

# Designing for Resilience

The AIA supports policies, programs, and practices that promote adaptable and resilient buildings and communities. Buildings and communities are subjected to destructive forces from natural and human-caused hazards such as fire, earthquakes, flooding, sea level rise, tornadoes, tsunamis, severe weather, and even intentional attack. The forces affecting the built environment are evolving with climate change, environmental degradation, population growth, and migration; this alters long term conditions and demands design innovation. Architects design environments that reduce harm and property damage, adapt to evolving conditions, and more readily, effectively and efficiently recover from adverse events. Additionally, the AIA supports member training and active involvement in disaster assistance efforts, providing valuable insights and aid to communities before, during, and after a destructive event.

—AIA Position Statement on Resilience

## Design is the solution: no one-size-fits-all approach

Each community is unique in its challenges. One community faces sea level rise and skyrocketing housing costs, while another community addresses vacant properties and job loss. These wide-ranging and complex risks and conditions preclude the use of cookie cutter solutions. Complex challenges require innovative solutions.

## Vulnerability in many forms: addressing shocks and stresses

Acute events and chronic challenges prevent communities from thriving. Being resilient to shocks and adaptable to stresses, being proactive not just reactive, and planning today for high performing buildings tomorrow requires design thinking.

### Shocks

Infrastructure failure  
Hurricanes  
Earthquakes  
Wildfires  
Heat waves  
Blizzard  
Epidemics  
Flooding  
Tornadoes  
Acts of terrorism  
Civil unrest  
Dam failure  
Subsidence

### Stresses

Affordability  
Aging population  
Environmental degradation  
Sea level rise  
Growing wealth gap  
Drought  
Species extinction  
Aging infrastructure  
Population growth  
Unemployment  
Melting polar ice  
Global warming  
Food scarcity  
Increasing pollution

## A balance: the planet, people + prosperity

Buildings have a direct and indirect impact on the environment, and likewise what takes place in a community has an impact on the performance of a building—the natural resources and infrastructure that energy, water and waste systems in a building depend upon; the jobs, schools and grocery stores that feed and grow a family. It is the architect's role to balance these interdependencies to create healthy, environmental, social and economically sustainable communities.

## Role of the architect:

Architects are uniquely positioned to develop innovative approaches for improving our nation's resilience across a wide variety of scenarios. Architects are:

### systems thinkers

who blend environmental science, building science and social science

### project leaders

absorb incredible amounts of information, prioritize issues to guide decision-making

### public servants

whose license comes with the obligation to “protect the health, safety and wellbeing” of the public

### facilitators

engage occupants, jurisdictions and communities in participatory design processes

### visionaries

communicate a future imagined reality with creativity, innovation and the visual skills to convey ideas

