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This study has made a significant contribution toward improving our understanding of earthquakes in this region by forecasting potential losses. The primary estimates in this study may be used in several ways *before* and *after* an earthquake:

### **To Mitigate Possible Losses Before an Earthquake**

Reducing earthquake loss begins before the earthquake. Loss estimates provide public and private sector agencies with a basis for planning, zoning, building codes, development regulations, strengthening of vulnerable essential facilities, and policy that reduce the risk posed by ground shaking. Loss estimates can also be used to evaluate the cost effectiveness of alternative approaches to strengthening potentially hazardous structures.

### **To Prepare Response Before an Earthquake**

Understanding the scope and complexity of earthquake damage is essential to effective preparedness. This study forecasts damage to buildings, number of casualties, and disruption of key facilities. These estimates can be the basis for developing emergency-response plans needed to cope with an earthquake-related disaster.

### **To Speed Response and Relief After an Earthquake**

Typically, the first 24 hours after an earthquake are the most crucial for saving lives and reducing injuries. Expediting relief to vic-

tims may help to reduce loss of life and complications from injuries. Response and relief agencies can use this study to predict the likelihood of casualties, damages, economic loss, and the number of homeless, as well as to estimate the financial and material resources necessary to assist victims. Regional, state, and federal officials may use estimates of injuries and casualties to project demand on medical resources.

### **To Improve Disaster Resiliency of the Area**

With a solid foundation of accurate regional data, the modeling approach can be extended to other disasters (hurricane, flood, snow storm, landslide, tornado, explosion, terrorism) in an effort to improve the disaster resiliency of the metropolitan area.

### **To Promote Public Awareness of the Potential Problems**

Typically, localities with infrequent earthquakes place a low priority on seismic code development, adoption, and enforcement. This study describes potential consequences and their significance in the community and region in an effort to promote public awareness of the potential problems. The information could also be used to support the adoption and enforcement of seismic building codes in regions of the United States that experience infrequent, but damaging, earthquakes.