

Why GAO Did This Study

Public transit systems, which receive funding from the federal government, are vulnerable to catastrophic events, as demonstrated by the impact Hurricane Sandy and other events have had on transit systems. These events highlight our reliance on transit systems for access to jobs, medical care, and other services, as well as the cost of recovering from these events. For instance, of the \$50.5 billion Congress appropriated to help communities devastated by Sandy, \$10.9 billion was provided for disaster relief to public transit agencies. Building resilience—the ability to prepare for, respond to, recover from, and mitigate the risk of catastrophic events—is one strategy to help limit the nation’s fiscal exposure to catastrophic events.

GAO was asked to review transit system resilience to catastrophic events. This report examines (1) how DHS and DOT help transit agencies make their systems resilient; (2) actions selected transit agencies take to make their systems resilient; and (3) challenges transit agencies face with making their systems resilient. GAO examined documentation and interviewed officials from DHS and DOT, and officials from nine transit and five emergency management agencies. GAO selected a non-generalizable sample of agencies in five locations, chosen for transit ridership volume and variation in geography, types of risks, and transit modes.

GAO did not make any recommendations in this report. DHS and DOT provided technical comments, which were incorporated as appropriate.

View [GAO-15-159](#). For more information, contact David J. Wise, (202) 512-2834, wised@gao.gov

PUBLIC TRANSIT

Federal and Transit Agencies Taking Steps to Build Transit Systems' Resilience but Face Challenges

What GAO Found

The Departments of Homeland Security (DHS) and Transportation (DOT) provide funding and other support to transit agencies to help make their systems resilient to catastrophic events. DHS focuses on emergency management and security, and provides funding through its hazard-mitigation, transit-security, and other grant programs. DOT's Federal Transit Administration (FTA) provides support through formula and discretionary-funding programs for transit capital-investment projects and for improving and maintaining existing systems. Both DHS and DOT provide transit agencies with technical assistance, such as for security programs or climate-change adaptation efforts.

Transit agencies that GAO selected identified a number of actions they are taking to help make their systems more resilient, including performing risk assessments and developing plans, such as emergency operations plans. These agencies also take actions, such as building redundant assets or facilities, to ensure the continuity of operations of the agencies' systems. Further, transit agencies have changed their infrastructure to mitigate the potential impact of disasters on their assets. For example, as shown in the figure below, one agency elevated vents and curbs to minimize water flowing into the subway.

Although all transit agencies GAO selected are taking resilience-building actions, officials GAO interviewed said that transit agencies face challenges with placing priorities on resilience and with certain aspects of some grant programs. In particular, officials from DHS, DOT, and transit agencies GAO selected explained that it is difficult for transit agencies to place priority on resilience activities because managers may be reluctant to focus on resilience and resilience activities compete with other priorities for funding. Federal, transit-agency, and emergency-management officials also cited challenges related to some aspects of federal grants that have made it difficult for transit agencies to, among other things, incorporate resilience into disaster recovery efforts and make regional transit-networks resilient. DHS, DOT, and some transit agencies are taking some actions to address these challenges, such as developing tools to help management prioritize resilience activities.

Deteriorated Curb Allowed Water to Flow in Subway (Left) and Raised Curb and Vent That Minimize Water Flow into Subway (Center and Right)



Source: GAO. | GAO-15-159