Adapting to Rising Tides

The **Adapting to Rising Tides (ART)** assessment of vulnerability and risk of San Francisco Bay Area shoreline and community resources to sea level rise and storm events has revealed a number of overarching vulnerabilities. These fall into five themes: population characteristics, certain land uses, emergency preparedness and response, information gaps and networked infrastructure.

SOCIETY & EQUITY ECONOMY

Emergency Preparedness and Response

The practice of emergency planning does not adequately address the contingencies and secondary impacts associated with widespread or long lasting sea level rise or storm event impacts. For example, transportation infrastructure in the Bay Area that is critical during an emergency or disaster is not resilient, and this could lead to consequences on day-to-day community and economic functions.

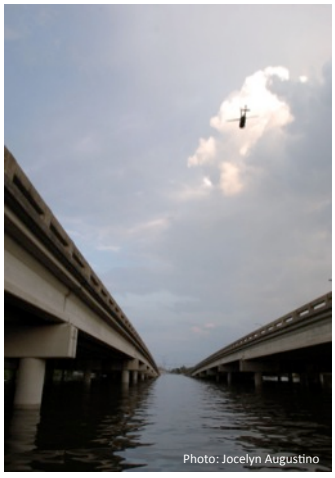
Photo: Jocelyn Augustino

There is very little redundancy of regionally significant transportation assets, and where alternatives exist, many have have limited capacity to accommodate additional traffic. If major transportation assets are disrupted, the re-routing of commuters and goods would result in heavy congestion that could overwhelm the region's roadways, interstates, transit systems, and non-motorized transportation corridors.

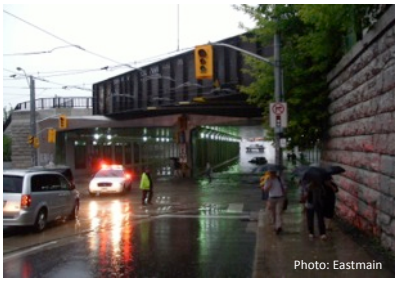
Photo: Eastmain

The lack of adequate alternatives can leave residents and facilities in some communities isolated during emergencies or disasters and unable to complete daily travel. This risk is even greater for communities or facilities that are linked to the transportation network by a limited number of roads or transit providers.

Example Adaptation Actions

Develop and maintain transportation asset management plans with information on location, elevation, age, condition, expected useful life, replacement cost, and rehabilitation schedule.

Conduct a "hot spot" analysis to **identify key routes and nodes** critical to goods and community mobility, **assess vulnerability and risk**, and **develop actions to improve resilience** to sea level rise and storm events.

Review and update existing policies, procedures, and practices, particularly those that are weather-related, to support the planning, design, or redesign of resilient transportation assets.