BUILDING LOSSES IN THE REGION

The figures to the left summarize the total building-related losses per census tract for the region of study, based on the magnitude of the deterministic scenario earthquakes (M5, M6, M7) or the average return period (100, 500, 2,500 years) for the probabilistic case. The total value listed next to each figure includes both direct building losses and building-related business interruption losses:

- **Direct building losses** (also known as “capital stock loss”) are the estimated costs to repair or replace the damage caused to the building and its contents.
- **Business interruption losses** (also known as “income-related loss”) are financial losses related to the length of time a facility is non-operational, including relocation expenses, loss of services or sales, wage loss, and rental income loss to building owners.

As expected, the total building-related loss estimates are larger for significant events (i.e., those with longer average return periods and/or greater magnitude). Thus, the greatest loss per census tract among all tracts in the region ($2.411 million) occurs for the probabilistic 2,500-year recurrence period, as illustrated in the figure on this page.

**Greatest Losses in New York County**

The bar graph on this page indicates that in a 2,500-year event, New York County (Manhattan) would experience the greatest building-related loss in the region, estimated at $11.45 billion. The majority of total losses would be produced by residential structures (roughly 50-60 percent of the total loss estimates, depending on the scenario), which are predominately unreinforced masonry. For the probabilistic 2,500-year recurrence period, the combined building losses ($64.3 billion) and income losses ($20.4 billion) for the entire 31-county, Tri-State region could amount to $84.8 billion, and for the M7 deterministic scenario event, the expected loss could amount to $196.8 billion, as stated in the “Key Findings” of this report.

**Manhattan would experience the greatest building-related loss in the region, estimated at $11.45 billion of about $85 billion for the entire study region.**