

Plan and develop the storm-water, energy, transportation, and emergency support systems in both public and private spaces.

Connecting Outcomes to Goals

Resilience

Preparedness for extreme weather is a hallmark of resilience along with the abilities to withstand and recover from adverse events, using both physical and social measures.

Increasing Social Equity

Prioritizing the needs of frontline communities ensures they have access to the necessary protections to weather extreme events.

Progress Assessment

Boston has not experienced a recent catastrophic weather-induced event. However, the COVID-19 pandemic and recent challenges of the MBTA system serve as harbingers of large-scale climate challenges. The pandemic raised the importance of healthy buildings, which will become more important as temperatures climb and mold-inducing flooding increases in likelihood. The city has taken steps to improve ventilation interventions in some buildings such as schools with a proposed \$2 billion investment in school infrastructure.^{129,130} The recent MBTA Orange Line shutdown highlighted the value of proactive emergency action, but also underscored the near-failed state of the region's transit system.

The City can require new construction be built with resilience in mind,⁶⁰ but jurisdictional limitations hold Boston back from developing non-utility shared energy infrastructure such as microgrids to support resilience objectives.

Rebuilding existing infrastructure faces cost and institutional inertia barriers at the state, city and neighborhood scales. Responsibility falls on the Boston Water & Sewer Commission to evaluate and act on threats to existing infrastructure, which it cannot do without additional funding. While the recent federal climate and infrastructure legislation^{37,38,39} will provide new funding streams, staffing limitations may hinder the City's ability to fully take advantage of these funds.

Equity Implications & Indicators

Neighborhood-Focused Risk Projections:

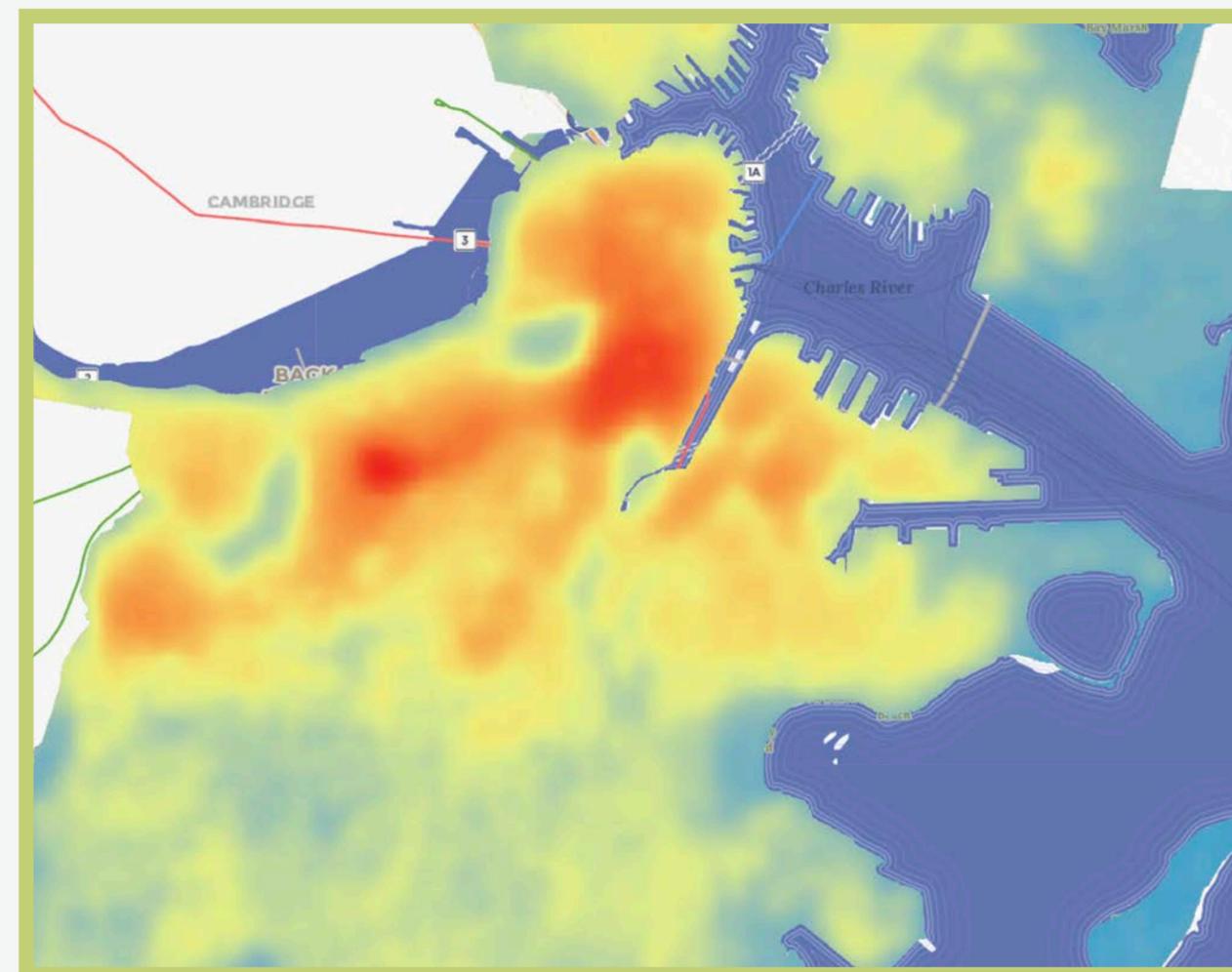
Regularly updating projections to reflect evolving risks, changing social needs, and infrastructure enhancements can help assess progress. These assessments occur through the City's ongoing Climate Ready Boston neighborhood plans, assessments, and updates.

Big Lifts

Local Energy Planning, Building a Resilient Coastline and Prioritization of Reparative Planning: All are necessary to prepare and protect Boston from the worst impacts of extreme weather with the aim of enhancing both physical and social infrastructure.

Figure 15. **Urban heat island intensity**

Urban heat island intensity—a metric combining the amount and extent of heat exposure—in central Boston experienced during extreme heat events in the 2010s.¹²⁸



Source: City of Boston