

National Hurricane Program

Working for Safer Communities

Metro New York Hurricane Transportation Study

A partnership between the U.S. Army Corps of Engineers, FEMA, the National Weather Service, and emergency management departments from New York, New Jersey, and Connecticut examined the potential impacts of hurricane landfall on the greater New York metropolitan area. Among the findings in the group's 1998 report:

- Coastal storms that would present moderate hazards in other regions of the country could result in heavy loss of life and disastrous disruptions to communication and travel in the Metro New York area.
- Depending on the intensity, approach direction, and forward speed of a landfalling hurricane in Metro New York, a storm surge of up to 30 feet above normal tide could be generated in some locations.
- When potential storm heights are compared to critical tunnel entrance elevations, which are as low as 7 feet above mean sea level, the vulnerability of underground mass transit is apparent.
- As a hurricane approaches, the rate-of-rise of storm surge could increase dramatically, with a rate as much as 12 feet per hour with a Category 3 hurricane. Emergency management officials must anticipate, rather than react to, this hazard for effective hurricane emergency response.



- Extreme winds associated with an approaching hurricane will have major impacts on the operation of high-level bridges and high-rise buildings.
- Heavy rainfall preceding hurricane landfall could severely affect critical mass transit and highway locations, particularly in northern New Jersey areas that are subject to riverine flooding.
- Seaports, bridges, airports, mass transit, and highway facilities, because of their varying degrees of vulnerability to storm surge, wind, and rainfall, are expected to close at different times.
- Mitigation measures to reduce potential loss of life and property will be important. Coordinated, early decision making among governmental and transportation agencies will help ensure the success of hurricane response.