The theme of this issue pertains to extreme loading. Some extreme loads can be expected to occur in combinations. The Tohoku earthquake of March 2011 precipitated a tsunami. High winds can turn lightning fires into firestorms. Hurricanes may bring flooding along with—or soon after—the winds. In the fall of 2012, Hurricane Sandy precipitated both flooding and fires. Building codes and governments should take into account possible and likely scenarios and prepare for combined events.

In “Counting the Cost of Calamities” in its January 14, 2012, issue The Economist observed, “The world has succeeded in making natural disasters less deadly, through better early-warning systems for tsunamis, better public information about evacuation plans, tougher building codes in quake-prone areas [emphasis mine] and encouragement for homeowners to adopt simple precautions such as installing tornado-proof rooms in their homes. Annual death tolls are heavily influenced by outliers, such as Haiti’s earthquake in 2010 (which killed more than 200,000) or the Bangladeshi cyclones in 1970 (300,000). But, adjusted for the Earth’s growing population, the trend in death rates is clearly downward.”

In “The Rising Cost of Catastrophes” from the same issue, The Economist says that the reason that we see more reports and more dramatic reports of natural disasters is not that there are necessarily more or more severe natural disasters but that “the world’s population and output are becoming concentrated in vulnerable cities near earthquake faults, on river deltas or along tropical coasts.” The concentration of population in such areas is not necessarily problematic. “When poor people leave the countryside for shantytowns on hillsides or river banks they are exposed to mudslides and floods, but also have access to better-paying, more productive work. Richer societies may lose more property to disaster but they are also better able to protect their people. Indeed, although the economic toll from disasters has risen, the death toll has not, despite the world’s growing population.”

The bottom line is that building and bridge codes save lives. Developing and enforcing such codes is only part of what societies do to protect their people, but it’s the part that PCI is directly involved in.

As The Economist says in “The Rising Cost of Catastrophes,” “disasters are inevitable; their consequences need not be.”