Figure 3. Road damage estimated for Antofagasta, Chile.

people would die and almost 7,000 would be injured, requiring hospitalization. An estimated 43,000 people would be left homeless by the disaster. The estimations also show that it would take at least 6 months to clear the debris.

In Guayaquil, it was estimated that more than 26,000 people would die and almost 53,000 would be injured, requiring hospitalization. It would take about 1 week to start providing emergency housing after the disaster, 1 month to start providing temporary housing and up to 2 years to reconstruct or repair the damaged houses. The estimations also show that the city would be without power for up to 1 week and without potable water for almost 2 weeks.

The estimation prepared for Tijuana indicated that 1 percent of the residential buildings, where 25,000 people live, would be destroyed and 35 percent of the residential buildings, providing dwellings to 325,000 people, would suffer severe damage. As a result, more than 18,000 people would die and almost 37,000 would be injured, requiring hospitalization. An estimated 130,000 people would be left homeless by the disaster. The estimations also showed that it would take about 1 month for the water supply system to recover 30 percent of its pre-earthquake capacity and more than 2 months to recover completely.

The results of the damage estimation were used to prepare a preliminary earthquake scenario. The scenario was presented and discussed by representatives of the various sectors of the community during the scenario workshops that were held in each city with the following objectives:

- Presentation of the results of the seismic damage estimations to the community, with the request for comments;
- Estimation of the impact of the estimated damage on the city activities;
- Development of ideas for actions to reduce the impact of an earthquake on the city's life; and
- Discussion of the institutionalization of risk-management activities in the city.

The information produced in the workshop was used to prepare the final version of the earthquake scenario that was published and distributed to the community. Figure 4 shows some of the participants of the scenario workshop in Guayaquil.

Planning

The results of the damage estimation and the ideas for risk management activities produced during the scenario workshops were used to prepare action plans to reduce each city's seismic risk. Frequent working meetings were carried out with city officials in charge of implementing risk management activities in order to define objectives, tasks, schedules, and budgets of the activities provided for the action plan.

The proposed activities addressed the three stages of disasters: (a) pre-disaster, when preparedness and mitigation are important; (b) during and immediately after the disaster, when the emergency response capability is depended on; and (c) post-disaster, when the city's capability to recover in the shortest possible