



Create a Waterfront for Future Generations



Tenean Beach,
Dorchester

Imagine Boston 2030

Introduction

Context

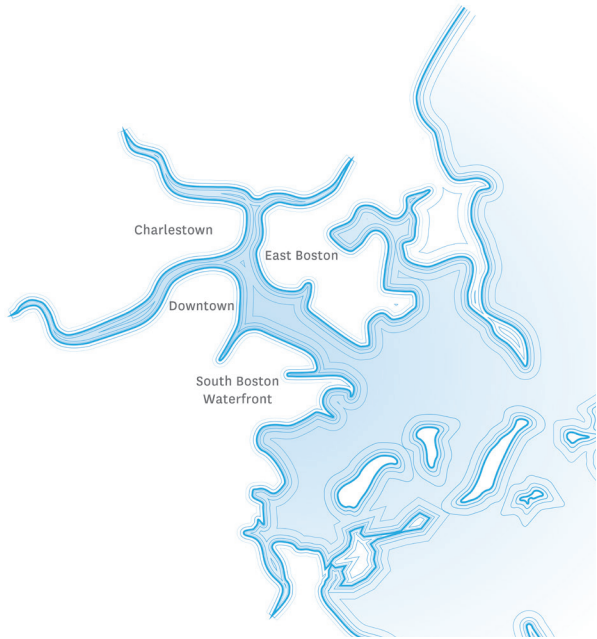
The Opportunity of Growth

Taking Action

Initiatives

Next Steps

Create a waterfront for all Bostonians that is climate-resilient and has the stewardship needed to thrive for coming generations.



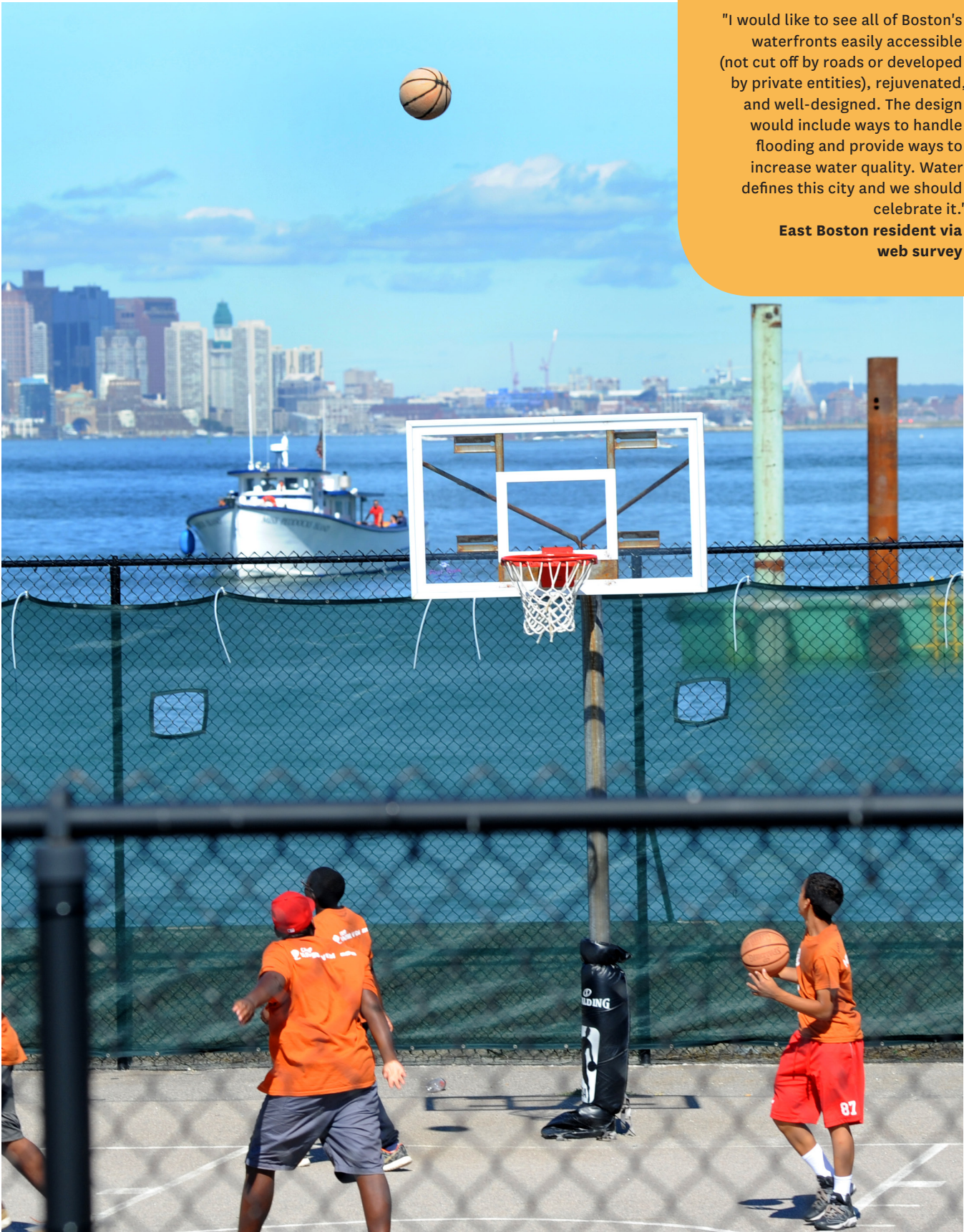
Camp Harbor View →

Boston’s waterfront has shaped and been shaped by urban development since the city’s inception. Boston Harbor played a pivotal role in American history, and the neighborhoods and wharves built along its shore were the foundations of the region’s economy for centuries. Just as the waterfront has been a resource to past generations for maritime trade, today a waterfront for all Bostonians can offer a more inclusive, livable, and resilient future.

As Boston grows, the waterfront must continue to play a critical role in meeting the needs of future generations by providing spaces where new jobs can locate and where housing growth can alleviate pressure in existing neighborhoods. It must also protect a long standing legacy of maritime and port-dependent industries, from shipping to seafood and marine research. Existing community, recreational, and ecological resources can be strengthened, and new signature parks can be created to draw Bostonians and visitors to the water. Underpinning

Boston’s long-term success as a waterfront city will be determined by vital investments in multilayered flood-protection systems that prepare economic hubs, existing and emerging neighborhoods, and critical infrastructure for the changing climate.

Creating a waterfront for coming generations will require Boston to confront significant technical, financial, and organizational challenges. Just as the city has collaborated with partners to clean up Boston Harbor, been a leader in reducing greenhouse gas emissions, and learned from other cities about carbon reduction, Boston can be a leader for twenty-first-century waterfront cities that continue to thrive as climate changes. With its universities on the cutting edge of research, technical and data-based businesses, creative developers, and strong community organizations that are planning proactively, Boston can come together now to create a waterfront for future generations.



This is what we aspire to achieve.

A Waterfront for all Bostonians

Support a Welcoming and Active Waterfront

An activated waterfront is anchored by varied types of open spaces, featuring cultural resources, opportunities to interact with the water, and year-round programming and connecting Bostonians with the natural, cultural, and economic history of the region.

Link Neighborhoods to the Water

An accessible waterfront is a public destination that can be reached and crossed by all residents and functions as a seamless link in the city’s and the region’s transportation network.

Foster Economic Opportunity

A thriving waterfront provides economic opportunities for Bostonians at a variety of income and skill levels and continues to support waterfront, port, and other marine-dependent industries.

Imagine Boston Waterfront Planning Process

To respond to waterfront issues and opportunities, the City of Boston undertook a waterfront planning process. A Citywide Working Group, including public, nonprofit, and private leaders, convened in the summer of 2016 to set a vision for the waterfront. This vision will further planning and the City’s day-to-day work along the waterfront.



Carson Beach, South Boston

A Climate-resilient Waterfront

Prepare for Climate Change

A climate-ready waterfront prepares Boston for climate-related risks, particularly coastal and riverine flooding, by creating multiple layers of protection.

Improve Environmental Quality

An environmentally sound waterfront improves water quality and strengthens habitats.

A Waterfront with Strong Stewardship

Ensure Sustainable Funding Structures

A financially sustainable waterfront has adequate funding and operational plans.

Facilitate Collaborative Planning

A collaborative waterfront is planned with broad and open public discussion and through partnership with relevant jurisdictions.

"Encourage the addition of more recreational boating [including] docking opportunities."

Resident via draft plan feedback

"With an eye to climate change, I'd like to see...waterfront park development to mitigate storm surges and sea rise and to turn adversity into an opportunity to create 'The American Venice.'"

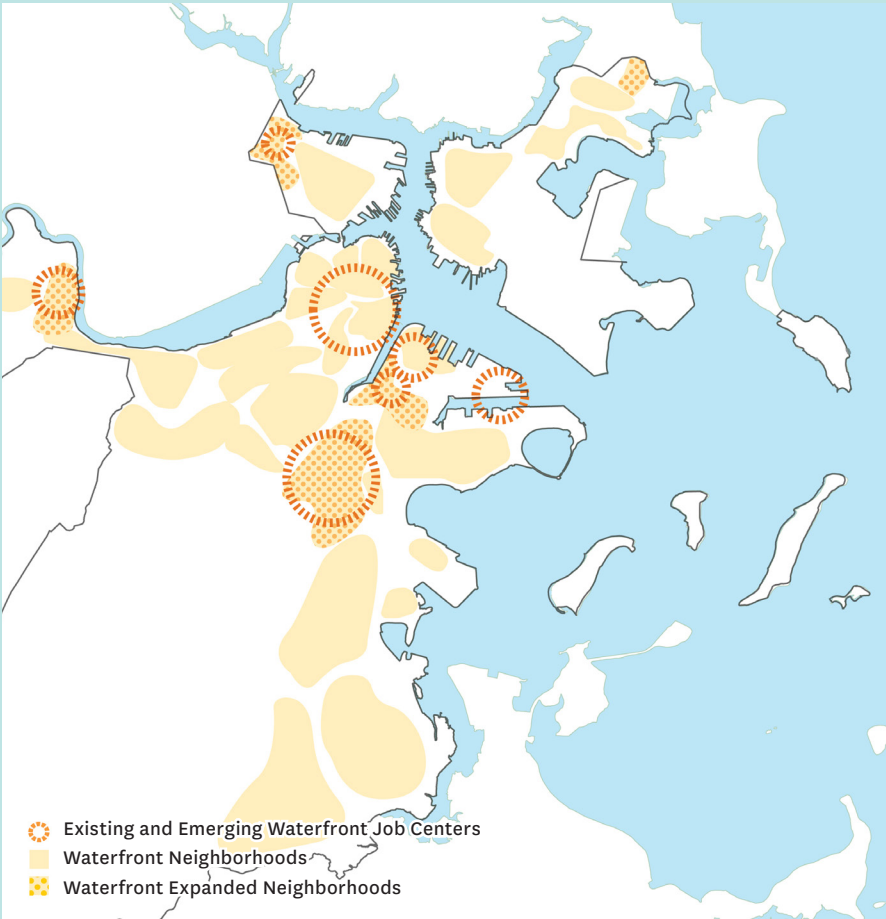
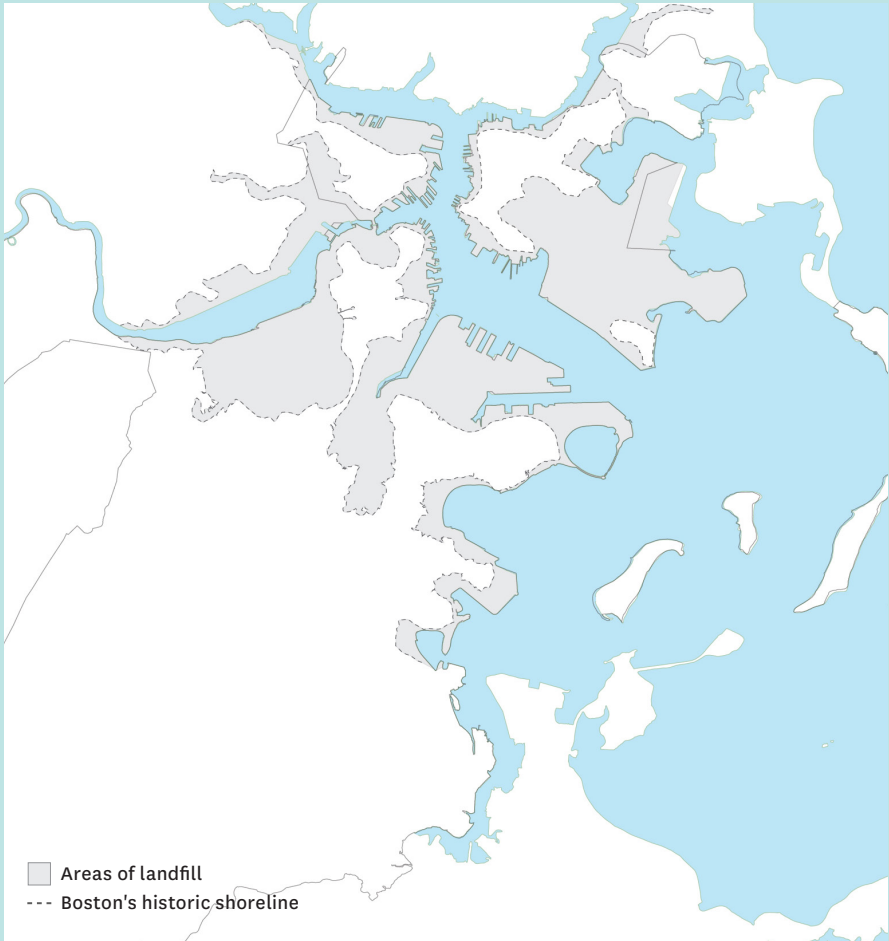
Roslindale resident via online survey

Boston’s waterfront played a pivotal role in American history, and the neighborhoods and wharves Bostonians built along its shore shaped the region’s economy.

A Manufactured Edge

As Boston’s economy grew, so did its population and the need to expand its size. Boston modified its shoreline through major landfilling efforts in the nineteenth- and early twentieth-centuries. Land was created for many reasons, including the expansion of the commercial center of Boston, establishing a new neighborhood in the Back Bay with a well-planned street and block system and the filling of tidal flats in South Boston to accommodate industrial uses, warehousing, and shipping.

Boston’s coastline has been reshaped through centuries of landfill. Given their low-lying nature, many of these areas are in the future floodplain. For historical maps, see page 58.



An Economic Engine

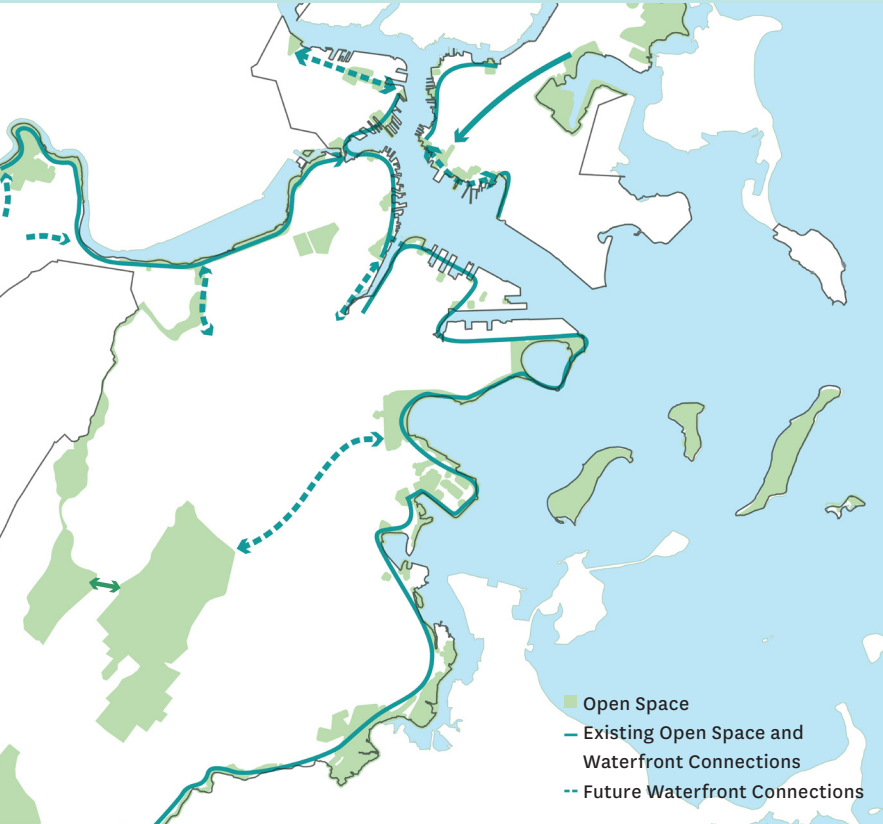
Boston’s waterfront has been an engine of the city and the region’s economy for centuries. Boston exported raw materials including timber, leather, woolen goods, and fur in the 1600s to 1800s and developed significant industrial, warehousing, and shipping facilities in the 1900s. Today, the harbor still hosts important maritime economic activities, from seafood processing to freight transport to the cruise industry. Significant portions of Boston’s waterfront land are dedicated for these maritime uses, even as economic activity has shifted to knowledge sectors of health care, education, and technology. As Boston plans for its future, land for the working port and maritime uses must be protected, while some waterfront lands might also be used to respond to Boston’s pressing twenty-first-century needs, including open space, flood protection, and job and housing opportunities.

[Read more about Boston’s industrial approach on "Industrial Approach" on page 202](#)



↑ Boston Ship Repair

"Maintain marine industrial character while adding more places to visit/eat."
East Boston resident via online mapping comments



An Open Space Destination

Boston's waterfront open spaces are treasures of the city and the region. As a whole, Boston's waterfront hosts a diversity of landscape types, from the urban edge of Rowses Wharf's paved walkways to the recreation destinations at Moakley Park and Carson Beach to the natural areas

of Belle Isle Marsh. While Boston has a variety of open space types, many parts of the city are dominated by one type of space; for example, the Inner Harbor has predominantly urban edges, while natural landscapes are farther from the center of the city.



↑ Waterfront as natural open space

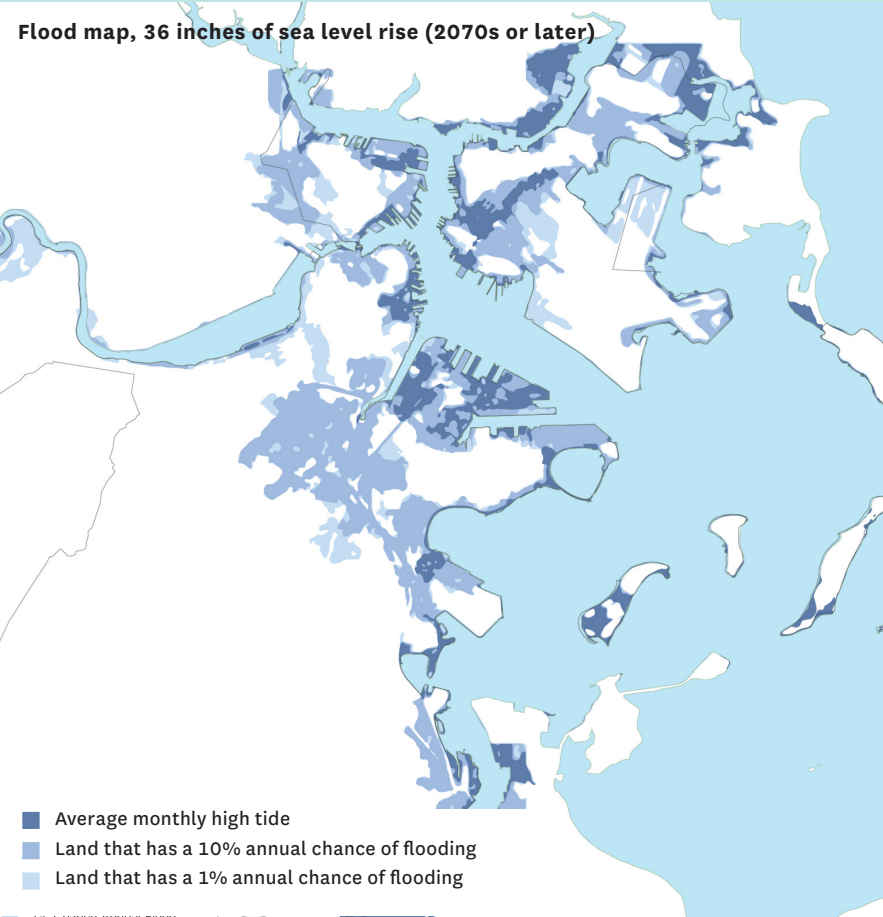


↑ Waterfront as urban edge



↑ Waterfront as recreational open space.

Future strategic investments can work to enhance Boston's waterfront assets by providing diverse new open spaces and by strengthening connectivity and public awareness through greater integration with pedestrian and bike networks, wayfinding, and interpretive exhibits.



Source: Climate Ready Boston

Climate and environment

Climate change, and increasing coastal and riverine flooding in particular, exacerbate existing risks and threaten the safety and economic vitality of the city. Boston's waterfront is the city's frontline for climate defense, and potential protective interventions can be implemented along the waterfront to mitigate risks. Tools for planning, regulating, and implementing along the waterfront should appreciate the dynamic character of the natural environment, including sea-level rise in particular.

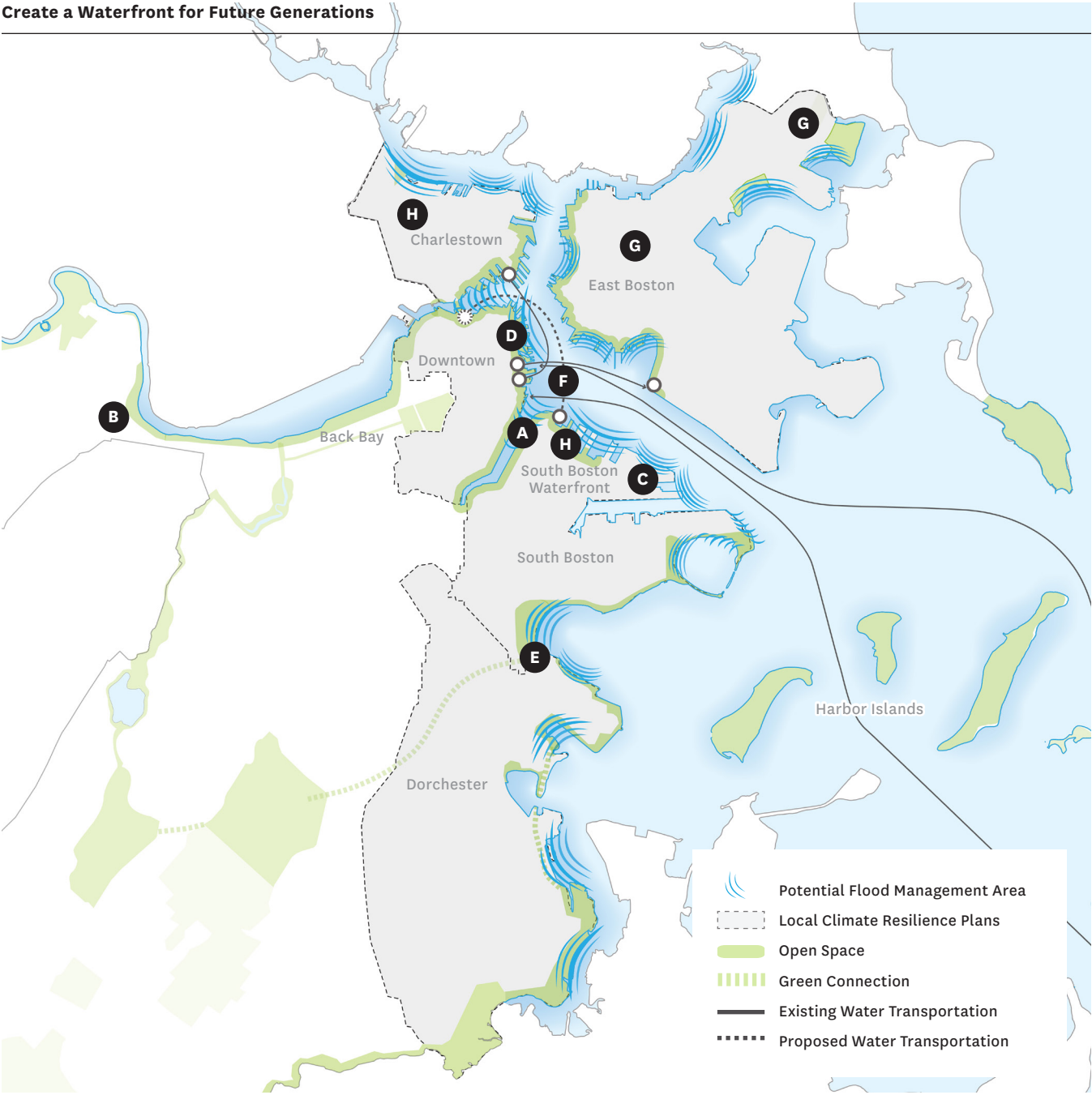
As soon as the 2030s, 5 percent of Boston's land area could be inundated by a 1 percent annual chance flood, exposing 3 percent of the population and \$20 billion worth of real estate to flooding.

[Read more about how Boston will respond in the Energy & Environment section, page 337](#)



↑ Deer Island

“The amount of property value and population that could be exposed from flooding in the future shows that these actions are vital.”
Mayor's Youth Council Representative via electronic comment



- A** Public space activation to create an urban waterfront in Fort Point Channel and South Boston Waterfront
- B** Large connected open spaces at Beacon Yards
- C** Waterfront jobs center at Raymond L. Flynn Marine Park
- D** Diverse and active downtown waterfront
- E** Emerald Necklace completion at Moakley Park
- F** Partnerships to support water transportation network
- G** Open spaces, including on the East Boston Waterfront and at Suffolk Downs
- H** District-scale local climate resilience plans

Actions and Investments

A Waterfront for All Bostonians

- › Create new signature open spaces that leverage underutilized waterfront sites.
- › Form networks of connected open spaces and cultural destinations.
- › Expand the diversity of experiences along stretches of the waterfront.
- › Expand connections between neighborhoods and the waterfront.
- › Strengthen and expand waterfront housing and job centers.

A Climate-Resilient Waterfront

- › Develop local climate-resilience plans to prepare existing and high-risk job centers and neighborhoods.
- › Create flood-protection systems that provide multiple benefits.
- › Implement policies and initiatives to ensure water quality and strengthen habitats.

A Waterfront with Strong Stewardship

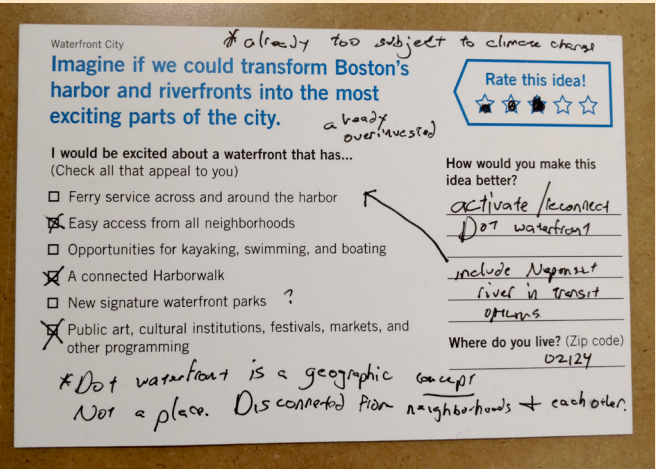
- › Apply new, sustainable models for the creation and maintenance of public waterfront areas.
- › Deploy proactive zoning and create a predictable entitlement process for greater public benefits.

"Where transit already exists—allow more density and stand up for density within 1/4 mile of transit."
Resident via draft plan feedback

"Engage the region's knowledge economy to increase innovation, profitability and investment in Boston's working port."
Resident via draft plan feedback

"Dorchester needs a boathouse. Today, access to rowing or sailing is limited to the Charles. City should partner with UMASS to provide a public[ly] accessible boat house and encourage water based sports for local residents. Schools or organizations could also leverage facilities to launch their own sports programs."
Dorchester resident via online mapping comments

Bostonians from all neighborhoods shared ideas about the waterfront. Common themes included increasing water transportation and open space, and addressing climate vulnerability.



Residents on a ferry tour of Boston Harbor during Imagine Boston Week in Fall 2016.



Workshop participants in summer 2016 rated different ideas for how to make Boston more of a Waterfront City.



Participants in the building-block activity experimented with how to develop neighborhood edges, many of which are along the waterfront. During the activity, participants were prompted to respond to rising sea levels. Many moved buildings back from the coastline and built marshes and sea walls to protect waterfront neighborhoods (below right). Below left, participants proposed canals to deal with the potential for higher sea levels in the future.

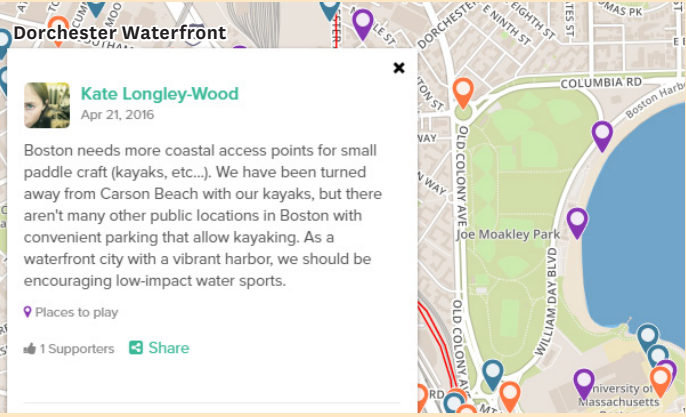
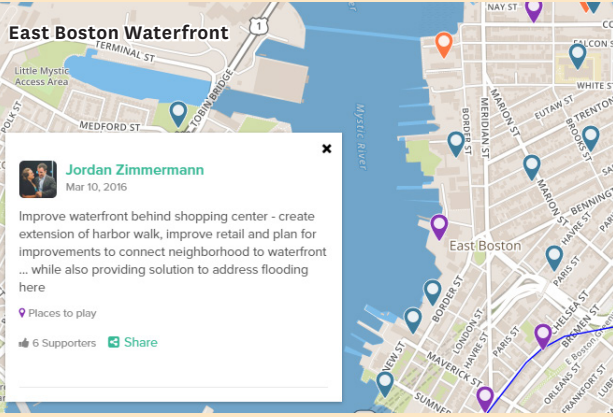


East Boston residents mark up a map at a community workshop in Spring 2016.



Compilation of proposed ferry routes drawn by workshop participants in Spring 2016.

Residents made comments on online maps about ways to enhance the waterfront in different neighborhoods.



Boston’s approach will support each of the city’s waterfront neighborhoods.



Dorchester

The Dorchester Waterfront—which is primarily comprised of state-owned beaches—can become a more accessible and appealing destination with a pedestrian-friendly waterfront, a renaturalized shoreline landscape, and flood protection for inland areas. The completion of the Emerald Necklace—via the proposed Columbia Road Greenway, which will improve walking, driving, and open space—and the enhancement of Morrissey Boulevard are among the key actions that can strengthen connections and access to the waterfront. As significant risks associated with flooding continue to rise along the waterfront, Columbia Point, home to major institutions and employers, and Moakley Park could become key areas for interventions that would reduce flood risk around Dorchester Bay.



Downtown

There are opportunities to enrich and diversify the Downtown Waterfront public realm to create a more vibrant, welcoming, and accessible gateway to Boston’s historic core. Several planned developments along the Downtown Waterfront have the potential to reduce inland flood risk, enhance pedestrian linkages, and develop new open spaces and experiential diversity that draws people to the water’s edge. As future developments and infrastructure projects are planned, the city will continue to deploy proactive zoning and develop design and use standards to generate public benefits and guide climate-ready development.



Fort Point Channel

At the intersection of Boston’s historic downtown, Chinatown, and the rapidly growing South Boston Waterfront, Fort Point Channel can become an active, urban waterfront. Activation of the Fort Point edge and watershed can leverage momentum from ongoing nearby development to improve public access, programming, and circulation. Integrated flood protection, coordinated with water-quality investments, could reduce significant flood risks for inland areas in the South End, Newmarket, and Widett Circle.



East Boston

In a time of rapid neighborhood change and increasing flood risk, East Boston’s waterfront can host new housing, job centers, and a welcoming open-space system that meet the needs of local residents. An accessible waterfront can be created through investments in Harborwalk connectivity, expanded waterfront transportation networks, enhancements to the public realm along Chelsea Creek and the development of new, destination open space with iconic views of Downtown. Growth should be guided by community priorities for affordable housing and open-space access and respond to an evaluation of climate vulnerability and potential flood-protection strategies.



Charlestown

In Charlestown, a historic industrial waterfront has evolved to accommodate a mix of uses, from the Massport-owned Autoport to Spaulding Rehabilitation Hospital. The neighborhood’s waterfront can become more active through investments in the Charlestown Navy Yard and mixed-use growth at Sullivan Square that is enabled by investments in open space and flood defenses along the Mystic River.



Charles River

Waterfront investments along the Charles River can improve water quality, strengthen existing open spaces, such as the Charles River Esplanade, and introduce new spaces—such as new open space at Beacon Yards—to enhance public access and interaction with the water. The development and implementation of flood-protection efforts will be critical to protecting areas along the Charles River, particularly near the Charles River Dam.

“There’s more to Boston’s waterfront than its role in the American Revolution and it should also be celebrated!”
Citywide Waterfront Working Group Member

A Waterfront for All Bostonians

Create new signature parks that leverage underutilized waterfront sites.

Exciting new spaces can become destinations for all Bostonians and visitors.

The waterfront is a public resource and its natural and recreational potential should be accessible to all. As a growing, diversifying city, Boston needs new signature waterfront open spaces that create destinations where residents and visitors from across the city can convene. In certain waterfront areas, changing uses or obsolete infrastructure that no longer serve its original purpose may present an opportunity to transform sites into new, vibrant open spaces that strengthen the public’s connection to the waterfront and increase resilience.

Grow the diversity of experiences along stretches of the waterfront.

Building a waterfront that offers users a greater variety of experiences in relatively close proximity—from serene walks in nature to active recreation or boating and from working to dining—can make the waterfront more interesting and attractive to a wide range of people.

As a whole, Boston’s waterfront hosts a diversity of types of experiences, ranging from the rich ecosystem along the Neponset River or the Harbor Islands to the ballfields of Moakley Park, and the shipyards and marinas of East Boston. However, this diversity is spread out across miles of waterfront; for the public visiting a specific stretch of the waterfront, there is often only a single experience to be had. Through the creation of new public spaces and the reprogramming of existing spaces, there are opportunities to create areas in which the waterfront offers a broader variety of experiences.

Strengthen and expand waterfront housing and job centers.

Through the preservation and agglomeration of critical maritime industrial uses and expansion of jobs and housing in select areas planned for climate adaptation, the waterfront can serve the needs of Boston’s growing population and economy.

Boston’s waterfront hosts certain critical industrial uses that are dependent on access to the water and should therefore be preserved and strengthened. In some inactive former industrial lands can evolve to enable new housing and job growth. The City will ensure that growth in these areas is climate-ready by studying and implementing appropriate infrastructure and policies to guide growth and investment.

See "Expand Neighborhoods" on page 190.



Brooklyn Navy Yard, Brooklyn, NY

Established in 1801, the Brooklyn Navy Yard employed 70,000 people at its peak, during World War II. Employment declined drastically in subsequent decades, and continued to decline after the Yard was decommissioned in 1966. In recent decades, the nonprofit Brooklyn Navy Yard Development Corporation (BNYDC) has diversified the Yard’s tenant base, which now includes a major film studio and light industrial tenants in growing sectors like food manufacturing. Building off of recent success, BNYDC and its partners are investing \$700 million in new development at the Yards, and expect employment to more than double to 16,000 by 2020.¹⁵

"The entire waterfront [should have] wide walkways with benches and tables and multiple public access points"

Resident via draft plan feedback

"Continuing to support water transportation infrastructure for water taxis to make is easy for residents and tourists to access and explore the waterfront."

Roslindale resident via online survey

Form networks of connected open spaces and cultural destinations.

The creation of new parks and the connection of existing open spaces and cultural destinations to form a larger "necklace" of spaces can yield a whole network that is greater than the sum of its parts. This is an especially relevant opportunity in areas of the city where current open space is fragmented but close to one another.

In dense neighborhoods like the North End and Downtown, where opportunities for large park spaces are limited, a series of smaller parks and cultural destinations can be better connected through a visible and logical pedestrian network, making them attractive to a greater population and active throughout the year. Like the Freedom Trail and Harborwalk, future networks can connect individual open spaces and cultural destinations to create a larger whole.

Expand connections between neighborhoods and the waterfront.

Improved bike, pedestrian, and ferry networks along existing or new green spaces can better connect all neighborhoods to the resources and benefits of the harbor and the rivers.

From the Emerald Necklace to the Charles River Esplanade, Boston has open-space networks that connect multiple neighborhoods and draw people from across the region’s diverse communities. However, many inland neighborhoods lack clear connections to the waterfront. Boston can strengthen connections from inland neighborhoods to the waterfront by enhancing existing links, implementing planned connections, and creating new pathways. Enhanced waterfront transportation, such as the Inner Harbor Ferry Expansion, can link communities around the Harbor and bring Bostonians to the waterfront.

South Bank, London

The South Bank of the River Thames in London is a dense former industrial area that now boasts a compelling network of cultural and recreational destinations activated through programming and connected through thoughtfully designed walkways. The distance between the London Eye Ferris wheel and the Tate Modern museum is around 1.2 miles, slightly longer than the distance between the North End Coast Guard Base and the Northern Avenue Bridge in Downtown Boston; though there are many differences between the two stretches of waterfront, the world-class experiences created in the challenging physical environment of South Bank can be an inspiration for long-term planning and investment in Downtown Boston.

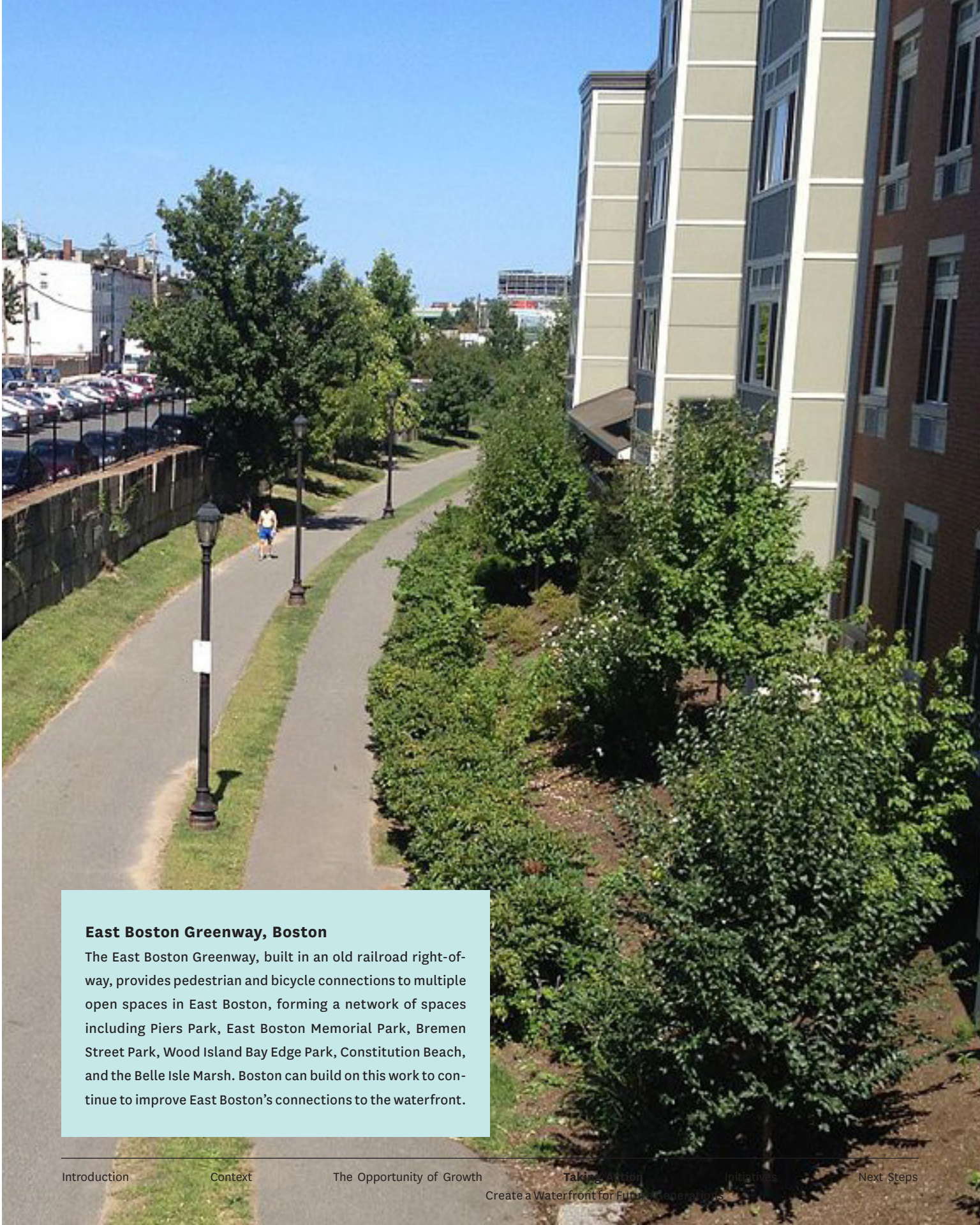


Allegheny Riverfront Park, Pittsburgh

Where the Allegheny River was once cut off from the city of Pittsburgh by a series of highways, it is now connected via a two-level riverfront park, with ramps bringing visitors right down to the water’s edge.

East Boston Greenway, Boston

The East Boston Greenway, built in an old railroad right-of-way, provides pedestrian and bicycle connections to multiple open spaces in East Boston, forming a network of spaces including Piers Park, East Boston Memorial Park, Bremen Street Park, Wood Island Bay Edge Park, Constitution Beach, and the Belle Isle Marsh. Boston can build on this work to continue to improve East Boston’s connections to the waterfront.



A climate-resilient waterfront that protects neighborhoods and job centers

Create flood-protection systems that provide multiple benefits.

Coordinated flood-protection mechanisms with public access spaces, recreational areas, or ecologically productive wetlands can maximize the benefits of these investments and the funding available to implement them.

Nature-based (“green”) or hard-engineered (“gray”) flood-protection investments can proactively respond to flood risks that threaten Boston’s residents, businesses, and institutions. To maximize the benefits of these investments and the funding available to finance them, they should be integrated wherever possible with publicly accessible paths, parks, open spaces, and ecologically productive wetlands.

Develop local climate-resilience plans to prepare existing and expanded neighborhoods for climate change.

Coordinated planning in areas of severe flood risk, including the study of flood protection mechanisms, can ensure that job centers, residential areas, and critical infrastructure can be safe in the face of climate change.

The flood risk that Boston faces is not just a challenge for individual buildings and other assets; it is a threat to entire neighborhoods. When streets and other key infrastructure are inundated and out of service, there are wide-ranging impacts. District-scale solutions are often more cost-effective to implement and maintain as well as more likely to effectively protect the area in a range of different scenarios. Given this, climate-adaptation planning should take place at the district scale and feature robust community engagement and the coordination of flood-protection systems with other infrastructure-adaptation efforts and public benefits.

"How [could] you create a beautiful green space while using hard infrastructure like levees?"
Mayor’s Youth Council Representative via electronic comment

256 Boston Harbor’s water quality is generally high, and much improved after decades of cleanup. Despite these advances, water quality remains lower in certain locations, particularly in areas with combined-sewer-outfalls (CSOs). Future improvements, such as infrastructure investment and public realm improvements at Fort Point Channel and Columbia Road, present opportunities to improve water quality by capturing stormwater to relieve the burden on CSOs and reduce phosphorus loading, and by treating water before it enters the harbor. Improvements will also aim to protect the salt marsh and other local wetlands.

San Antonio River Walk, San Antonio

In the 1930s, the City of San Antonio created a multipurpose bypass channel—complete with 17,000 feet of walkways along the river and stairs up to street level—to mitigate dangerous and frequent flooding in the downtown. The River Walk has evolved into an extensive urban park network and one of the City’s main tourism assets, spurring significant commercial growth. In 2009 and 2011, public investment nearly doubled the length of the River Walk, leveraging investment in resilience to guide metropolitan planning and catalyze economic growth. These projects, Museum Reach and Mission Reach, helped to link the now 15-mile walkway to the city’s historic missions, open spaces, diverse neighborhoods, commercial hubs, and cultural institutions.

HafenCity, Hamburg

HafenCity is a major new redevelopment of the old Port of Hamburg into a mixed-use community. Outside of the city’s dike system, the old Port faced severe flood risk. To ensure the safety and long-term resilience of the new community, buildings and roads are elevated above the floodplain, taking sea-level rise into account, and waterfront parks are designed to withstand periodic flooding.



Rebuild by Design, Hudson River, New Jersey

In the aftermath of Hurricane Sandy, the U.S. Department of Housing and Urban Development (HUD) launched the Rebuild by Design competition to develop innovative projects that improved the resilience of communities in the Sandy-affected region. One of six winning proposals was State of New Jersey’s Hudson River project, which employs a multifaceted approach to address flooding from major storm surges, high tides, and heavy rainfall events. The project, which occurs in the municipalities of Hoboken, Weehawken, and Jersey City, combines hard and soft infrastructure to act as coastal barriers. The project includes investments in inland green and grey infrastructure like bioretention basins, green roofs, and an enhanced stormwater-management system.

257

"We need something drastic to protect us from rising sea tides. It's clear that if cities like Boston are not undertaking progressive measures to protect ourselves, we're not going to have a city in 50 years."
Roxbury resident via online survey

A waterfront with strong stewardship

Apply new, sustainable models for the creation and maintenance of public waterfront areas.

Innovative models that, for example, leverage the value generated by private development or employ public-private partnerships to create, operate, maintain, or program public spaces can ensure the long-term quality and sustainability of these areas.

Developing transformative and unique waterfront public spaces requires significant and sustained investments from public and private sources to ensure the highest quality of operations and maintenance. Boston can establish public-private partnerships—from local friends groups to dedicated special purpose entities—to support new a vibrant public realm and waterfront open spaces. As dedicated stewards, these organizations can support the public sector in producing programming, managing capital improvements, soliciting private funding, and overseeing routine operations and maintenance.

Hudson River Park, New York City

Hudson River Park is a four-mile, 150-acre park along the West Side of Manhattan. The design, construction, and operation of the park is managed by the Hudson River Park Trust, a public benefit corporation that is a partnership between New York City and New York State. The City and the State funded the park’s construction, while ongoing operations are funded by revenues from commercial activities within the park, such as food vendors, restaurants, and office development on Pier 57.

Deploy proactive zoning and create a predictable entitlement process for greater public benefits.

A predictable project entitlement process can enable long-term planning for neighborhood development and the coordinated delivery of benefits.

As Boston works to guide development along the waterfront, there will be multiple areas where the City conducts detailed planning that considers how existing zoning and regulations can evolve to support priorities such as open space or flood protection. A predictable project entitlement process will be critical to implementing this planning. More predictable entitlements can enable the coordinated delivery of benefits, reduce project costs and risks, support continued delivery of needed housing and job space, and generate more funding for the public benefits that accompany development.

Greenpoint–Williamsburg, New York City

In 2006, the City of New York rezoned nearly 200 blocks of the Brooklyn waterfront neighborhoods of Greenpoint and Williamsburg. In addition to allowing new mixed-use development and providing density bonuses for the creation of affordable housing, the rezoning included requirements for developers to fund and build pieces of a continuous waterfront public area. This was supplemented by an Open Space Master Plan, a framework for the design, development, and maintenance of City and State parks as well as the privately developed public spaces

Spectacle Island, Boston Harbor Islands National Recreation Area

