

CLIMATE READY: SOUTH BOSTON

Land area: 3.1 sq miles
Population: 31,000
Jobs: 78,000
Economic contribution: \$20 billion



Equitable development and job creation. Improved transit and community services. Increased access to open space. Enhanced health and security. All of these community benefits can be achieved through preparing Boston for the impacts of climate change.

Led by the City of Boston and the Green Ribbon, Climate Ready Boston is aimed at identifying how Boston's climate is going to change, what's most at risk, and steps that can be taken to improve our community and thrive in the future. It builds on Boston's commitment to address global warming by cutting carbon and other emissions. The Climate Ready Boston report is available at (<https://www.boston.gov/environment-and-energy/climate-ready-boston>) and was developed with input from leading scientists; city, regional and state staff; utilities; and nonprofit and community organizations.

What Climate Change Means for South Boston

GREATER
AMOUNTS
OF SEA
LEVEL RISE



More Flooding:

- Due to sea level rise, significant flooding will result from storm surges less powerful than those causing flooding today.
- South Boston is Boston's most-exposed neighborhood to major coastal flooding, with nearly 25% of its land area exposed in the near term and increasing to 60% by the 2070s.
- South Boston and the South End can also expect to see the greatest increase in land exposed to stormwater flooding.

MORE HOT
DAYS



More Heat:

- Climate change means hotter temperatures in South Boston, especially in its urban "heat islands," or areas with more asphalt and less tree cover to provide shade.
- Heat waves pose a particular risk to low-income individuals, who may have less access to air conditioning and health services, and those suffering from medical illnesses.

What's At Stake



Community Assets & Flooding

A number of South Boston's community assets are vulnerable to major flooding events.

- In the near term, the South Boston Waterfront is exposed to major coastal storms near Fort Point Channel and to the north along Boston Harbor. Entrances and exits to the Ted Williams Tunnels are at risk, potentially cutting South Boston off from East Boston. Much of the land north of West First Street and East First Street will be exposed.
- In the second half of this century, major flooding events could cut South Boston off from other parts of the city due to flooding on the South Boston Bypass, Dorchester Avenue, and William J. Day Boulevard.
- Toward the end of this century, much of the South Boston Waterfront will be exposed to flooding from high tides, and many neighbourhoods will be exposed to major flooding.



People and Buildings Impacted by Major Flood Events

Flooding can be extremely disruptive to the local economy as operations are interrupted while structures are repaired or businesses relocate.

- In the near term, close to 60% of Boston's real estate market value that is exposed to major coastal flooding is in South Boston.
- In 2030, more than 2,300 people and 350 buildings valued at more than \$1.9 billion would be exposed.
- In 2070, these figures increase to more than 10,900 people and 1,750 buildings valued at more than \$19.5 billion.



Economic Output and Jobs

Flooding can be extremely disruptive to the local economy as operations are interrupted while structures are repaired or businesses relocate.

- South Boston is expected to face annual losses of \$80 million in economic output and 600 jobs as soon as 2070.
- The restaurant and retail industries are likely to be most affected by coastal flooding throughout the century.

South Boston in Action

The following initiatives have been proposed to ensure that South Boston is prepared for climate change impacts.



Prepared & Connected Communities:

- Conduct an outreach campaign to private facilities that serve vulnerable populations to ensure that they engage in emergency preparedness and adaptation planning.
- Update the city’s heat emergency action plan.
- Expand Boston’s small business preparedness program.



Protected Shores:

- Develop a local climate resilience plan for South Boston to support district-scale climate adaptation. The plan should include the following:
 - Community engagement through a local climate resilience committee;
 - Land-use planning for future flood protection systems;
 - Infrastructure adaptation planning;
 - Coordination with other plans, including Imagine Boston 2030, GoBoston 2030, Special Planning Areas, and any updates to the South Boston Municipal Harbor Plan;
 - Development of financing strategies and governance structures to support district-scale adaptation.
- Near term protection is needed along the South Boston Waterfront from Fort Point Channel to Boston Harbor and the Reserve Channel.
- Protection against flooding from Dorchester Bay is also critical along with enhancing the New Charles River Dam.



Resilient Infrastructure:

- Develop coordinated risk response plans for extreme weather events.
- Support MBTA’s Silver and Red Line flooding assessments.
- Explore options for a neighborhood energy grid in Ray Flynn Marine Park.



Adapted Buildings:

- Update zoning and building codes and notify developers with projects in the pipeline to update plans.
- Help building owners assess potential impacts and increase resilience.
- Promote access to insurance.
- Prepare municipal buildings to withstand change.