Success Story: Building a Network of Damage Assessment Experts in Mexico City

Introduction
Two years after a magnitude 7.1 earthquake hit central Mexico, Miyamoto continues to build disaster resilience in Mexico City through the USAID/OFDA PREPARE II program. A successful series of “train-the-trainer” workshops provided the opportunity for knowledge sharing and capacity building that resulted in 41 engineers trained in Rapid and Detailed Damage Assessment methodology from all 16 municipalities in Mexico City. This achievement was possible thanks to months of strategic planning with a critical partner, the Secretariat of Integral Risk Management and Civil Protection of Mexico City.

A New Perspective: Virtual Reality Goggles Let Engineers Assess Damage
A four-day workshop combined classroom instruction and video footage with a cutting-edge, virtual-reality assessment tour provided by the National College of Construction Engineers (CONAIC). For the first time ever, engineers from throughout Mexico City used their smartphones and virtual-reality goggles to witness a 360-degree tour of a building damaged during the 2017 earthquake.

The technology allows users to walk around the building and examine each floor, room and crack in
order to practice making accurate assessments and appropriate categorizations of damage. The trainers supplemented the virtual technology with first-hand video footage and professional insights, providing the participants with a comprehensive overview of damage assessments and on-site safety evaluation.

The workshop was notably attended by the Secretary of Integral Risk Management and Civil Protection, Architect Myriam Urzúa Venegas, who made inaugural remarks and participated in many of the activities. The Secretary expressed continued interest and commitment to building Mexico City’s resilience and capacity to respond to disasters.

In surveys collected after the workshops, participants expressed gratitude, with one writing: “The topics discussed are very interesting. They contribute greatly to our own criteria on structural evaluation and it gives us in a detailed form the steps to follow for a solid evaluation.”

Miyamoto International will score participants’ diagnostic tests and workshop performance in order to recommend individuals to the Civil Protection Unit. Selected participants will attend a USAID/OFDA “Training for Instructors” course, during which they will gain the skills to facilitate the complete four-day seminar and transfer that knowledge to additional engineers within their respective municipalities.

In response to the outstanding success of the workshops, the Secretariat requested that the PREPARE II project train an additional 70 technical specialists. Ultimately, a widespread and expertly trained roster of engineers will be prepared to respond quickly and efficiently in the case of future disasters, ensuring the safety and resilience of Mexico City’s urban infrastructure and economy.