

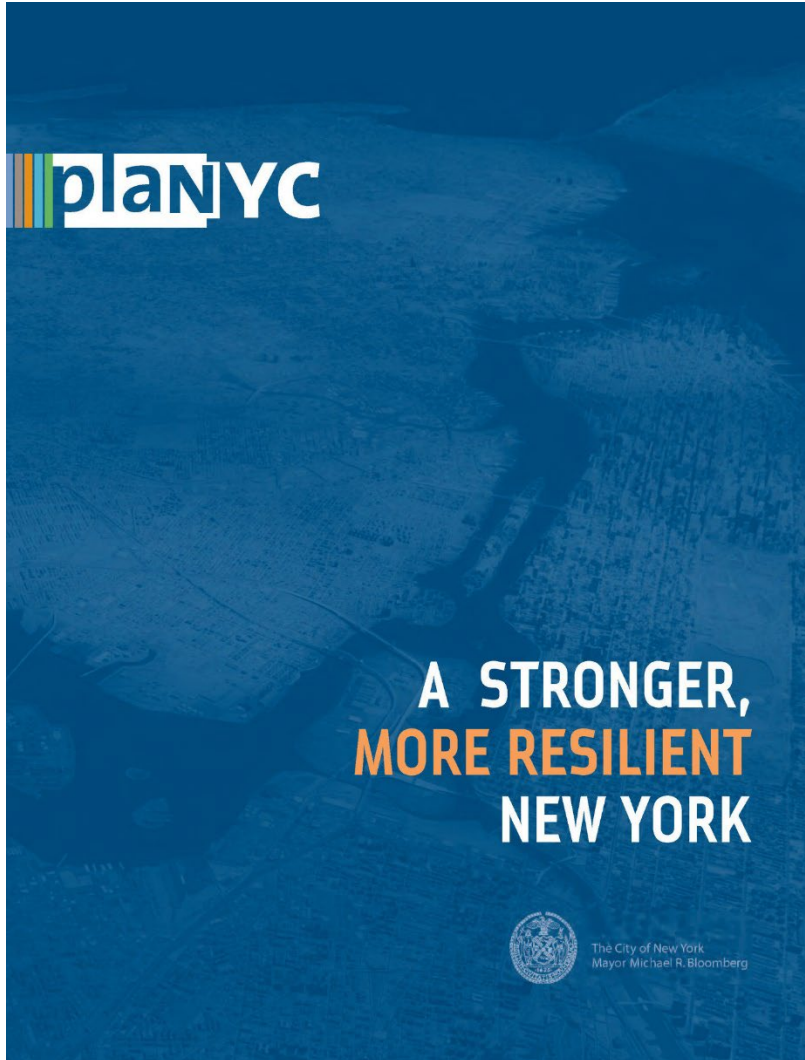
A large crowd of people is gathered on a grassy area, likely a park, under a large suspension bridge. The scene is set at sunset, with a warm orange and yellow glow on the horizon. The bridge's steel structure is prominent, and the city skyline is visible in the distance. The sky is a mix of blue and orange, with some clouds. The people are sitting on blankets or chairs, enjoying the view and the evening air. The overall atmosphere is peaceful and communal.

Economic Development & Climate Resilience in NYC

March 23, 2022

Elijah Hutchinson, Vice President of
Waterfronts, NYCEDC

As we begin a new Administration, we are building on a foundation of action



- **After Hurricane Sandy, the City invested \$20+ billion dollars** largely focused on reducing coastal storm surge risk, guided by the 2013 local plans, State and Federal investments

THE NEW NORMAL: A DEEPER DIVE INTO THE COMMITMENTS

POLICY

City Council:

- Include **sea level rise in the building code**
- Codify a **permanent, City-funded Office of Climate Resiliency**

State:

- Pass and fund the **Environmental Bond Act**
- Mandate **meaningful flood risk disclosure**
- Expand the **PACE program to include resiliency retrofits**

Federal:

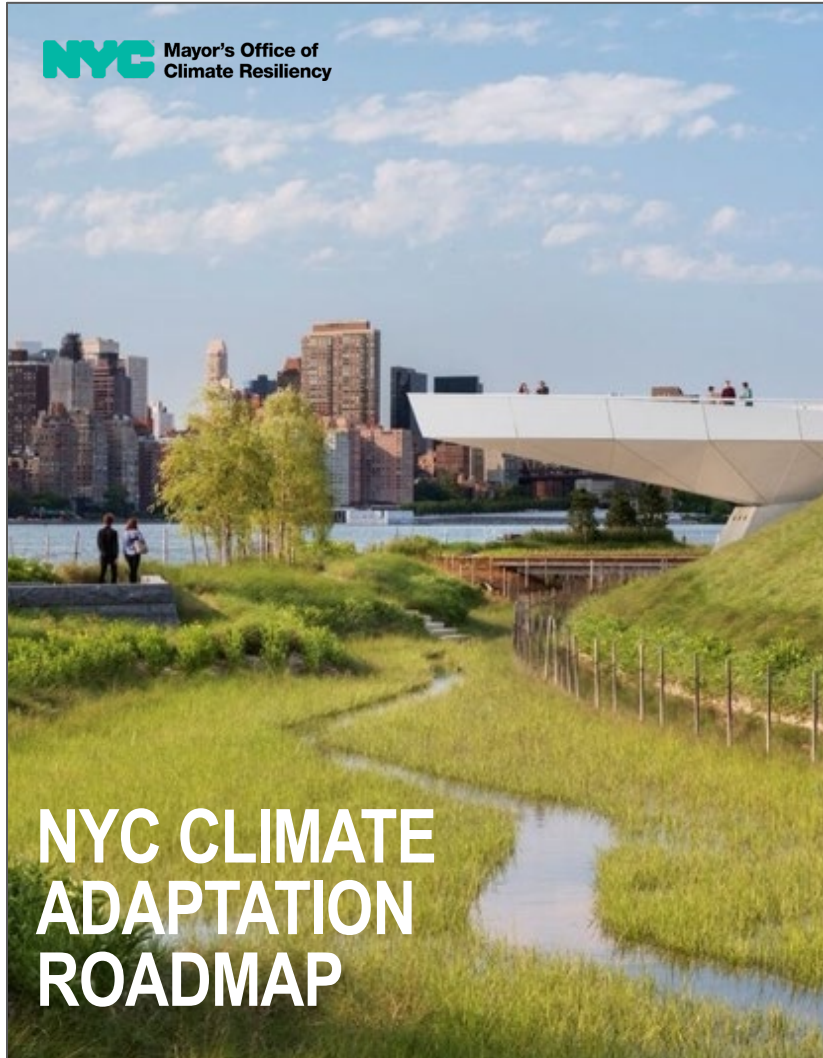
- Expand Ida disaster relief, including funding for **voluntary buyouts**
- Pass the **American Families Plan (the Federal infrastructure bill)**
- Reform the **National Flood Insurance Program**
- Reform **FEMA BRIC funding** to support resiliency

MOCEJ will continue this work and initiate new efforts to better adapt New York



Solar panels and compost on Governors Island

MOCEJ WILL DEVELOP A NEW STRATEGIC PLAN FOR CLIMATE ADAPTATION IN NYC



Working with interagency partners, MOCEJ will:

- **Evaluate the relative impacts of NYC's multiple climate hazards** (coastal storms, sea level rise, higher temperatures, and extreme precipitation)
- **Evaluate and incorporate the latest findings in climate science** and best practices in climate adaptation, including valuable lessons learned during the post-Hurricane Sandy recovery period
- **Articulate and build consensus around a climate adaptation strategy** through a targeted sequence of measures (i.e. projects, policies, programs, and partnerships), focusing on implementation for 2020-2050

About New York City Economic Development Corporation (NYCEDC)

Learning from
yesterday

Addressing
problems today

Preparing for
tomorrow



Mayor of New York City

Deputy Mayor of
Housing and Economic Development

NYC / EDC

NYC / EDC

EDC is engaged in resiliency initiatives across the **five boroughs**.



- Sawmill Creek Wetland Mitigation Credit Bank
- New Stapleton Waterfront



- Lower Manhattan Coastal Resiliency (LMCR)



- Hunts Point Resiliency
- Food Supply
- Raise Shorelines



- Red Hook Integrated Flood Protection System
- Coney Island Infrastructure
- Sunset Park Assets



- Green Infrastructure
- Rockaway Boardwalk
- RISE: NYC

Lower Manhattan Coastal Resiliency, Manhattan



NYC / EDC

If we don't act, Lower Manhattan will begin to flood monthly by the 2040s and daily by the 2080s.

200 buildings

With over 85,000 jobs, 6,200 residents, and over \$115 million in daily economic output

9 schools

With over 3,500 students, affecting over 2,500 families

70,000 daily riders

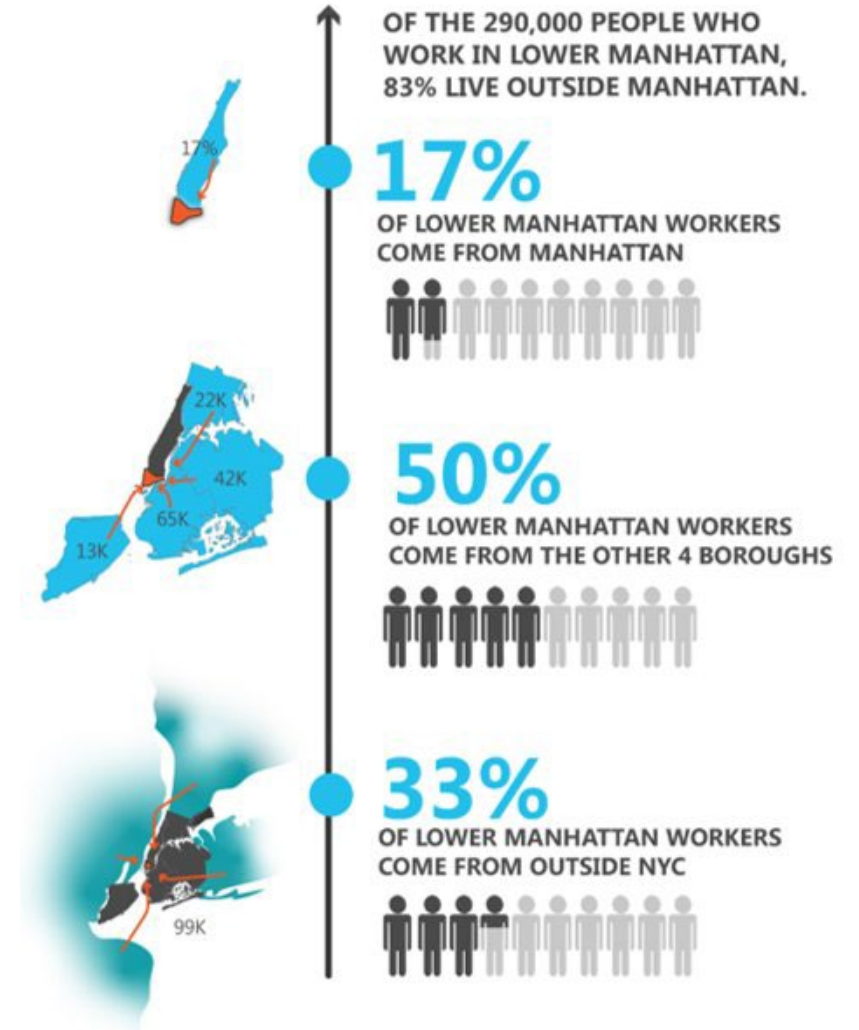
Rely on the Staten Island Ferry and travel through the Whitehall Ferry Terminal

11 subway lines

With almost 60,000 daily users

Critical citywide systems

Including our subways, sewers, and electrical systems



This Master Plan is part of a broader City-led strategy to protect Lower Manhattan, including over \$1B in capital projects. A detailed plan for FiDi-Seaport is critical for filling the last remaining gap.



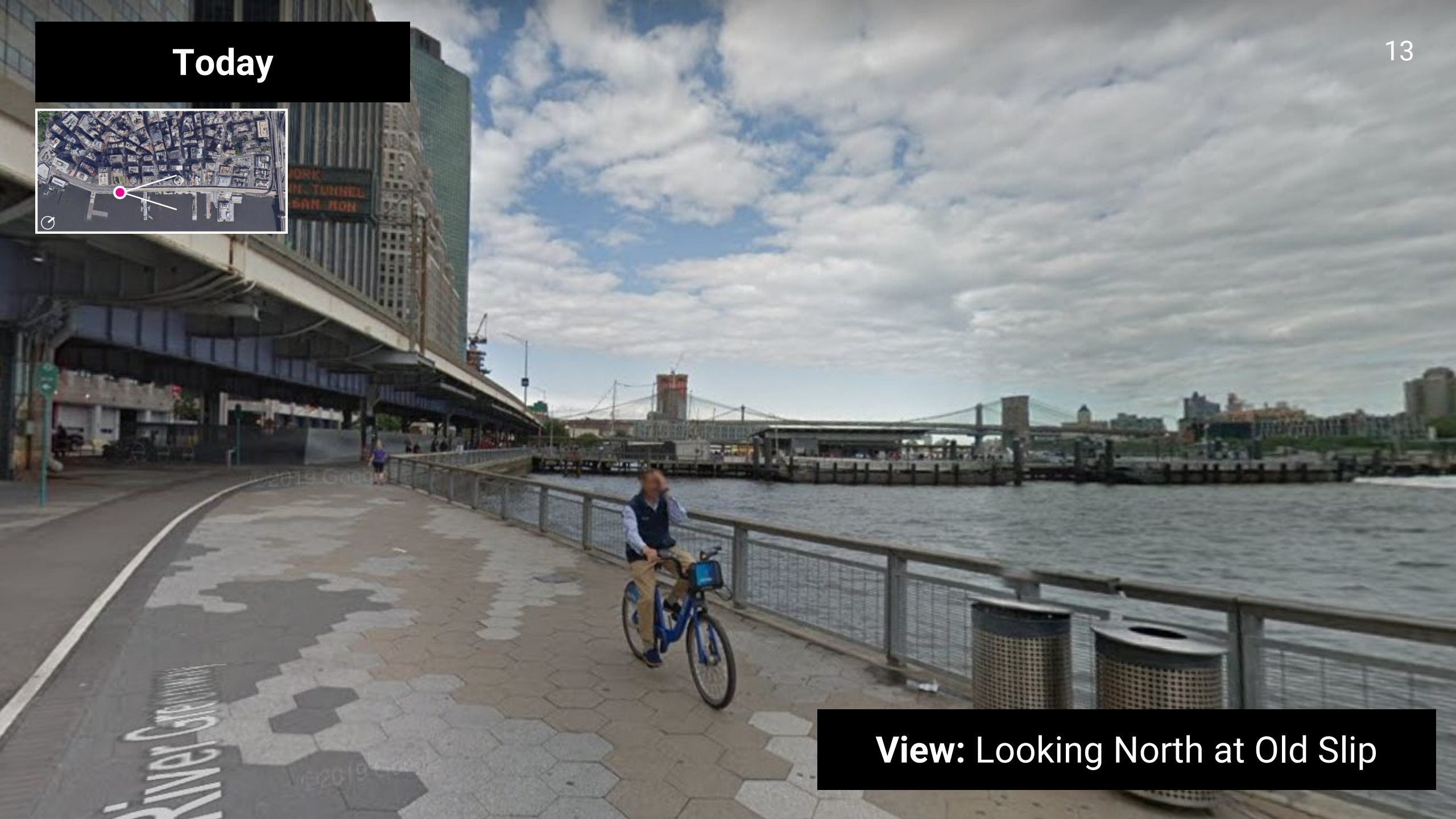
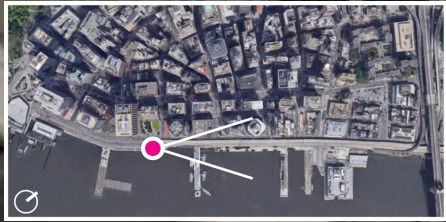


Financial District and Seaport Climate Resilience Master Plan

*We encourage you to browse the full Master Plan at
fidiseaportclimate.nyc!*

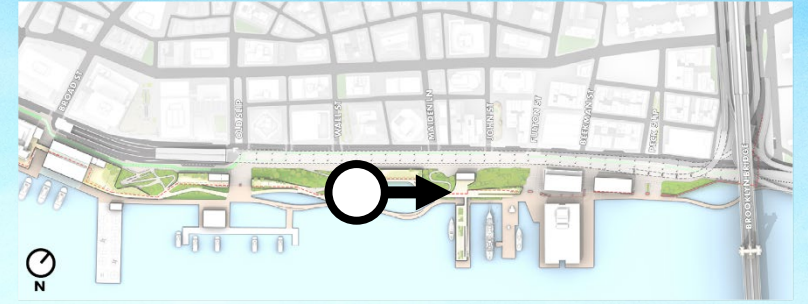
Today

13



View: Looking North at Old Slip

Maiden Lane Cove (Facing North)



Providing community-serving uses

Preserving & enhancing existing destinations

Preserving & enhancing East River ecology

Creating new multi-level waterfront open spaces



Upper Walkway (Facing North)

Universally-accessible connections to the waterfront

New resilient ferry terminals



Who helped shape this Master Plan?

Project Team

- **NYCEDC** and **MOCR** led the project team to develop the Master Plan.
- Other City agencies, including **Transportation, Parks, City Planning, and Environmental Protection**, advised and supported.
- The City assembled a team of technical experts, led by the Dutch engineering firm **Arcadis**.

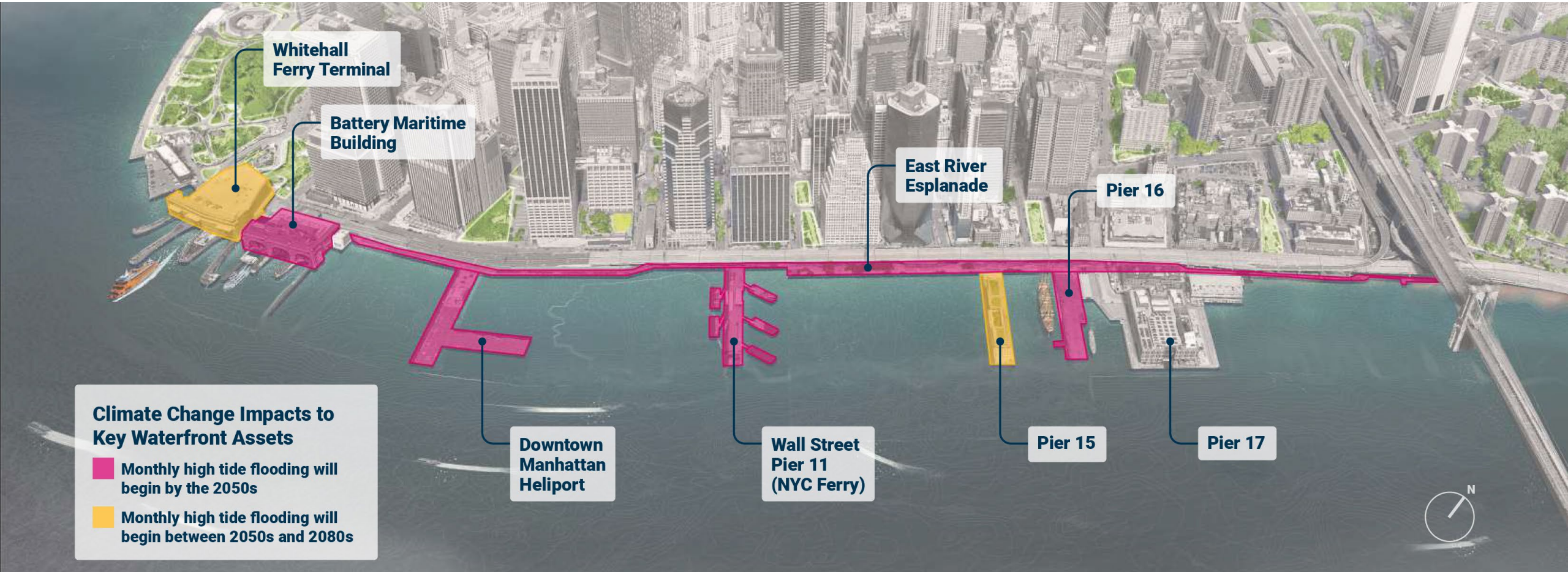
Regulators

- The City regularly met with the **Aquatic Resources Advisory Committee (ARAC)**, a group of representatives from state and federal regulatory agencies, who advised on permitting pathways for any work in the East River.

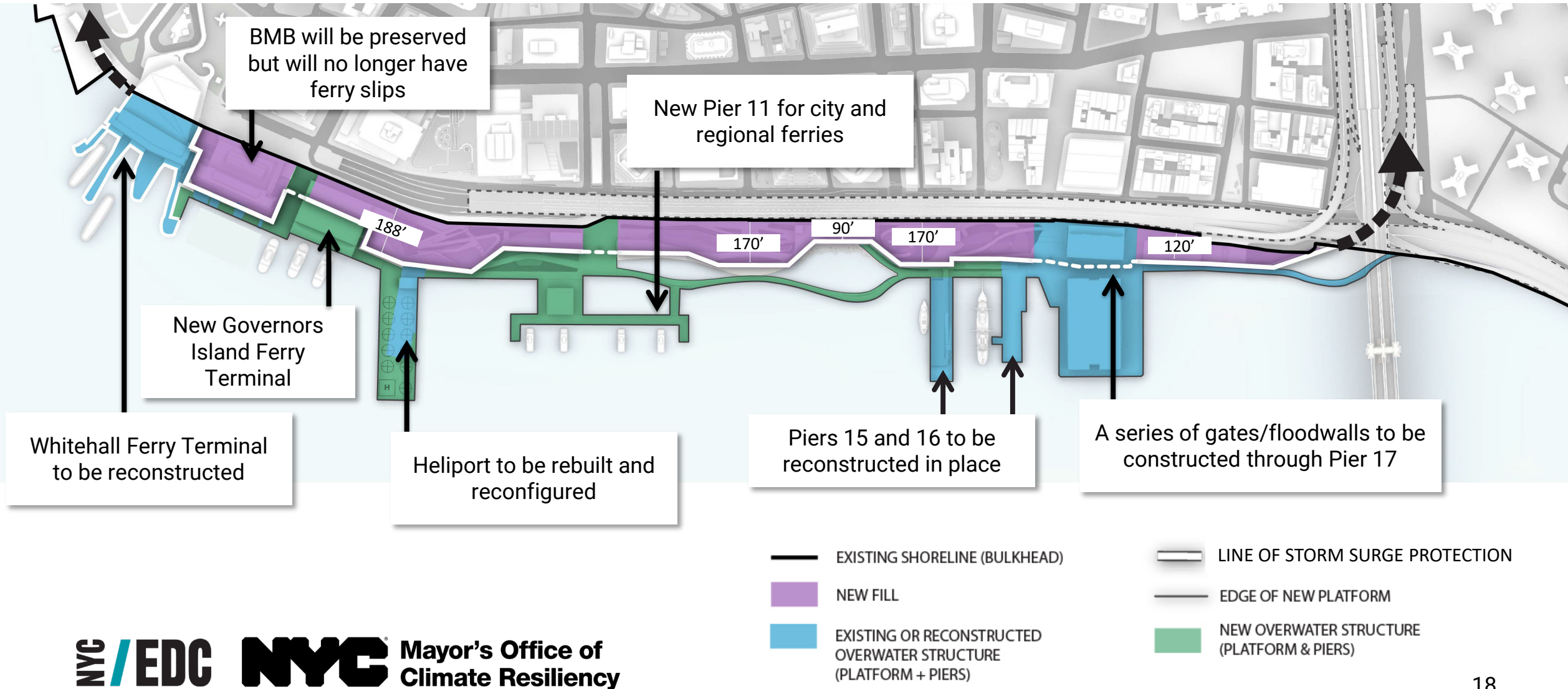
CCLM & Public

- The project team met with the **Climate Coalition of Lower Manhattan (CCLM)**, a group of key local and citywide organizations and resilience advocates, at every step of the way.
- The project team hosted **many public meetings** at the end of each phase of work to share progress and solicit feedback.

Rising tides will begin compromising the operations of key waterfront assets by the 2050s.



This plan proposes to extend the Manhattan shoreline and reconstruct maritime facilities over the next 15-20 years.



This master plan will cost \$5-7 billion to implement; a mix of local, state, and federal funding sources will be needed.

Existing Funding Sources Considered

- US Army Corps of Engineers (USACE) Civil Works Program (*Capital*)
- Federal Emergency Management Agency (FEMA) Programs (*Capital*)
- Capital Investment Grant (*Capital*)
- Infrastructure for Rebuilding America and Rebuilding American Infrastructure with Sustainability and Equity Grants (*Capital*)

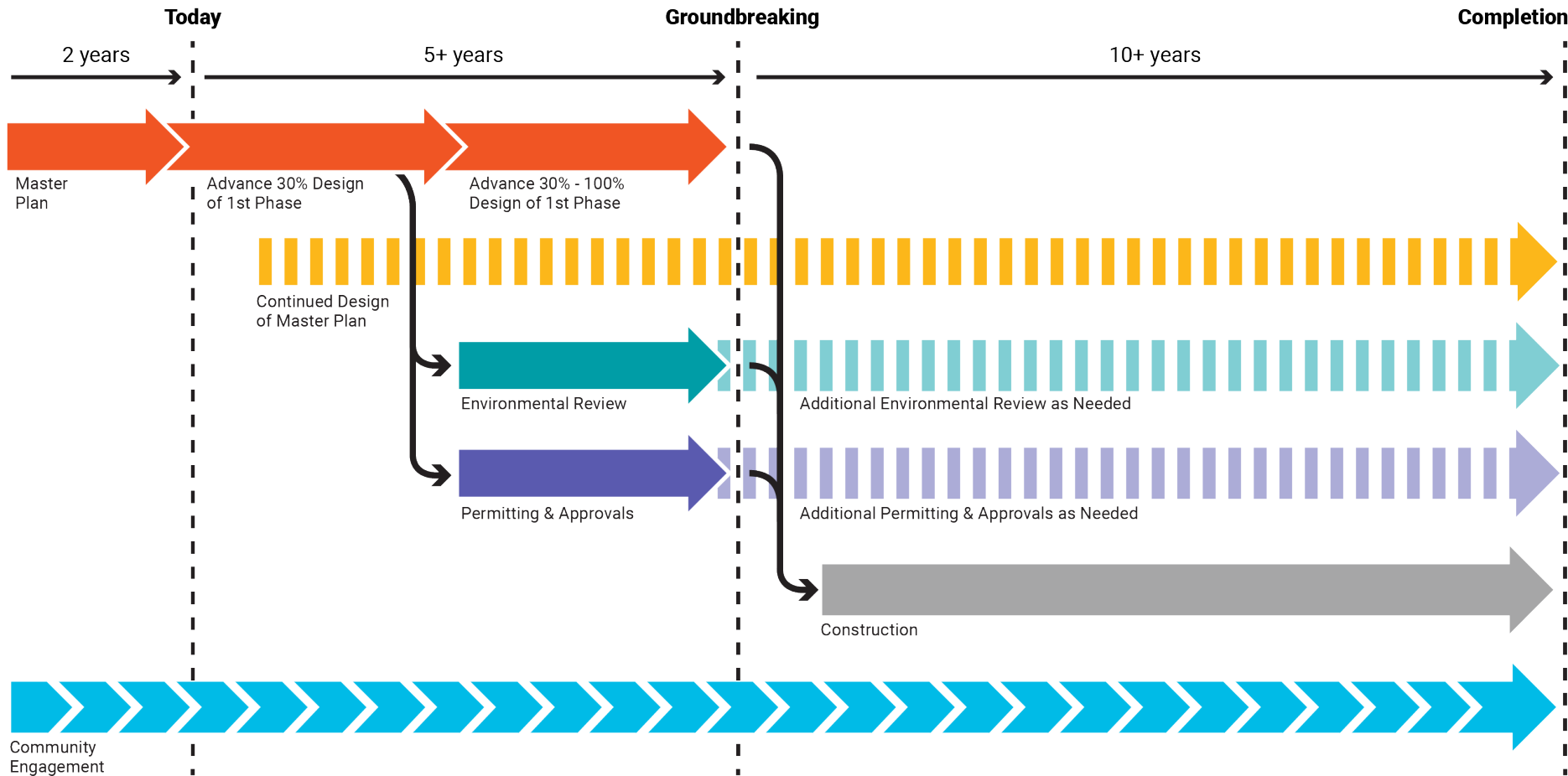
New Funding Sources Studied

- New York State Environmental Bond Act (*Capital*)
- Insurance Surcharge (*Capital or O&M*)
- Resilience Assessment (*Capital or O&M*)
- Revenue from new development (residential, office) (*Capital or O&M*)

Potential Governance Structures

Entity Type	Description	Advancing Design & Permitting	Advocacy	Funding & Financing	Capital Construction	Operations & Maintenance
City Agency	Existing City-agency management	Moderate Alignment Can procure and contract a design team. Can conduct community engagement. Has the expertise and ability to coordinate and advance pre-construction processes.	High Alignment Can advocate for legislation / policy.	Moderate Alignment Can access city capital and channel federal or state funding.	Moderate Alignment Have staff with expertise to oversee capital construction, but capacity may be limited for a project of this scale.	Moderate Alignment No existing agency dedicated to managing resilience infrastructure. Organizational capacity would need to be created and could require an amendment of the City Charter for authorization.
Public Benefit Corporation or other public authorities	State-controlled public authorities, with one or more board members appointed by the Governor.	High Alignment Can procure and contract a design team. Can hire staff to coordinate and advance pre-construction processes.	Moderate Alignment Have restrictions around advocacy for legislation / policy.	High Alignment Has bonding authority and can raise private funds. Can also access City capital and channel federal or state funding.	High Alignment Can hire dedicated staff with expertise to oversee capital construction.	High Alignment Can hire appropriate personnel for O&M.
Local Development Corporations (LDC)	A nonprofit corporation that is created or sponsored by a local government.	High Alignment Can procure and contract a design team. Can hire staff to coordinate and advance pre-construction processes.	Low Alignment LDCs cannot advocate for legislation / policy.	High Alignment Has bonding authority and can raise private funds. Can access City capital and channel federal or state funding.	High Alignment Can hire dedicated staff with expertise to oversee capital construction.	High Alignment Can hire appropriate personnel for O&M.

This master plan will take 15 to 20 years to design, secure approvals, and build; the time to act is now.



Frequent tidal flooding is expected by the 2040s. With full funding and alignment with key regulatory agencies, the flood defense could be in place by 2035.