

# Next Steps & Call to Action

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“I would like to learn more about what we can do as citizens to help make a resilient NYC.”



- Participant from the first open house



Overlooking the Financial District and Seaport neighborhoods from the Brooklyn Bridge pedestrian walkway (Photo Credit: Filippo Bacchi)

**The Financial District and Seaport Climate Resilience Master Plan is a bold vision that responds to the impacts of climate change in one of the most low-lying and exposed neighborhoods of New York City.**

It proposes to extend the shoreline of Lower Manhattan for the first time in decades to make space for critical flood defense infrastructure. Once fully realized, this waterfront will be universally accessible and serve all New Yorkers better than before with transformed open spaces, community amenities, and resilient ferry terminals and piers.

Much of the new Financial District and South Street Seaport waterfront will be raised nearly two stories higher than it is today to provide passive protection against coastal storms. The proposed conceptual design takes advantage of this topography to create slopes and ridges that foster a unique waterfront experience. Atop these ridges, which are formed by floodwalls that are buried under the landscape, the proposed master plan provides new public open spaces that offer expansive views of the East River. On the water side of the ridges, a raised esplanade brings people close to the water itself and provides easy access to resilient ferry terminals and piers. This seamless integration of flood defense infrastructure into the fabric of a dense urban environment will set a new global precedent for more resilient and livable cities that successfully adapt to the impacts of climate change.

The master plan envisions a resilient waterfront with long-term adaptability to the changing needs and conditions of the city's historic maritime hub. It proposes resilient facilities for ferries and other vessels, space for docking historic ships, and flexibility for emergency operations. Wherever possible, the master plan also proposes sustainable solutions that aim to improve the health of our planet, from integrating renewable energy and green infrastructure to enhancing aquatic habitats in the East River.

While the conceptual design of the master plan is not set in stone, it is a blueprint for how to create a 21st century resilient waterfront. This master plan is:

- Grounded in sound engineering and technical analysis;
- Shaped by extensive collaboration with City agencies; local, state, and federal regulators; and both the local community and citywide organizations; and,
- Flexible, to ensure the master plan can stand the test of time.

The result is a shared City-community vision that responds to the impacts of climate change while transforming the waterfront to better serve all New Yorkers for generations to come.

### Climate resilience is the only option.

The Financial District and Seaport **will** change dramatically whether the City takes action or not. By the 2040s, high tides will frequently flood the area. This flooding will happen monthly in the 2050s and daily by the 2080s. By 2100, high tides could flood most of the area between Water Street and the current shoreline every day with heights up to four feet above the current esplanade. A coastal storm event in 2100 could cause flooding that reaches inland more than five city blocks, past William Street, with a depth of up to 15 feet. This would have devastating impacts to vital transportation networks, critical public utilities, businesses, residents, and schools. This stark reality raises the question of Lower Manhattan's future viability, to which this master plan is the answer.

It is not simply infrastructure that is affected by climate change. It is the 70,000 daily passengers that currently rely on the Staten Island Ferry; the 290,000 people who work in Lower Manhattan; the 62,000 residents who call it home; the 175,000 vehicles that drive along the FDR Drive and Battery Park Underpass on a daily basis; the 17.7 million annual visitors who come to this area; and many others who rely on and pass through the area. The impacts of climate change in Lower Manhattan will be felt well beyond New York City. As Hurricane Sandy, the September 11 attacks, and other shutdowns of Lower Manhattan have shown, even a few days of impacts result in significant economic reverberations around the entire region, nation, and even the globe.

### The shoreline of Lower Manhattan must be extended.

With these high stakes, and imbued with a sense of urgency, the City embarked on an extensive, multidisciplinary planning process to secure the future of the Financial District and Seaport neighborhoods. This began with learning from other cities and countries around the world that are grappling with similar issues before evaluating the broadest range of potential climate resilience solutions within the local context.

The result of technical analysis was clear: to achieve the goals of this master plan, the shoreline of Lower Manhattan **must** be extended into the East River to create the space needed to build a flood defense system. Extending the Manhattan shoreline is critical to achieving these goals because the Financial District and Seaport shoreline today simply does not have enough space to build this infrastructure. Further, this space is necessary to ensure that flood defense does not wall off the city from the waterfront but instead provides universally accessible entrances and pathways down to the shoreline edge.

The City did not come to this conclusion lightly. Building in the water is a complex and expensive process that requires approvals from state and federal regulatory agencies. To ensure the master plan is implementable and constructable, the project team conducted extensive technical engineering analyses as well as a detailed review of existing laws, regulations, and permitting requirements. The City worked closely with the state and federal regulators that will ultimately issue permits, reflecting a design that avoids and minimizes the shoreline extension everywhere possible without sacrificing the dual goals of passive flood protection and high-quality, universal public accessibility.

The City acknowledges that any potential environmental impacts to the East River must be mitigated. This work to integrate regulatory feedback into the design from the beginning has resulted in a master plan that the City believes can advance through an extensive permitting process and has a viable pathway to construction. As the master plan advances to later stages of design, applying for and securing these permits will be a major next step.



Attendees at Public Open House #1 explore flood risks through a virtual reality simulation and speak with a member of the project team (Photo Credit: SCAPE)



Attendees at Public Open House #1 learn about New York City's sewer system and how it works today (Photo Credit: SCAPE)

## The master plan reflects a shared City-community vision.

The conceptual design of the master plan is the product of two years of extensive public engagement. Community feedback fundamentally shaped the design, reflecting several major themes reinforced by members of the community time and again, including:

- The master plan should **not wall off the city from the water**.
- The community is excited about an opportunity for a **new elevated waterfront experience**.
- The community shares a strong interest in **community-serving amenities**, including green spaces, active recreation, and indoor amenities such as community facilities and cafes.
- The master plan should include a continuous **bike path and waterfront esplanade** to connect the Manhattan Waterfront Greenway.
- The master plan should preserve or enhance the **ferries, ships, and piers** in the area, which add to the character of the waterfront.
- Many people are interested in **replacing the FDR Drive viaduct** with an at-grade boulevard.
- The master plan should preserve and protect the **Historic South Street Seaport**.
- The master plan should design for a **sustainable future** with carbon-neutral and nature-based solutions.
- The master plan should complement the **existing character** of the waterfront and surrounding neighborhoods.
- The master plan should set a new global standard for **design excellence**.

Community feedback and public engagement will continue to shape the future of this waterfront as design advances.

## The time to act is now.

Grounded in climate science, engineering, and feasibility testing, the master plan reflects a vision that can ultimately be realized. However, time is not on our side. With a long road to implementation and the impacts of climate change already being felt more frequently and intensely, there is not a moment to spare. Realizing this master plan will require significant funding commitments, political will, and a coalition of community support to carry it forward.

Throughout the master plan process, the project team carefully considered costs and analyzed possible funding sources. The price tag for flood defense infrastructure is high; fully realizing this master plan will require considerable federal support. At present, federal programs commensurate with the scale of this resiliency investment are not yet in place. Creating a resilient waterfront that serves all New Yorkers will require the combined efforts and resources of all levels of government—local, state, and federal.

New York City is part of a coalition of local governments advocating to create new funding pathways for climate adaptation, acknowledging that investing in resilient infrastructure is critical for our collective safety, prosperity, and well-being. It is critical that all partners, particularly the federal government, embrace the role they must play in building a more resilient nation by creating funding opportunities to adapt to the increasingly devastating impacts of climate change.

## What do we do next?

A project of this scale will take 15 to 20 years, perhaps even more, to fully implement. If the master plan is fully funded and designated a priority for regulatory agencies, complete flood protection for this area could be in place as early as 2035.

Given this, it is critical that the City act now. As a next step, the City will progress design of the master plan to a level sufficient to begin permitting and environmental review. Advancing design will also unlock additional federal funding opportunities. Beyond design, it will be critical to continue to work closely with the regulatory agencies that will ultimately decide the fate of this plan and continue studies and analysis, including sampling and testing in the East River, to determine a baseline for potential environmental impacts. The City will also explore options for future governance structures to shepherd implementation of the master plan.

Throughout all of this, the City will work closely with the community, advocates, and local, state, and federal elected officials to ensure the master plan continues to represent a shared vision between the community and the City.

## A call to action.

This master plan is the first step towards realizing a more resilient Lower Manhattan, but its long-term success will rely on the continued support and advocacy by all who care about this place. It is critical to build an ongoing coalition of support, and your participation matters. For all readers of this report: Whether you are a local resident, worker or student, commute through Lower Manhattan, or simply care about resilience and the future of New York City, you can act **now** by:

- Visiting the master plan website ([fidiseaportclimate.nyc](https://fidiseaportclimate.nyc)) to sign up for the latest updates;
- Sharing this master plan and website with your colleagues, friends, and family to generate awareness;
- Reaching out to your local, state, and federal elected representatives to share your support and enthusiasm; and
- Reaching out to the project team if you have any additional questions.