

**Regional**

# Climate Protection for Vulnerable MBTA Stations

Ensure that T stations are more resilient

**Project Score**

- Access 1
- Access 2
- Safety 1
- Safety 2
- Reliability
- Affordability
- Sustainability/Resiliency 1
- Sustainability/Resiliency 2
- Governance

This project recommendation came out of the Needs Assessment as well as analyses for parallel planning processes

## Project Description

Some T stations are already vulnerable to coastal flooding in the case of an extreme weather event, and with climate change, they will become increasingly vulnerable. These stations include JFK/UMass, Sullivan Square, and many Blue Line stations in East Boston. They can be made more resilient during a rain or flood event with on site redesign or barriers or be protected by other adaptations to the surrounding neighborhood, particularly at flood entry points. These adaptations may also contribute to neighborhood protection. Smaller scale protections may be necessary as well, such as conserving ADA access by protecting elevator pits. Protection can be done with permanent design changes or the procurement and installation of temporary structures. The *Climate Ready Boston* report highlights the vulnerability of and the possible adaptive infrastructure for each of these stations as well as for the Silver Line stations in the South Boston Waterfront, which are also vulnerable.

## Benefits and Issues Addressed

Depending on the type and severity of an extreme weather event, T stations are impacted differently. Blizzards can cripple the entire transit system, but flooding can affect a single station halting one line at a time. This is particularly problematic if flooding a station leads to the inundation of a tunnel or diverts passengers onto buses within a particularly congested corridor, as is the case for the Aquarium and Maverick stations. Diversions can often last far longer than the flooding due to water damage and necessary repairs, making climate readiness essential to maintaining access to jobs and services.

## Implementation

**Approximate Cost:** TBD  
**Potential Funding Sources:** MBTA/MassDOT  
**Who's Responsible:** MBTA/MassDOT  
**Time Frame:** 5 to 15 years

## Best Practices

Philadelphia, PA's, Southeastern Pennsylvania Transportation Authority recently completed an FTA-funded pilot vulnerability assessment on its Manayunk-Norristown commuter rail line. The report provides a detailed list of specific adaptation measures for storms, snow, and other climate-related events.  
[www.septa.org/strategic-plan/reports/ClimateAdaptationReport.pdf](http://www.septa.org/strategic-plan/reports/ClimateAdaptationReport.pdf)

## Public Input

"Improve infrastructure to be resilient. Increase funding for adaptation, including new tax revenue."  
 —Chinatown roundtable

"Make MBTA stations climate resilient"  
 —02116

