MUNICIPAL RESILIENCE & CLIMATE ADAPTATION PLANNING

Municipal resilience and climate adaptation planning is an investment in the future of your community. It allows you to undertake a comprehensive planning process that employs local knowledge to identify natural and weather-related hazards, recognize your strengths and vulnerabilities, and prioritize actions to help prepare your community for the future. A successful resilience planning process results in a list of clear actions that you can implement to improve resilience, reducing your disaster recovery time and cost. **This process makes you eligible for additional funding to assist in financing the cost of important infrastructure and resilience-building projects.** Many projects will need to be completed one way or another, so resilience planning can help make them more efficient and cost-effective for your community.

Building resilience and increasing vulnerability preparedness is a long-term strategy for protecting your local resources and preserving the value of public investments. Many of the municipal infrastructure projects you are currently undertaking have design lives of 50 years or more. Resilience planning can ensure your projects are engineered to withstand the weather events of today, as well as the climate statistics predicted for our future.

Pare Corporation has the technical expertise and regional knowledge to guide your community through a resilience planning process, paving the way to realistic projects that have a measurable cost-benefit for the community. Pare can help you:

- Assist with securing funding to receive state-based resilience planning certification
- Develop, conduct, and document community workshops, public meetings, and other engagement efforts during the planning and implementation efforts
- Manage the development of a repository of information for public engagement throughout the resilience process
- Prepare detailed **Community Resilience and Climate Adaptation Plans**, including supporting Geographic Information Systems (GIS) data
- Complete annual state and federal reporting
- Develop a detailed implementation plan with timeline, scope, phasing, and funding sources
- Support the application process for resilience-building **grants and loans**
- Coordinate with stakeholders, supporting organizations, regulatory and permitting agencies, elected officials, and municipal departments
- Perform detailed vulnerability and risk assessments, and conduct feasibility studies for priority actions
- Develop and/or update Emergency Action Plans, Hazard Mitigation Plans, Flood Mitigation Plans, and other documents as identified in the resilience planning process

Every $1 spent on resilience and disaster preparedness saves taxpayers $6. Designing and building to exceed current building codes can result in a benefit of $4 for every $1 invested.

[National Hazard Mitigation Saves: 2017 Interim Report, National Institute of Building Sciences, December 2017]

CLIMATE STATISTICS FOR THE NORTHEAST

Sea level along coastlines in the Northeast has risen approximately one foot since 1900 — exceeding the global average by 50%. Sea level rise in the region is expected to continue exceeding global averages.

The amount of precipitation falling in very heavy events between 1958 and 2010 increased by more than 70% in the Northeast, more than any other region in the United States.

Temperatures in the Northeast rose by almost 2°F between 1895 and 2011. The frequency, intensity, and duration of heat waves is projected to increase over the next century, stressing both public and private infrastructure.

Hurricane Florence was the 12th 1-in-1,000-year rainfall event in the U.S. since the beginning of 2016. Heavy precipitation is happening more and more frequently.

Hurricane Irene brought catastrophic inland flooding due to heavy precipitation, costing an estimated $16 billion in economic losses. Superstorm Sandy caused an estimated $60 to $80 billion in damages, with most severe damage caused by storm surge along the coast.

[Source: U.S. Climate Resilience Toolkit &