

THOMAS P. DINAPOLI  
STATE COMPTROLLER



110 STATE STREET  
ALBANY, NEW YORK 12236

STATE OF NEW YORK  
OFFICE OF THE STATE COMPTROLLER

May 8, 2024

Zachary Iscol  
Commissioner  
New York City Emergency Management  
165 Cadman Plaza East  
Brooklyn, NY 11201

Re: Hazard Mitigation and Coordination  
Report 2023-F-38

Dear Commissioner Iscol:

Pursuant to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article III of the General Municipal Law, we have followed up on the actions taken by officials of New York City Emergency Management (NYCEM) to implement the recommendations contained in our initial audit report, *Hazard Mitigation and Coordination* (Report [2021-N-8](#)).

**Background, Scope, and Objective**

Hurricane Sandy, or Superstorm Sandy, hit New York City (or City) on October 29, 2012. Made up of several combined storms, it was one of the most damaging hurricanes ever to make landfall in the United States. Over the course of 48 hours, wind, rain, and water destroyed approximately 300 homes, damaged critical public and private infrastructure, left hundreds of thousands of New Yorkers without power and with limited access to food, drinking water, health care, and other critical services. The storm resulted in the deaths of 44 City residents and inflicted an estimated \$19 billion in damages and lost economic activity. Over 69,000 residential units were damaged and thousands of New Yorkers were temporarily displaced, including 6,500 patients who had to be evacuated from hospitals and nursing homes. Over 1 million children were unable to attend school for a week. Major weather-related events continue to threaten New Yorkers. For example, in 2021, Hurricane Ida caused the deaths of 13 City residents, most of whom lived in basement apartments in Queens and Brooklyn.

NYCEM is responsible for coordinating citywide emergency planning and response for all types and scales of emergencies, including weather-related events. NYCEM helps New Yorkers before, during, and after these emergencies through preparedness, education, and response. NYCEM also works to advance long-term initiatives that reduce risk and increase the resilience of the City through mitigation planning and Federal Emergency Management Agency (FEMA) mitigation grant coordination. Hazard mitigation is any cost-effective and sustained action taken to reduce the long-term risk to human life, property, and infrastructure from hazards. Too often after disasters, repairs and reconstruction are completed in such a way as to simply restore damaged property to pre-disaster conditions. New York City has fundamentally shifted toward hazard mitigation, a critical step that can break the cycle of repetitive loss. The implementation of such hazard mitigation actions focuses on risk reduction and leads to building stronger, safer, and smarter infrastructures and systems.

NYCEM's New York City Hazard Mitigation Plan (HMP) identifies hazards that pose risks to the City as well as actions City agencies are taking to reduce the impacts of these hazards. To be eligible for FEMA post-disaster mitigation funding, including Hazard Mitigation Grant Program funding, the HMP must be updated every 5 years. In March 2009, NYCEM completed the first HMP. Five years later, NYCEM partnered with the Department of City Planning and the Mayor's Office of Resiliency to create the 2014 HMP update. NYCEM released the 5-year HMP update as a website in 2019 and updated it in 2024.

NYCEM also creates and maintains four citywide evacuation plans: the Area Evacuation Plan, Maritime Emergency Transportation Plan, Coastal Storm Plan, and Flash Flood Emergency Plan. These citywide plans provide guidance for agencies to prepare for, conduct, and assess an emergency. Continuity of Operations (COOP) plans ensure that an individual organization can continue to perform its essential functions, provide essential services, and deliver core capabilities during a disruption to normal operations. Effective continuity of operations activities provide a baseline capability and represent the minimum standard required by a comprehensive, integrated continuity program. As required by Executive Order 107, the COOP Management Team, which includes NYCEM and the New York City Office of Technology and Innovation (formerly Department of Information Technology and Telecommunications), must provide training to City agencies on the creation and/or migration of existing agency contingency plans and the use of NYCEM's Sustainable Planner web-based tool to develop agency-wide COOP plans. The COOP Management Team is also required to provide oversight and guidance to City agencies as they fulfill their responsibility to develop COOP plans.

Section 498 (a) of Chapter 19-A of the New York City Charter (City Charter) states that NYCEM shall be the lead agency in the coordination and facilitation of resources in incidents involving public safety and health, including incidents that may involve acts of terrorism. All agencies shall provide NYCEM promptly with all information relevant to the performance of the emergency management functions and shall collect and make available any information requested by NYCEM for use in emergency planning. Further, all agencies shall promptly provide NYCEM with all appropriate material, equipment, and resources needed for emergency management functions, including personnel.

We issued our initial audit report on October 25, 2022. The audit objective was to determine if NYCEM adequately monitors and coordinates with City agencies for natural hazard mitigation, evacuation, and continuity of operations. The audit, which covered the period from January 2018 through April 2022, found weaknesses in NYCEM's monitoring processes as well as inaccuracies in data reported on NYCEM's HMP website. In addition, NYCEM did not provide evidence that it conducted formal assessments of its four citywide evacuation plans. We also found that two of these plans were last updated in 2013—9 years before we issued our audit report. Moreover, NYCEM did not have access to local evacuation plans.

Further, we determined NYCEM could have done more to monitor and follow up with City agencies to ensure COOP plans were completed. We found that not all City agencies submitted COOP plans to NYCEM; therefore, NYCEM officials had no assurance that all City agency COOP plans were created or completed. Even when City agencies submitted COOP plans, NYCEM did not review them to ensure, to the extent possible, that the information was accurate, up to date, and complete. We found that COOP plans were often incomplete and had incorrect points of contact. Moreover, many City agencies were not conducting the required exercises that test the capabilities of the COOP plan.

The objective of our follow-up was to assess the extent of implementation, as of April 17, 2024, of the six recommendations included in our initial audit report.

### **Summary Conclusions and Status of Audit Recommendations**

NYCEM has made some progress in addressing the problems we identified in the initial audit report. Of the initial report's six audit recommendations, three were partially implemented and three were not implemented.

### **Follow-Up Observations**

#### **Recommendation 1**

*Comply with the HMP Maintenance Protocol and the HMP, including requesting sufficient supporting documentation from City agencies to ensure HMP mitigation action data is accurate, complete, and up to date.*

Status – Not Implemented

Agency Action – NYCEM disagrees with this recommendation and still does not request supporting documentation from City agencies to ensure HMP mitigation action data is accurate, complete, and up to date. NYCEM officials indicated that the 2024 HMP passed State requirements and expressed confidence that it will also meet FEMA requirements. They also stated that they trust agencies are self-reporting accurate information, and it is their experience that collecting documentation from the agencies and overseeing the agencies' project management processes would lead to discouraging participants from submitting any information and may discourage participation altogether. They added that the complexity of tracking large-scale capital, planning, and conceptional projects is beyond the scope and intent of the HMP and would require resources beyond any single agency or initiative. However, as we found during the initial audit, fundamental components such as estimated start and finish dates and cost estimates were often missing from the HMP. Of the 1,042 mitigation actions listed in the HMP as of December 15, 2023, we found:

- 530 (51%) did not have start dates.
- 525 (50%) did not have finish dates.
- 380 (36%) did not have cost estimates.

Although NYCEM officials disagreed with this recommendation, they stated they believe it was partially implemented. Officials informed us that NYCEM took other steps in response to this recommendation, including hiring a planning specialist to support and maintain the HMP database, meeting with agencies and hosting a webinar about updating mitigation actions and coordinating with the NYC Mayor's Office of Risk Management and Compliance to facilitate interagency compliance. However, the prevalence of missing mitigation action data coupled with NYCEM's decision not to request supporting documentation from City agencies demonstrates that NYCEM has not implemented this recommendation.

## **Recommendation 2**

*Establish time frames and implement formal written policies and procedures for updating citywide evacuation plans and conducting plan assessments.*

Status – Partially Implemented

Agency Action – Although NYCEM officials developed and provided internal guidance for reviewing and revising planning documents, they have not demonstrated that it has been fully implemented. The guidance included a statement that all planning documents should be reviewed regularly to ensure continued usefulness and accuracy. After we questioned what “regularly” meant, officials updated (in March 2024) the guidance to state that all planning documents should have a targeted annual review. However, officials did not demonstrate that this time frame has been fully established and implemented. Further, officials indicated that two of the citywide evacuation plans, the Maritime Emergency Transportation Plan and the Area Evacuation Plan, have not been updated since 2013 and 2018, respectively. Although they provided copies of spreadsheets, emails, and meeting invitations indicating citywide evacuation plans were reviewed since then, they did not provide the actual assessments. Officials acknowledged that this recommendation has not been fully implemented.

## **Recommendation 3**

*Explore the feasibility of obtaining access to local evacuation plans.*

Status – Not Implemented

Agency Action – NYCEM disagrees with this recommendation and did not implement it. NYCEM officials stated that standard practice is for the local jurisdiction to own their evacuation plans to ensure version control and to provide the most up-to-date version of a plan. However, as we stated in our initial audit report, access to such plans would allow NYCEM, as the City’s emergency response coordinator, to ensure adequate coordination.

## **Recommendation 4**

*Create formal policies and procedures for following up with City agencies that are delinquent in attesting to/submitting COOP plans and completing COOP plan exercises.*

Status – Partially Implemented

Agency Action – NYCEM officials acknowledged that this recommendation has not been fully implemented. In response to our initial audit, NYCEM developed the NYCEM COOP Program Follow-up Standard Operating Procedure (SOP) incorporating new and existing procedures for following up with agencies that are delinquent in attesting to and/or submitting COOP plans and completing plan exercises. Although NYCEM officials pointed out procedures they have performed, they also stated they are still working to effectively implement the SOP and ensure COOP plans are submitted on a quarterly basis.

### **Recommendation 5**

*Enhance monitoring and follow-up efforts with City agencies when they do not attest to/submit COOP plans or complete COOP plan exercises in a timely manner.*

Status – Partially Implemented

Agency Action – NYCEM officials acknowledged that this recommendation has not been fully implemented. They attributed this to lack of staff and the need to deal with ongoing City emergencies. As previously stated, NYCEM developed the SOP in response to our initial audit. Officials pointed out related actions they have taken, such as re-issuing COOP plan requirements to participating City agencies, requiring the agencies to submit COOP plans quarterly, and moving from annual to monthly monitoring of COOP exercise completion. However, they acknowledged that NYCEM needs to implement more tracking and follow-up measures to proactively conduct outreach. They stated they are in the process of procuring a new COOP software platform that will be more user friendly.

### **Recommendation 6**

*Review COOP plans submitted by City agencies to ensure, to the extent possible, that the plans are accurate, up to date, and complete.*

Status – Not Implemented

Agency Action – In response to our initial audit, NYCEM developed a Continuity Assessment Tool (CAT) to evaluate agency COOP plans. Using the CAT, NYCEM reviewed its COOP plan as well as the COOP plans of four additional pilot agencies. According to NYCEM officials, both NYCEM and the pilot agencies recognized the need for a Citywide Essential Service review to help agencies prioritize their most critical functions, so NYCEM directed agencies to review and update their essential services. However, NYCEM's review of the pilot agencies' COOP plans did not address deficiencies we identified during our initial audit. We reviewed the COOP plans of the pilot agencies and found they lacked critical information such as contact names and/or telephone numbers, alternate site locations, and critical supplies. Moreover, NYCEM did not review the COOP plans of the 41 city agencies that were not part of the pilot. We reviewed COOP plans for 12 of these agencies (for which we identified deficiencies during the initial audit) and found many of the same deficiencies we previously identified. For example, of the 95 COOP plan points of contact reviewed, we found:

- 44 did not have telephone numbers listed; therefore, we could not verify if they were the correct points of contact and could be reachable during an emergency.
- 22 had listed telephone numbers that could not be reached (e.g., not in service, no answer).
- 5 were no longer employed by their agencies.
- 3 were employed by their agencies but were never points of contact.
- 2 were no longer points of contact.

In addition, NYCEM's February 2024 COOP dashboards indicated that the required plan maintenance, for 16 of the 62 submitted COOP plans, was not performed. In

fact, the dashboard indicated that the required maintenance for some plans had not been performed in years, including one plan for which the required maintenance was last performed in December 2018. Further, COOP plan exercises were not completed for 19 of the 62 COOP plans. This included two plans for which the exercise was last completed in 2019, three plans where it was last completed in 2020, and nine plans where it was last completed in 2022.

NYCEM officials stated that they do not have the power to mandate or compel compliance on the part of any other agency and do not have the specific agency subject matter expertise to independently review other City agency COOP plans for accuracy, timeliness, and completeness. They added that NYCEM is not sufficiently staffed to provide this level of technical review and support across the 46 participating agencies. However, reviewing COOP plan components such as point-of-contact names and telephone numbers does not require specific agency subject matter expertise. Our initial audit report does not suggest that NYCEM has the power to mandate or compel other City agencies to take action. Instead, we noted criteria, such as Section 498 (a) of the City Charter, which may have been helpful in gaining compliance from City agencies.

NYCEM officials also stated that they will remove point-of-contact information from the COOP plan template and associated guidance because COOP plans are not designed to be opened during an emergency to facilitate communications. Rather, they are intended to be planning tools to help agencies identify what essential services and assets should be prioritized during emergencies. While we recognize that COOP plans ensure an individual organization can continue to perform its essential functions, provide essential services, and deliver core capabilities during a disruption to normal operations, we disagree with NYCEM's position that point-of-contact information is not an essential component of the plans. Accurate, complete, and up-to-date point-of-contact information is vital to ensure key agency personnel can be reached to implement COOP processes and procedures when needed.

Major contributors to this report were Hardat Singh and Marsha Paretzky.

NYCEM officials are requested, but not required, to provide information about any actions planned to address the unresolved issues discussed in this follow-up within 30 days of the report's issuance. We thank the management and staff of NYCEM for the courtesies and cooperation extended to our auditors during this follow-up.

Very truly yours,

Joseph Gillooly  
Audit Manager

cc: Jaleesa Murrell, NYC Emergency Management  
Abdul Washington, NYC Emergency Management  
Doug Giuliano, NYC Mayor's Office of Risk Management and Compliance  
Marjorie Landa, NYC Mayor's Office of Risk Management and Compliance  
Julian Ross, NYC Mayor's Office of Risk Management and Compliance