culture, music, history, and food is everywhere. You may not have had the chance to visit Mexico City; it is often overlooked by international tourism for Mexico's mega beach resorts. But I highly recommend it. Its historical center rivals any ancient European city and, on top of it, Mexico has unbelievably good food and music.

An elderly homeowner raised a hand and said thoughtfully, "I appreciate you coming here to talk to us. We needed good information on engineering and financial solutions. It is still a long way to go, but I am hopeful."

A comment like that keeps us going through a long day in a post-disaster zone.

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