



## Site-Specific Recommendations

### Watervliet Fire Department

County-Municipal Partnership

#### Need

An important component of building resilience is identifying flood-prone structures – particularly those that have experienced repetitive losses and/or are critical facilities whose operation could be disrupted by a flood – and relocating them or adapting the structure and site to withstand future flood events. The Watervliet Fire Department is located at the edge of the FEMA 100-year floodplain and in the 500-year floodplain. As part of the **Risk Assessment** presented in Chapter 3, the Fire Department was classified at extreme climate risk due to its location in an area with major flood risk (80% chance of flooding over 30 years) and severe heat and social vulnerability. Further, the Fire Department is located on top of the former Erie Canal and is experiencing subsidence in several locations, which is causing structural damage to the facility and creating unsafe conditions for firefighters and emergency responders. The Watervliet Fire Department is proactively exploring options to relocate and construct a new facility to reduce its exposure to environmental hazards. This project uses Watervliet as a case study for County-municipal cooperation and outlines an approach for assisting the Watervliet Fire Department in relocating their currently undersized and flood-prone facility to a new location to improve emergency response operations.

#### Recommended Actions

##### 01 The County should partner with the Watervliet Fire Department to identify a suitable site for a new fire station.

This site must be located in an area with a low risk of flooding and provide easy access to the Fire Department's service area. The new site should be able to accommodate an approximately 20,000-square foot structure.

##### 02 Support the Watervliet Fire Department in securing funding to acquire a new site and build a new fire department and emergency response facility with the following features:

- Approximately 20,000-square foot structure (the current firehouse is 13,000 square feet); a two-story structure is possible if required based on the new site configuration
- 5+ drive-through bays (doors in front and back to reduce hazard of backing into station)
- Radio/watch room
- Firefighting gear decontamination area
- Medical equipment decontamination area
- Expanded meeting/classroom area
- Expanded commercial kitchen with daytime room
- Fitness room
- Laundry and fire gear cleaning/drying room
- Hose cleaning and drying area
- Firehouse vehicle exhaust system
- Firehouse back-up generator(s)
- Outdoor crew gathering area
- Spare equipment storage area
- LEED building standard (which would be supported by FEMA CRS as encouraged in **Project 4**)
- Separate sleeping quarters, gender-specific restrooms and showers
- Public restrooms
- Administrative offices for chief, company officer, fire investigators, EMS coordinator, union

#### Implementation

##### Planning-level Cost Estimate

\$13,500,000 to \$14,000,000\*

*\*This is an all-in number, including design, permitting, owner contingency separate from the estimate contingency, and furniture, fixtures, and equipment. This cost estimate does not include the costs of site acquisition.*

##### Potential Funding Sources

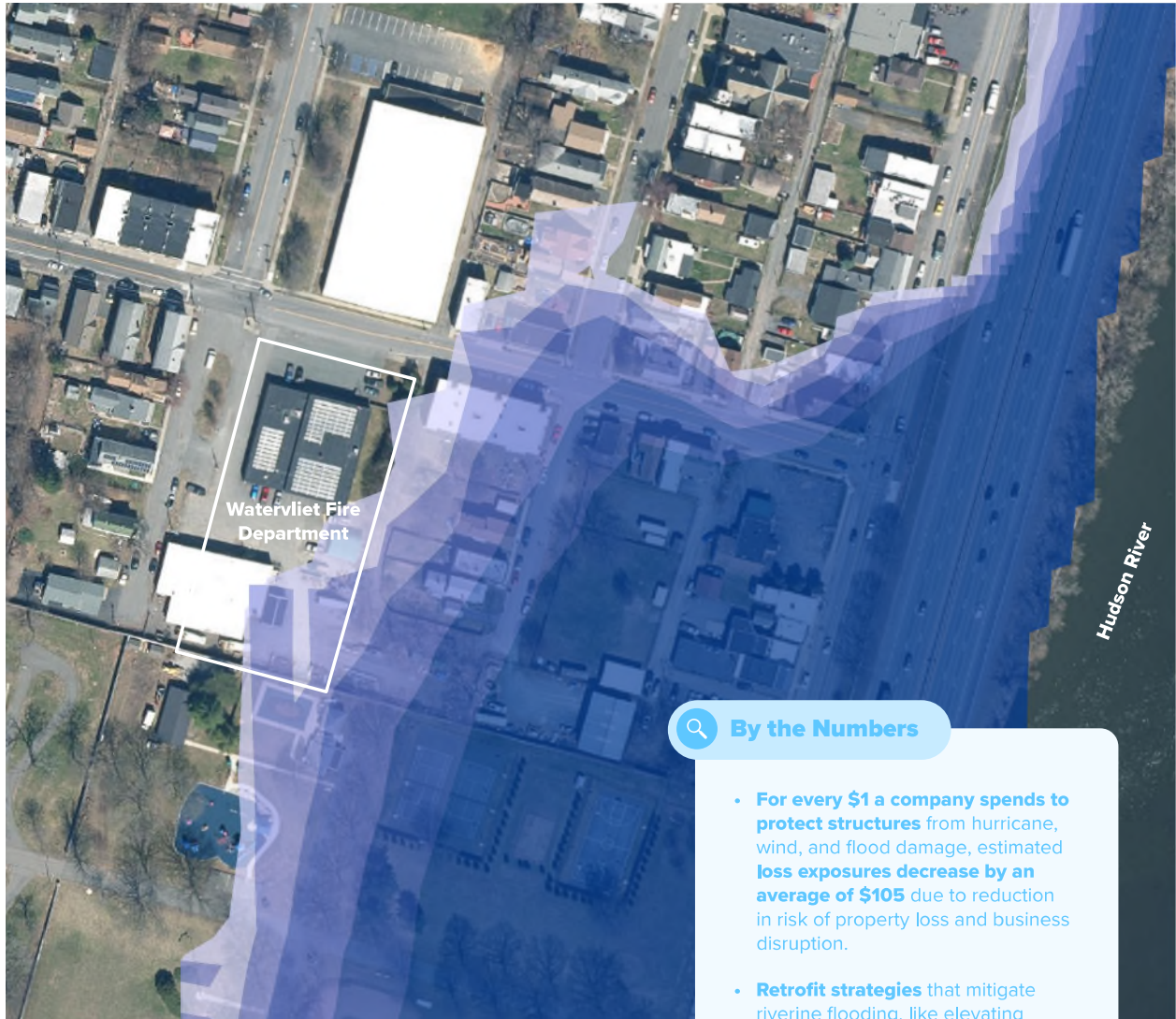
- FEMA Hazard Mitigation Grant Program
- NYS DEC Climate Smart Communities
- NYS Environmental Bond Act



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### By the Numbers

- For every \$1 a company spends to protect structures from hurricane, wind, and flood damage, estimated loss exposures decrease by an average of \$105 due to reduction in risk of property loss and business disruption.
- Retrofit strategies that mitigate riverine flooding, like elevating buildings, HVAC systems, or wet floodproofing, can each avoid \$2 in losses for every dollar invested.

#### ⚡ Watervliet Fire Department (116 13th Street)

Projected inundation from a 100-year storm in 2050

● > 36" ● 25-36" ● 13-24" ● 6-12" ● < 6"